

Recreation, Land Use, and Aesthetic Meeting Notes and Handouts

**RECREATION, LAND USE, AND AESTHETIC MEETING NOTES
AND HANDOUTS**

Date	Additional Information
June 27, 2000	Interest groups present recreation, land use, and aesthetic issues to consultants
July 11, 2000	Discuss PG&E study proposals and first stage consultation Comments.
November 16, 2000	Licensee present at a Chester Public meeting updates to study plans based on public comments and presented study results to date.
February 5, 2001	Recreation Draft Questionnaire and Issue Meeting. See Appendix _ for copy of questionnaires
March 27, 2001	ADA, recreation impact, and recreation facility condition studies preliminary results presented
Jan 8, 2002	Plumas County presents County's relicensing goals and objectives to Licensee and FERC representative in Chico.
Jan 10, 2002	Whitewater boating and aquatic biology preliminary study results presented
Jan 28, 2002	Public Access and Focus Group preliminary results presented
January 30, 2001	Whitewater Boating and Public Access preliminary study results presented
May 15, 2002	Licensee provides summary of recreation, land, and aesthetic study results. Anticipated addition of the Hamilton Branch announced. Participants provide initial feed pack to Draft License Application proposals.
June 14, 2002	Licensee provides written responses to issues identified during previous RLA meeting. Hamilton Branch addition discussed further.
June 19, 2002	Public Shoreline Workshop in Chester . Lake Almanor Shoreline Management Plan components presented to public in an informal setting to encourage discussion.
July 17, 2002	Recreation development alternatives, draft Recreation Resource Management Plan's (RRMP) site development recreation monitoring components, and survey methodology discussed.
July 18, 2002	Licensee responds and holds discussion on Plumas County's relicensing goals and objectives and provides handout on resources information relevant to lake levels. Information on June 2002 boat ramp survey also provided.
August 8, 2002	Licensee provides written information/holds discussion responding to 2105 Committee's goals and objectives as well on where relevant information is located in the draft license application. Draft Recreation proposal discussed and additional information on survey methodology provided.
August 9, 2002	Draft RRMP presented and discussed, including draft recreation site development plans.
August 27, 2002	Survey methodology, water surface hazard marking, road dust abatement, fuel load reductions on Licensee lands, PSEA Camp, beetle tree damage, and lake level relationship to recreation visitation discussed. 2105 Committee submits a lake level proposal to Licensee.
August 28, 2002	Development of Draft RRMP, PAOT capacity of draft recreation proposals, septic leach fields, shoreline erosion, and erosion control options discussed.
September 27, 2002	Licensee senior hydrologist provides overview of Lake Almanor operational goals and constraints and responds to 2105 Committee's lake level proposal. Licensee provides overview of final application recreation proposals based on group's input. Whitewater flow issues discussed. Licensee and 2105 Committee complete agreement status table.

JUNE 27, 2000

UNFFR RELICENSING
FERC No. 2105
Recreation, Land Use, and Aesthetics Work Group Meeting
June 27, 2000
10 A.M. to 12:30 P.M.
ABC Center, Chester, CA

Attendees:

Mark Greenig	Foster Wheeler
Kirby Gilbert	Foster Wheeler
Marvin Alexander	2105 Committee
Bill Cheek	2105 Committee
Mike Willhoit	2105 Committee
Aaron Seandel	2105 Committee
Jane Goodwin	USFS
Peggy Gustafson	USFS
Harry Williamson	National Park Service
Chuck Everett	EDAW, Inc.
Rob Stiving	PG&E
John Mintz	PG&E
Bill Dennison	Plumas County and 2105 Committee

The meeting was arranged today at earlier requests by the 2105 Committee to assist PG&E in the development of the studies for the Upper North Fork Feather River Project FERC # 2105 in preparation for the relicensing of this area. The meeting was designed for everybody to get acquainted, provide preliminary discussion on the recreational plan under the Project and develop a background for future discussions.

Following introductions and a review of consultants' qualifications, Marvin Alexander, as described below, provided the Lake Almanor recreational history and the highlights of what local citizens want to see in the FERC Project #2105 Recreational Plan:

History--Almost no mention of recreation was made in the 1954 license. Even without a plan this area has grown into a very good recreation area. In June 1993 FERC study indicated that PG&E should implement a comprehensive recreation plan, but PG&E asked that it be delayed until re-licensing. That time is here and we are seeking a comprehensive plan in a cooperative manner.

The 2105 Committee and local citizens have years of knowledge about the needs of the different constituencies; "sub-publics". We know the importance of the Lake Almanor water level, water quality, recreation, lake access and lakeshore soil erosion. We can assist you in identifying and obtaining information from the various groups:

- 1) Today, we have growing communities--LACC 2000 people, Almanor West 550 and another 1,000 expected in Bailey Creek. Plans are underway for 300-400 homes adjacent to Bailey Creek. Demands for recreation will continue to grow.

For the most part the residents in these communities are older, fairly affluent, mostly retired and are here because of the lake. They boat, fish and play alot of golf. There are hundreds of millions of dollars invested in homes in the areas.

- 2) Business Community of Chester and other areas around the lake that were once dependent upon the forest products industry now must rely more on tourism.
- 3) General Citizens of Chester have no access to the lake. Children do not have a swimming area and there is no good boating, or fishing access. This is a high priority in the 2105 plan.
- 4) Fisherman have limited access; particularly for the elderly and handicapped.
- 5) Public access to the lake in general must be improved.

The 2105 committee noted that land within the Project 2105 area may be limiting and asked that PG&E look at their lands and federal lands outside of those boundaries to determine recreational potential. An example, are the PG&E lands along Highway 147 for camping and a bike and hiking trail around the lake.

Our "over-arching" goal is to obtain a license that meets recreational needs for all, while still maintaining a profit for the utility company.

Water Level was emphasized several times. To protect the tourism and home and business values, the 2105 Committee wants to have a requirement built into the FERC license that in normal years, that between Memorial Day and Labor Day the lake level will be maintained between the 4485 and 4494 elevation. (PG&E Datum)

Water Quality monitoring and mitigation measures must also be part of the final license requirements.

A model that the 2105 Committee is using was obtained from West Penn Power which shows their recreational plan for Lake Linn in West Virginia. It was chosen because it fits the 2105 Committe needs, even though the lake is only 72,000 acre ft.vs. Lake Almanor's at 1.1million acre ft.

Marvin noted some of the details of that plan and asked the planners to review it.

Other Issues for future consideration:

- * The significance of the Red River Lumber Company Deed.
- * Review of deeds that permit the utility company to erode private property.
- * The need to review all existing permits to provide equity for all.
- * Need to mark water hazard areas.

- * Discussion of woody debris and a common plan on how individual homeowners may dispose of it, as well as providing assurance that the utility company will assume some responsibility for cleanup.
- * The need for a bike and hiking trail around the lake that does not infringe on private property.
- * The need to develop a good, sound land management plan.
- * Concern about the Lake Almanor dam valves.
- * The necessity to lower the over-flow elevation.
- * The need for turn-lanes on Highway 89.
- * Consideration for development of Butt Lake area.
- * Standardization of resort owner agreements.
- * Need to include Collins Pine Co. in our meetings.

Next Meeting - Tuesday, July 11--8:30 a.m. to 2 p.m. at the ABC Center

JULY 11, 2000

Upper North Fork Feather River Project
Recreation, Land-Use, and Aesthetics Studies
Tuesday, July 11, 2000 Meeting Agenda

- I. Summary of Proposed Recreation, Land-Use, and Aesthetics Studies**
- II. Discussion of USFS, NPS, and Plumas County Study Letter Comments**
- III. Lake Almanor Boat Tour**

UNFFR RELICENSING
FERC No. 2105
Recreation, Land Use, and Aesthetics Work Group Meeting
July 11, 2000
ABC Center, Chester, CA

Attendees:

Steve Pavich	Foster Wheeler
Kirby Gilbert	Foster Wheeler
Marvin Alexander	2105 Committee
Mike Willhoit	2105 Committee
Jane Goolsby	USFS
David Reis	USFS
Mike Taylor	USFS
Linda Stonier	National Park Service
Harry Williamson	National Park Service
Peggy Gustafson	USFS
Steve Nachtman	EDAW, Inc.
Chuck Everett	EDAW, Inc.
John Mintz	PG&E

John Mintz started the meeting discussing the studies would address resources in the Project area and bypass reaches and some would provide regional/vicinity context. The development of specific management plans is to be focused on the lands within the Project boundary, however.

The Forest Service representatives mentioned that the Rest Area on SR 89 does not have adequate facilities and that recreationists are adversely impacting the facility. There were other comments expressing concerns that through the CPUC proceedings the PG&E lands above SR 147 on the eastshore could be lost through divestiture.

Representatives of the 2105 Committee described how the newly formed Park and Recreation District for Chester was looking to provide more recreation opportunities for the youth of Chester. The 2105 representatives also expressed interest in studying the effects of lake levels in terms of its effect on recreation values and use.

For the ADA study of accessibility the 2105 Committee representatives thought that the approach to surveying the private resort owners would not work well because most resort owners were probably not willing to talk much with PG&E due to past arguments over commercial licenses for shoreline uses and occupancies.

Several other of the recreation studies were discussed in terms of the proposed study outlines including how the survey questionnaire would be implemented. There were discussions with the Forest Service on the availability of GIS data layers and contact names were traded amongst consultants and Forest Service staff. John Mintz mentioned that the flow study for whitewater boating was planned for October, but that the agencies had not all agreed on the exact dates yet.

Other discussion points were made during the overview of the study plans including:

- Desire to see recreation mining addressed in terms of describing the uses in the Seneca reach
- Desire by the 2105 Committee to see the Red River Deed addressed and to not have PG&E waive the rights under the Red River Deed
- Desire to see clarification on what studies use PG&E elevation datum verses USGS elevation datum.

The meeting was concluded with a discussion of the next steps including how PG&E was going to respond to study plan comments. Additionally there was some coordination on how to best publicize the Shoreline Management Plan workshops slated for July. A boat tour of Lake Almanor was held after the meeting lead by Mike Wilhoit of Lake Almanor West.

Stanforth, James

From: O Mara, Tamara
Sent: Wednesday, October 16, 2002 6:46 AM
To: UO EP DART Users; UO EP DART Read Only Users
Cc: UO EP Mapping Supvs; UO EP Mapping Group; Gin, Ruby; Lee, Irene; TSC - Computer Requests
Subject: DART Version 3.6.1.0 Upgrade; DART will not be available on Sunday, after 5:00 p.m.

DART Users:

DART will be upgraded on Monday, October 21, 2002. **DART will not be available from Sunday, October 20, 2002 after 5:00 p.m. until Monday, October 21, 2002.**

The DART Upgrade includes a new "Thick Raster" option that has been added into DART's Preferences screen. In Divisions that use GEMS raster maps, this option will allow you to darken your raster map. Also, the Equipment Attribute Screen has a minor change. Please review the attachment below for more information.

On Monday morning Agent should upgrade DART. If Agent does not run:

- Go to Start, Programs, PG&E Version Control Agent - Agent
- Make sure that DART is selected
- Click "Run Agent"

If you have any problems with the upgrade, please contact the TSC at 223-9000.

Thank you for your assistance.

Tammy O'Mara
Mapping & Gas Field Support

NOVEMBER 16, 2000

Upper North Fork Feather River Project, FERC No. 2105
November 16, 2000 Public Meeting
Chester, CA

Purpose of the Meeting

This meeting was scheduled to provide an update to the local community on the 2000 study work. Each of the study efforts was briefly described and status of the study reviewed.

Comments

- Some members of the 2105 Committee noted some frustration, perhaps anticipating more discussion (or resolution) on issues of importance to them.
- Among the issues raised was shoreline erosion. Comments indicated some dissatisfaction with the current PG&E position on erosion rights.
- The potential impact of erosion on land value was also expressed as a concern.
- Shoreline erosion should be coordinated with cultural resources assessments.
- Some questioned why PG&E should be required to do some studies, such as noxious weed surveys.

Upper North Fork Feather River Project (FERC 2105)
 Status of Relicensing Studies - 11/16/2000

FIRST STAGE CONSULTATION DOCUMENT (FSCD) STUDIES

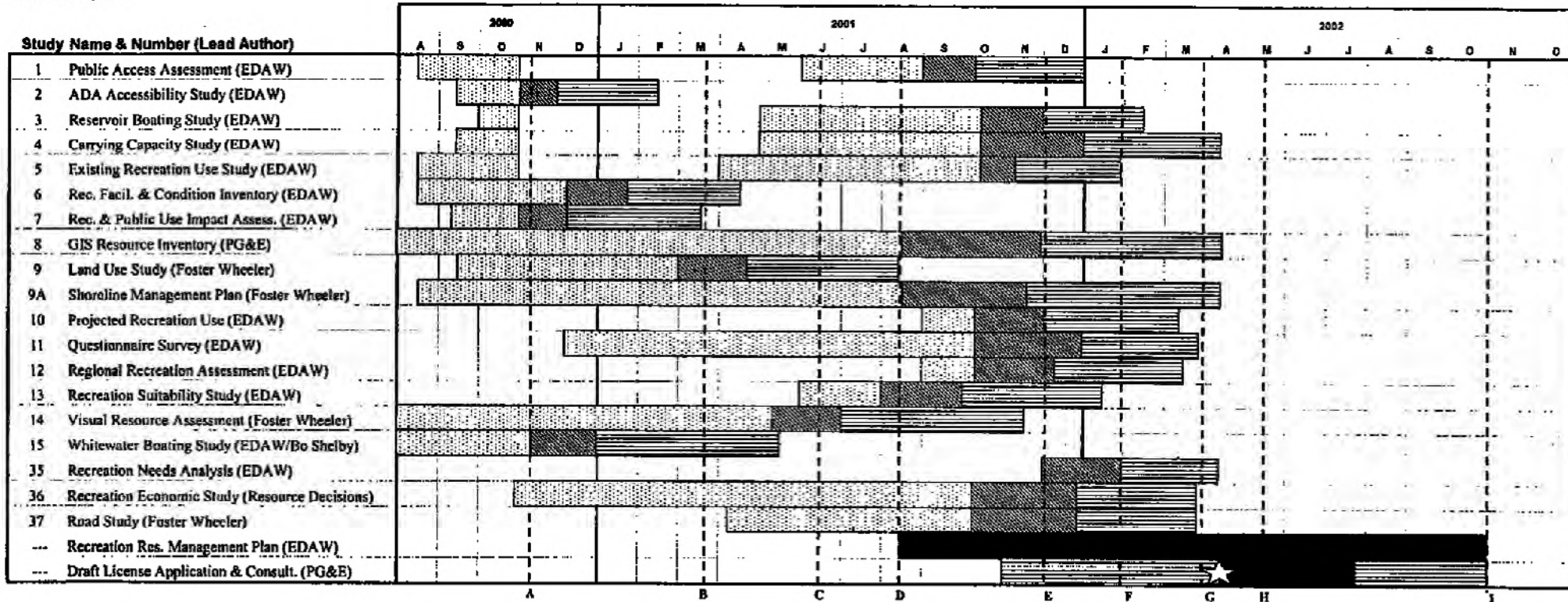
#	Name	Status
Recreation and Land		
1	Public Access	Initial field data collected
2	ADA Accessibility	Field work and analysis completed
3	Reservoir Boating	Initial field data collected
4	Carrying Capacity	Ecological site conditions collected
5	Existing Use	Partial survey data collected
6	Recreation Facility Condition Inventory	Initial field data collected
7	Recreation and Public Use Impact	Initial field data collected, analysis continuing
8	Resource Inventory	USGS, CNDDDB, and USFS data collected
9	Land Use	Plans & zoning analyzed
10	Projected Recreation Use	To begin Fall of 2001
11	Questionnaire	Questionnaire design to begin by end of year
12	Regional Recreation	To begin Fall of 2001
13	Recreation Suitability	To begin Spring of 2001
14	Visual Resource	Key viewing points (KVPs) being established
15	Whitewater Boating	Field work completed, analysis underway
Cultural/Historical		
16	Cultural Resources	Fieldwork and draft evaluation of hydro system complete
Water Quality		
17	Water Quality Monitoring	Spring and Summer samples analyzed
18	Temperature Modeling Program	Shading parameters measured, temperature data acquired
19	Sediment Incipient Motion	Cross sectional and sediment gradation data surveyed
20	Lake Almanor Shoreline Erosion	Shoreline erosion mapped
Fisheries/Riparian		
21	Fish Population Surveys	Reservoir sampling complete. 1 of 3 stream efforts complete.
22	Entrapment Evaluation	Equipment and methods are being tested and evaluated
23	Angler Creel Survey	Complete
24	Sensitive Aquatic Species Surveys	Phase 1 surveys conducted for amphibians
25	Instream flow/Habitat Mapping	Habitat mapping completed
26	Fluvial Geomorphology	Consultant has been hired
Wildlife/Botany		
27	Vegetation Mapping	Scheduled for Spring 2001
28	Sensitive Plant Surveys	Complete
29	Noxious Weed Surveys	Complete
30	Bald Eagle and Peregrine Falcon Surveys	Monitoring continues at Lake Almanor and Butte Valley
31	Willow Flycatcher Habitat Suitability Assessment	Preliminary assessment completed; mapping in 2001
32	Greater Sandhill Crane Habitat Suitability Assessment	Preliminary assessment completed; mapping in 2001
33	Forest Carnivore Surveys	Completed
34	Bat Surveys	Preliminary surveys by 11/2000; follow-up surveys in 2001

NEW STUDIES

#	Name	Status
9a	Shoreline Management Plan	Meetings being arranged
35	Recreation Needs Analysis	To begin December 2001
36	Recreation Economic Assessment	Literature search being conducted
37	Traffic Study	Starting early 2001
38	Macrobenthic Invertebrate Surveys	In progress
39	Mollusc Surveys	To be started in Spring of 2001

Upper North Fork Feather River Project - Recreation, Land Use, and Aesthetic/Visual Resource Studies Schedule
Pacific Gas and Electric Company
FERC Project No. 2105

November 16, 2000



- Legend**
- Field Work/Data Collection
 - Analysis
 - Study Results Summary and PG&E Review
 - Recreation Resource Management Plan
 - Public Review of Draft Application
 - 2105 Committee/Agency Input & Meeting
 - Draft Application Made Available for Review

- Proposed Meetings and Topics**
- A PG&E General Relicensing Public Meeting
 - B Summary of ADA (#2), Facility Inventory (#6), Impact (#7), and Whitewater Study Results
 - C Land And Shoreline Use Public Stakeholder Meetings (#9 and 9A).
 - D Land and Shoreline Use Public Workshop/RRMP Framework Meeting
 - E Summary of Public Access (#1) and Recreation Suitability (#13) Study Results
 - F Summary of Reservoir Boating (#3), Existing Use (#5), Projected Use (#10), Economic (#36), and Road Study (#37) Results.
 - G Summary of Carrying Capacity (#4), Questionnaire (#11), Regional (#12), and Needs (#35) Study Results.
 - H Review of proposed PME in the Draft License Application.
 - I Review of agency comments on the Draft License Application.

LAND USE STUDIES SLIDES

Study Progress Meetings
11/16/00 in Chester and 12/11/00 in Sacramento

UNFFR Project
FERC # 2105

STUDY 9 - LAND USE AND MANAGEMENT

- National Forest Land and Resource Management Plans Mapped and Summarized
- Plumas County Comprehensive Plan and Zoning Mapped and Summarized
- Floodplains as mapped by FEMA and the Corps of Engineers
- Wetlands as mapped by Wildlife/Botany study team
- Air photo interpretation and field checking
- Reasonably Foreseeable Land Use and Ownership Changes

STUDY 14 - VISUAL RESOURCE ASSESSMENT

- U.S. Forest Service Visual Quality Objectives
- Plumas County Policies
- State and Federal Scenic Highway and Byway Designations
- Key View Points and Key Travel Routes
- Lake Almanor and Butt Valley Reservoir Fluctuations
- Project Component Visibility Assessment

STUDY 9A - SHORELINE MANAGEMENT PLAN

- Existing Shoreline Policies
- Land Ownership and Plumas County Shoreline Zoning, Inventory
- Existing Shoreline Conditions (Development and Public Access)
- Public Access Analysis from Recreation Study Group
- Geological Study Group Results Supplemented with Field Work for Shoreline Erosion Hazards
- Vegetation and Aquatic Resources Mapping
- Public Involvement Meetings and Workshops (June and August 2001)
- Shoreline Plan Concepts
- Draft Shoreline Management Plan

STUDY 37 - PROJECT ROAD STUDY

- Project Roads Condition Assessment (including Caribou Road using FS, AASHTO, or FHA Standards).
- Traffic Counts on High Use Project Roads and Caribou Road
- Identify Needed Improvements and, if needed, amend Road Maintenance Agreement Between USFS and PG&E.

Upper North Fork Feather River Project

Recreation Studies

EDAW, Inc.

Study 1: Public Access Assessment

Objective: Collect information on resource, facility, and land management to determine the Project's public access opportunities and constraints.

- Identify, assess, and inventory public access points
- Rate public access (high, medium, or low accessibility)

Study 2: Americans with Disabilities Act (ADA) Accessibility Study

Objective: Review present and future accessibility needs for people with disabilities by analyzing use of facilities and activity participation.

- Review existing accessibility literature and ADA guidelines
- Conduct field inventory and assessment

Study 3: Reservoir Boating Study

Objective: Describe existing boating use and water surface management on Project reservoirs to assess whether or not management changes are appropriate.

- Research local boating issues
- Assess boating user levels
- Assess boating infrastructure
- Assess boaters' perceptions
- Estimate water surface boating capacity

Study 4: Carrying Capacity Study

Objective: Determine the maximum level of recreational development and use that provides quality recreation opportunities, protects resources and works consistent with Project operations.

- Collect data relating to ecological, physical, facility, and social capacity
- Identify limiting factors for each site, reservoir segment and shoreline
- Assess overall capacity of sites and reservoirs

Study 5: Existing Recreation Use Study

Objective: Estimate existing Project-related recreation use at developed and dispersed recreation sites.

- Estimate seasonal visitation of day and overnight use
- Estimate non-holiday use by weekend people-at-one-time (PAOT)
- Estimate holiday weekend use by people-at-one-time (PAOT)
- Estimate recreation activity levels
- Document use distribution
- Create monitoring program for recreational land use

Study 6: Recreation Facility Condition Inventory

Objective: Assess existing Project-related facilities and use areas to identify possible needs for facility improvements and maintenance.

- Map and photograph facilities and sites
- Inventory facility and site conditions
- Assess and characterize facility condition
- Document other FERC-required data

Study 7: Recreation and Public Use Impact Assessment

Objective: Assess recreation and public use impacts to vegetation, soils, and water quality to Project lands and waters.

- Develop site impact assessment forms
- Map, photograph, and record impacts

Study 10: Projected Recreation Use

Objective: Project the amount of recreation use in the Project area through the end of the Project's license term.

- Assess visitor origin and population growth
- Review current activity trends and project annual increases by activity type
- Assess Project's role in regional opportunity assessment

Study 11: Questionnaire Survey

Objective: Understand recreation users' characteristics and preferences to aid in planning, designing, and managing Project recreation areas.

- Identify primary recreation user groups and issues
- Develop questionnaire survey strategy and survey administration
 - Visitor survey
 - Area resident survey
 - Private business survey
- Review and approval of questionnaire & administration
- Administer the survey
- Analyze survey data

Study 12: Regional Recreation Assessment

Objective: Understand the Project's role and influence on regional recreation supply and demand.

- Gather regional supply and demand data
- Analyze regional supply and demand

Study 13: Recreation Suitability Study

Objective: Determine areas suitable for potential recreation development and dispersed use in the Project area consistent with resource opportunities and constraints.

- Review and identify GIS data layers to be used
- Analyze recreation opportunities
- Analyze recreation constraints
- Compare opportunities and constraints to determine suitability

Study 15: Whitewater Boating Study

Objective: Assess whitewater boating opportunities by identifying flow levels required to provide those opportunities.

- Agency review of whitewater boating study plan
- Review resource literature
- Conduct controlled-flow study
- Assess whitewater boating opportunities
- Review whitewater boating valuation literature
- Assess affects to other resources (PG&E & others)

Study 35: Recreation Needs Analysis

Objective: Estimate recreation needs for existing and potential facilities over the term of the new license.

- Review results from previous recreation studies
- Identify overall recreation needs
- Identify recreation needs on a site-by-site basis
- Assess Project-related recreation needs

STUDY AND APPLICATION CONSULTATION

2001

- Review of visitor, area resident, and private business recreation surveys
- Administration of recreation surveys
- 3 Recreation study result meetings
- 2 Shoreline management and land-Use workshops

2002

- 1 study result meeting
- 2 license application meetings

STUDY 8. RESOURCE INVENTORY

- U.S.G.S. data (base, DEM, orthos)
- California natural diversity data base (CNDDDB) data
- Lassen and Plumas National Forest data
- Field data and other existing data

STUDY 16. CULTURAL RESOURCES

Survey Coverage

- 75% of the Project area has been surveyed using complete survey strategy (20m transect intervals)
- 15% of the Project area has been surveyed using cursory survey strategy (25-35m transect intervals)
- 10% of the Project area not surveyed due to steep terrain.

Survey Results

- 50 sites were identified within Project boundaries
 - 32 new sites identified
(14 prehistoric, 15 historic, 3 with both)
 - 18 previously identified sites were re-recorded
(6 prehistoric, 12 historic)
 - 10 previously identified sites could not be found because they are either a) inundated or b) covered with rip-rap.

Impacts

- Most impacts are due to wave action or construction (campgrounds, roads, housing development).
- Other main impact is artifact collection.

NEW STUDY 36. RECREATION ECONOMICS

- **Local benefits from Project related recreation expenditures**
- **Willingness-to-pay for various recreation improvements**
- **Lake level economic relation to recreation visitation and value, surrounding land values, county**

from 4-16-2000 @ Chester

Questions for PHE re: cultural resources.

To: Allison MacLougall

From: Farrell Cunningham (MORR)

530 284-1022

- Sorry you couldn't make it here. Look forward to hearing from you.

- 1) Will there be a meeting of the Marlin community to review cultural resource findings?
- 2) How PHE monitor project success/ failings, in short, results?
 - ↳ will there be a review, perhaps independent, to gauge Marlin perceptions of project success?
- 3) Will there be an ethnographic study?
 - ↳ if not completed before the surveys (on the ground) are supposed to be finished;
 - a) how will cultural sites such as JCPs and ceremonial sites be protected, be known and protected, spot ethnographic studies? In other words, how will sites spot artifact distributions (apparent) be identified and protected spot adequate pre-field research?
- 4) Will ethnographic studies incorporate botanical and faunal resources used ~~common~~ culturally by the Marlin community through its ~~discovery~~ (i.e. milk, fisher, beargrass, etc)

FEBRUARY 5, 2001

AGENDA

Upper North Fork Feather River Project (FERC# 2105) Recreation Studies

Questionnaire Review Meeting

February 5, 2001 - 6:30 p.m.

Chester Memorial Hall, Chester, California

Introductions

- I. The relicensing process and the role of recreation - John Mintz, PG&E**

- II. Recreation Survey Methodology - Steve Nachtman and David Rolloff, EDAW, Inc.**
Discussion of technical survey issues and methods

- III. Components of the Recreation Survey - Steve Nachtman and David Rolloff**
 - **Recreation Visitor Surveys**
 - **Area Resident Survey**
 - **Recreation-Related Private Business Owner/Operator Survey**

- IV. Preliminary recreation issues - Steve Nachtman and David Rolloff**

- V. Local recreation issue discussion - Meeting Participants**

- VI. Suggestions for recreation study methods - Meeting Participants**

- VII. Next steps in the process – John Mintz**

Wrap-up and conclusions

MARCH 26, 2001

**SUMMARY RESULTS
ADA ACCESSIBILITY STUDY**

**Upper North Fork Feather River Project
FERC No. 2105**

Prepared by:

EDAW, Inc.
San Francisco, CA
Seattle, WA

Prepared for:

Pacific Gas & Electric Company
San Francisco, CA

March 26, 2001 Recreation, Land Use, and Aesthetics Meeting
Chester, CA

Objective

- The objective of the ADA Accessibility Study is to assess the present adequacies and future accessibility needs for persons with disabilities who use public recreation facilities and use areas associated with the Project.
- The ADA-related assessment is not intended to provide the Licensee and others with a comprehensive set of measurements and design recommendations for every structure that would be used for facility modifications. Rather, this study is programmatic and appropriate for identifying overall program improvements, options, and needs.

Methods

- The methodology involved 2 primary components:
 - (1) review of existing literature and background considerations, including consultation with agencies and facility operators, and
 - (2) site-specific field investigations and assessment of recreation facility accessibility.
- A facility and access accessibility survey form was developed and used when conducting field assessments, which were conducted at Licensee and United States Forest Service (USFS) recreation facilities in the study area. Following the field visit, a summary report was prepared that assesses accessibility needs and options at Licensee and USFS developed recreation sites in the study area.
- The Americans with Disabilities Act Guidelines for Buildings and Facilities (ADAAG) is the current guidance for accessibility. These guidelines are currently being expanded by the Access Board to address a broader range of recreation facilities and activities, referred to as the draft proposed ADAAG guidelines.
- Accessibility, for the purposes of this report, is defined by the design standards and technical criteria set forth in the draft proposed ADAAG guidelines.
 - ◆ The draft proposed ADAAG guidelines state that:
 - (1) where one picnic table is provided in a picnic area, the picnic table shall be accessible;
 - (2) where 2 or more picnic tables are provided in a picnic area, at least 50 percent, but never less than 2, shall be accessible; and
 - (3) at least 40 percent, but never less than 2, of the accessible picnic tables shall be connected to an accessible access route.
 - ◆ The draft proposed ADAAG guidelines state that where campsites are provided, accessible campsites shall be provided as follows:

Minimum Number of Accessible Camping Spaces Required

Number of Total Camping Spaces Provided	Minimum Number of Accessible Camping Spaces Required
1	1
2 to 25	2
26 to 50	3
51 to 75	4
76 to 100	5
101 to 150	7
151 to 200	8

Source: Access Board (1999)

- ◆ In most cases, compliance with the proposed guidelines will be expected to occur as part of other renovations associated with recreation sites.

Study Area

The study area includes all Licensee and USFS developed recreation facilities at Lake Almanor, Butt Valley Reservoir, and the Belden Reach. These facilities include all developed recreation sites that are open for public use located within and adjacent (1/4 mile) to the FERC project boundary. These facilities include:

USFS Public Recreation Sites

- Almanor Campground North
- Almanor Campground South
- Almanor Boat Launch
- Almanor Picnic Beach
- Canyon Dam Boat Launch
- Almanor Rest Area (Highway 89)
- Almanor Overflow Camping Area (Highway 89)
- Almanor Group Reservation Camp (Highway 89)
- Dyer View Day Use Area
- Lake Almanor Recreation Trail
- Gansner Bar Campground
- North Fork Campground
- Queen Lily Campground

Licensee Public Recreation Sites

- Lake Almanor Campground
- Camp Conery Group Camp
- Canyon Dam Day Use Area
- Almanor Scenic Overlook
- Eastshore Day Use Area
- Last Chance Creek Campground/Group Camp
- Ponderosa Flat Campground
- Alder Creek Day Use Area/Boat Launch
- Cool Springs Campground
- Belden Rest Stop (Highway 70)

Study Area - continued

This study also includes a brief assessment of the general extent of accessibility at Chester Park. This public facility is not considered a part of the Project but is located in the town of Chester along the UNFFR. It is operated and maintained by a local veterans' group and services the local community.

Also included in this report is an assessment characterizing the general extent of accessibility for people with disabilities at privately owned and operated recreation facilities at Lake Almanor. A detailed assessment of private resorts was not conducted as part of this study; however, resort owners were asked to complete a survey for this study. Thirteen of the private recreation providers participated in this survey. Private recreation facilities in the study area include:

- Almanor Lakefront Village
- Almanor Lakeside Resort
- Almanor Lakeside Villas
- Big Cove Resort
- Country Club Resorts
- Dorado Inn
- High Sierra Resort
- Knotty Pine Resort
- Lake Almanor Lakeside Lodge
- Lake Almanor Resort
- Lake Cove Resort
- Lake Haven Resort
- Lassen View Resort
- Little Norway Resort
- Miller's Resort
- Moonspinners Resort
- Northshore Campground
- Novotny's
- Plumas Pines Resort
- Vagabond Resort
- Villager Resort
- Wilson's Camp Prattville

Results

- This summary includes 2 sections that summarize the accessibility of existing Licensee and USFS facilities, one by activity type and one by provider.
- Recommendations and options are made regarding making these facilities more accessible in the future in accordance with the draft proposed ADAAG guidelines.

Summary of Accessibility by Activity Type

- Opportunities for persons with disabilities to participate in recreation activities in the Project area are currently limited to camping, picnicking, and trail use. No accessible facilities for boating, fishing, or swimming/shoreline access are currently available.
- An accessible fishing access trail is under construction at Canyon Dam Boat Launch by the USFS. In addition, much of the paved Lake Almanor Recreation Trail is accessible (however, some trail segments are not).
- Currently, only 2 facilities (Lake Almanor Campground Loop 1 and Ponderosa Flat Campground) meet the minimum requirements set forth in the draft proposed ADAAG guidelines. Many of the recreation elements in each of the designated accessible campsites, however, are non-accessible and would need to be modified to meet draft proposed ADAAG guidelines.

**Summary of Existing and Required Accessible Campsites and Picnic Sites
Based on Draft Proposed ADAAG Guidelines.**

	Total Number of Campsites	Total Number of Existing Accessible Campsites	Minimum Number of Accessible Campsites Required ¹	Total Number of Picnic Tables	Total Number of Existing Accessible Picnic Tables	Minimum Number of Accessible Picnic Tables Required ¹
USFS Facilities						
Almanor Campground North	49	0	3	N/A	N/A	N/A
Almanor Campground South	53	0	4	N/A	N/A	N/A
Almanor Boat Launch	N/A	N/A	N/A	N/A	N/A	N/A
Almanor Picnic Beach	N/A	N/A	N/A	6	1	3
Canyon Dam Boat Launch	N/A	N/A	N/A	5	0	3
Almanor Rest Area	N/A	N/A	N/A	7	0	4
Almanor Overflow Camping Area	N/A	N/A	N/A	N/A	N/A	N/A
Almanor Group Reservation Camp	10	0	2	N/A	N/A	N/A
Dyer View Day Use Area	N/A	N/A	N/A	N/A	N/A	N/A
Lake Almanor Recreation Trail	N/A	N/A	N/A	N/A	N/A	N/A
Gansner Bar Campground	14	1	2	3	0	2
North Fork Campground	20	1	2	N/A	N/A	N/A
Queen Lily Campground	12	0	2	N/A	N/A	N/A
Licensee Facilities						
Lake Almanor Campground Loop 1	66	4	4	N/A	N/A	N/A
Lake Almanor Campground Loop 2	28	2	3	N/A	N/A	N/A
Lake Almanor Campground Loop 3	37	2	3	N/A	N/A	N/A
Camp Conery Group Camp	5	0	1	14	0	7
Canyon Dam Day Use	N/A	N/A	N/A	19	2	8
Almanor Scenic Overlook	N/A	N/A	N/A	N/A	N/A	N/A
Eastshore Picnic Area	N/A	N/A	N/A	9	0	5
Last Chance Creek Campground/Group Camp	26	0	3	N/A	N/A	N/A
Ponderosa Flat Campground	61	4	4	N/A	N/A	N/A
Alder Creek Day Use Area/Boat Launch	N/A	N/A	N/A	3	0	2
Cool Springs Campground	30	2	3	N/A	N/A	N/A
Belden Rest Stop	N/A	N/A	N/A	4	0	2
Total	411	16	36	70	3	36

N/A = not applicable

Camping

- Overall, there are moderate opportunities for persons with disabilities to participate in camping in the Project area. The Licensee has done the most to accommodate persons with disabilities in the Project area by providing 14 campsites within its campgrounds. The USFS has provided 2 accessible campsites within its campgrounds.
- Lake Almanor Campground provides some accessible campsites; however, this facility is the only one that provides public accessible campsites at Lake Almanor.
- There are some accessible campsites at Butt Valley Reservoir at both Ponderosa Flat Campground and Cool Springs Campground.

Picnicking

- Overall, there are limited opportunities for persons with disabilities to picnic in the Project area. The Licensee and USFS provide 3 accessible picnic sites in total.
- An accessible picnic site includes an accessible access route to an accessible picnic table, an accessible trash receptacle, and an accessible water faucet.
- Only 2 recreation facilities in the Project area provide accessible picnic sites: Almanor Picnic Beach and Canyon Dam Day Use Area.
- Future accessibility improvements may be relatively easy to implement because all but one of the day use areas provide accessible toilet or restroom facilities.

Boating

- There are no accessible boating facilities at Lake Almanor or Butt Valley Reservoir.
- At least one accessible boating facility should be provided at each reservoir according to the proposed guidelines.

Fishing

- There are currently no accessible fishing access sites on Lake Almanor or Butt Valley Reservoir.
- At least one accessible fishing site should be provided at each reservoir under the proposed guidelines.
- An accessible fishing site is under construction at Canyon Dam Boat Launch by the USFS. An additional accessible fishing site could be provided at one of the old breakwaters near Almanor Picnic Beach.
- At Butt Valley Reservoir, an accessible fishing site could be provided at Ponderosa Flat Campground near the overflow camping area.

Swimming/Shoreline Access

- There are no accessible shoreline access/swimming areas on Lake Almanor or Butt Valley Reservoir.
- At least one accessible shoreline access/swimming area should be provided at sites where such an area is already provided or is currently being planned.
- An accessible shoreline access/swimming area could be provided at one of the old breakwaters near Almanor Picnic Beach and at Lake Almanor Campground.
- At Butt Valley Reservoir, an accessible shoreline access/swimming area could be provided at Ponderosa Flat Campground.

Summary of Accessibility by Provider

Both the USFS and the Licensee have made efforts in providing opportunities for persons with disabilities to participate in the primary recreation activities in the Project area. Each provider has emphasized different recreation activities that are complimentary. A summary of the area and extent of accessibility provided by the USFS and the Licensee is provided below.

USFS Recreation Sites

- The USFS has done some limited accessibility renovations of its recreation facilities and is focusing on providing new accessible angler access to the Lake Almanor shoreline.
- No accessible campsites are provided at USFS campgrounds at Lake Almanor. The USFS has not upgraded its campsites to be accessible but plans to do so.
- Only 2 accessible campsites are provided at USFS campgrounds. Gansner Bar Campground and North Fork Campground each provides one accessible campsite.
- Only 4 of the USFS campgrounds provide accessible toilet or restroom facilities.
- There are very limited accessible day use and picnicking facilities. The USFS provides only one accessible picnic table provided in the Project area.
- The USFS operates both the boat launches at Lake Almanor, neither of which is accessible. Both Almanor Campground Boat Launch and Canyon Dam Boat Launch are potentially suitable locations for accessible boating facilities.
- The USFS provides the Lake Almanor Recreation Trail, which is generally accessible in most areas, and is currently being planned for extension to Canyon Dam Boat Launch.
- The USFS is constructing a fishing access site at Canyon Dam Boat Launch that will be accessible.
- In summary, the USFS has focused its efforts on the accessibility to recreation trails but has not provided other accessible recreation facilities in the Project area. Future facility improvements and renovations should include providing additional campsites, picnic sites, and other facilities to meet draft proposed ADAAG guidelines when adopted.

Licensee Recreation Sites

- In past years, the Licensee has reviewed all its recreation facilities at the Project for ADA compliance. As a result of this review, some recreation facilities at the Project have been renovated for accessibility in the past few years.
- The Licensee has renovated its restrooms at each of its recreation facilities and has made at least 5 percent of its campsites accessible. A majority of Licensee campgrounds provide designated accessible campsites. Only Last Chance Campground/Group Camp has no accessible campsites. However, some of the elements in each of these designated accessible sites are non-accessible and should be retrofitted to meet draft proposed ADAAG guidelines when adopted. This retrofit would occur when a site is to be replaced or renovated.
- Overall, the Licensee has done a good job at providing accessible campsites, but should retrofit existing elements within designated accessible campsites and add additional accessible campsites to meet draft proposed ADAAG guidelines.
- The Licensee does not provide many accessible picnic sites. Only Canyon Dam Day Use Area provides an accessible picnic area.
- Future facility improvements and renovations should include providing additional accessible picnic sites and other facilities to meet draft proposed ADAAG guidelines when adopted.

Summary

The following table provides an overall summary of accessibility of existing USFS and Licensee recreation facilities in the Project area.

Summary of the accessibility of existing public USFS and Licensee recreation facilities.¹

	Toilets/ Restrooms	Telephones	Trash Receptacles	Water Faucets	Picnic Tables	Swimming Areas/ Shoreline Access	Fishing Sites	Parking Areas	Boat Launches	Campsites	Recreation Trails
USFS Facilities											
Almanor Campground North	x		x								x
Almanor Campground South	x		x								x
Almanor Boat Launch	x		x								
Almanor Picnic Beach	x		x		x						
Canyon Dam Boat Launch	x		x					x			
Almanor Rest Area (Hwy 89)	x										
Almanor Overflow Camping Area (Hwy 89)											
Almanor Group Reservation Camp (Hwy 89)											
Dyer View Day Use Area	x		x					x			
Lake Almanor Recreation Trail											x
Gansner Bar Campground	x		x							x	
North Fork Campground	x		x							x	
Queen Lily Campground			x								
Licensee Facilities											
Lake Almanor Campground	x		x							x	
Camp Conery Group Camp											
Canyon Dam Day Use Area	x		x		x						
Almanor Scenic Overlook	x							x			
Eastshore Day Use Area	x		x					x			
Last Chance Creek Campground/ Group Camp											
Ponderosa Flat Campground	x		x	x						x	
Alder Creek Boat Launch/Day Use Area	x		x								
Cool Springs Campground	x		x							x	
Belden Rest Stop (Hwy 70)	x		x	x				x			

¹ An 'x' indicates that the existing recreation element in the corresponding column is fully or partially accessible at that recreation facility. However, the number of accessible facilities may not be fully adequate.

Provided by EDAW, Inc.

**SUMMARY RESULTS
RECREATION FACILITY AND CONDITION INVENTORY STUDY**

**Upper North Fork Feather River Project
FERC No. 2105**

Prepared by:

**EDAW, Inc.
San Francisco, California
Seattle, Washington**

Prepared for:

**Pacific Gas & Electric Company
San Francisco, CA**

**March 27, 2001 Recreation, Land Use, and Aesthetics Meeting
Chester, CA**

Objectives

- This report presents the results of an inventory and evaluation of public recreation facilities, use areas, and site conditions in the study area.
- The recreation facility and condition inventory focuses on 2 main elements: identification of existing public recreation facilities and use areas, and the physical condition of those facilities and use areas.
- The general condition of public recreation sites and facilities is presented, particularly with regard to maintenance and repair issues and general impacts observed in the area. This information will be used, along with other study results, to determine if these resources should be managed differently, improved, or expanded based on current and anticipated future need.

Methods

- The focus of this analysis is on developed public recreation sites in the immediate vicinity of Lake Almanor, Butt Valley Reservoir, and the Belden and Seneca Reaches (Bypass Reaches). This analysis also includes a review of undeveloped dispersed recreation sites immediately surrounding these areas as well as privately owned and operated recreation facilities at Lake Almanor.
- The methods used in this study involved a review of published information, consultation with agencies and landowners, and site-specific field investigations. Existing conditions were identified and documented through field notes.
- To characterize facility conditions, each Level 1 site was rated using the following criteria: (N) needs replacement (broken or missing components, or non-functional); (R) repairs needed (structural damage or otherwise in obvious disrepair); (M) maintenance needed (primarily cleaning); and (G) is in good condition (functional and well-maintained).
- This information was summarized tabularly and described in the text. In addition, public developed recreation sites and facilities were photographed, and conceptual site maps were prepared.

Study Area

- Project sites were categorized into Level 1 (greater detail provided) or Level 2 (lesser detail provided) recreation sites. Level 1 sites include Licensee and U.S. Forest Service (USFS) developed public recreation facilities and use areas at Lake Almanor, Butt Valley Reservoir, and the 2 Bypass Reaches (Belden Reach and Seneca Reach). These facilities are generally located within or adjacent (1/4 mile) to the FERC Project boundary.
- The following Level 1 developed public recreation sites and use areas were inventoried:

16 Public Recreation Sites at or Near Lake Almanor

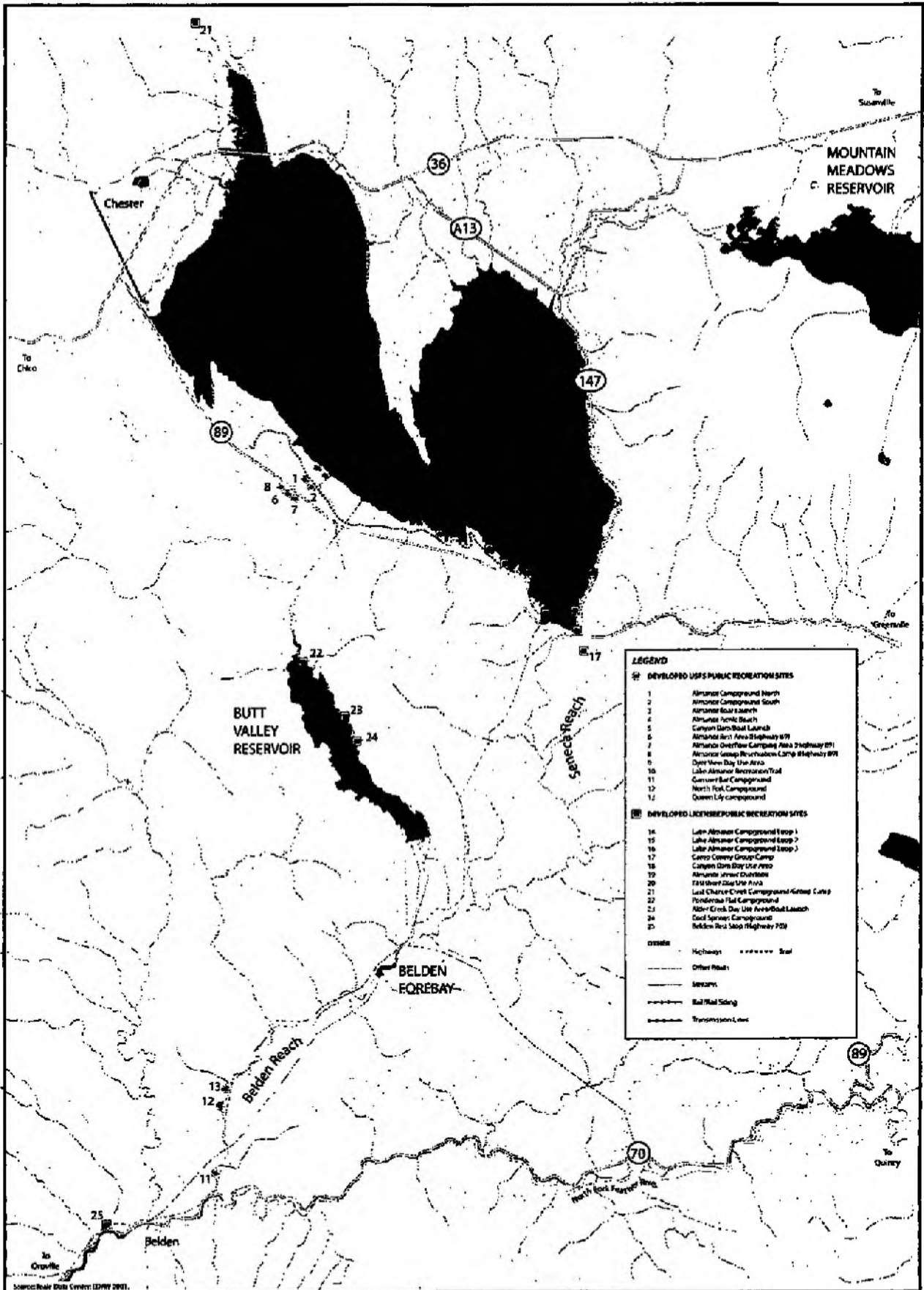
- ◆ Almanor Boat Launch
- ◆ Almanor Campground North
- ◆ Almanor Campground South
- ◆ Almanor Group Reservation Camp (Highway 89)
- ◆ Almanor Overflow Camping Area (Highway 89)
- ◆ Almanor Picnic Beach
- ◆ Almanor Rest Area (Highway 89)
- ◆ Canyon Dam Boat Launch
- ◆ Camp Conery Group Camp
- ◆ Canyon Dam Day Use Area
- ◆ Dyer View Day Use Area
- ◆ Eastshore Day Use Area
- ◆ Lake Almanor Recreation Trail
- ◆ Lake Almanor Campground (Loops 1, 2, and 3)
- ◆ Lake Almanor Scenic Overlook
- ◆ Last Chance Creek Campground/Group Camp

3 Public Recreation Sites at Butt Valley Reservoir

- ◆ Alder Creek Day Use Area/Boat Launch
- ◆ Cool Springs Campground
- ◆ Ponderosa Flat Campground

4 Public Recreation Sites at or Near the 2 Bypass Reaches

- ◆ Belden Rest Stop (Highway 70)
- ◆ Gansner Bar Campground
- ◆ North Fork Campground
- ◆ Queen Lily Campground



Upper North Fork Feather River Project
Pacific Gas & Electric Co.

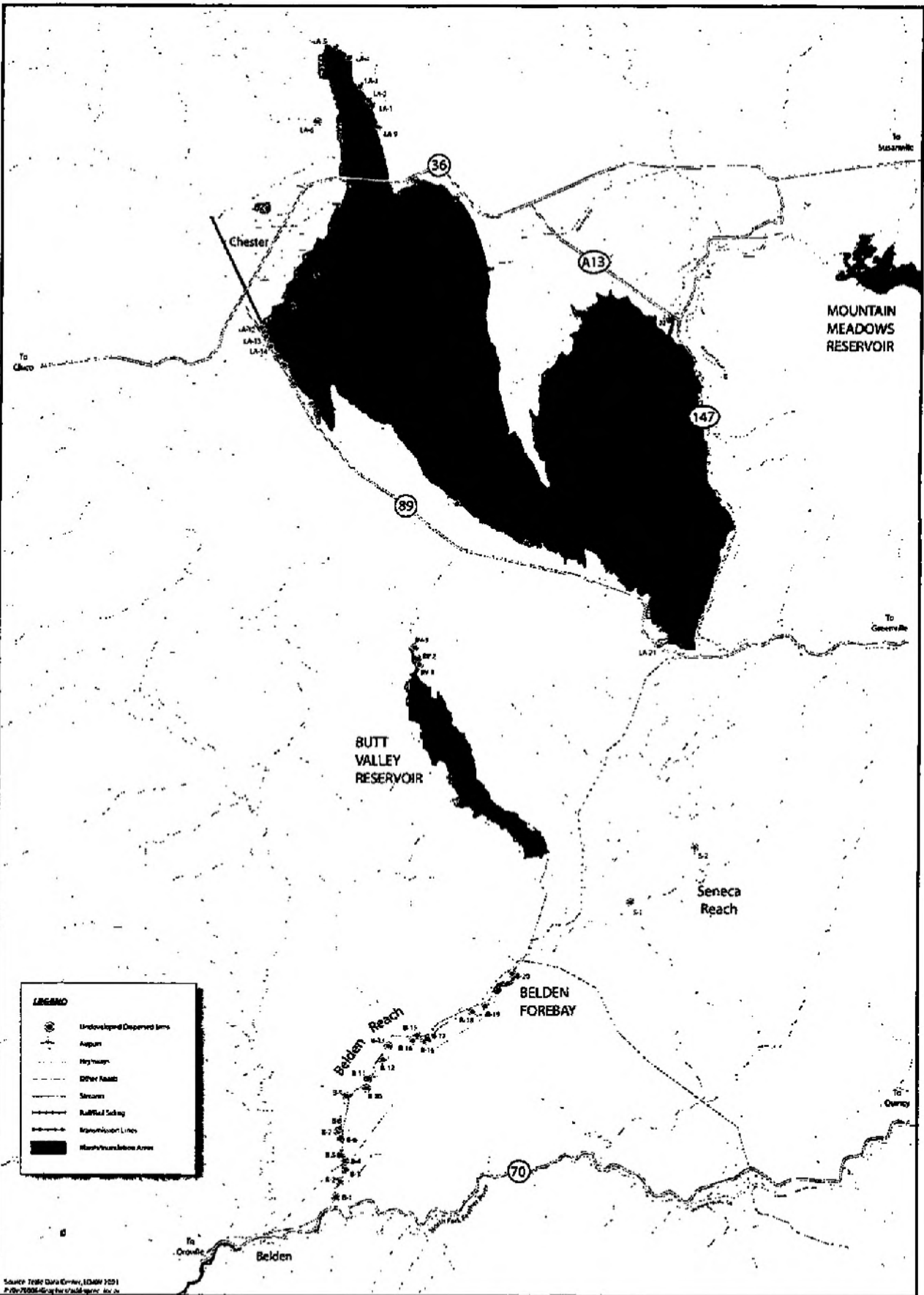
**Licensee and USFS Public Recreation Sites
in the UNFFR Project Vicinity**

Figure 2.0-1

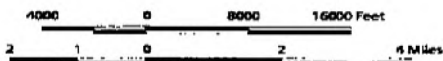


January 15, 2001





Upper North Fork Feather River Project
 Pacific Gas & Electric Co.
**Undeveloped Dispersed Recreation
 Sites in the UNFFR Project Vicinity**
 Figure 2.0-2



February 15, 2001

EDAW

- Level 2 recreation sites include private facilities and dispersed undeveloped lakeside and riverside day use and overnight sites.
- Level 2 recreation sites and use areas include:
 - ◆ Twenty-two privately owned and operated recreation facilities including boat launches and marina/slips, and overnight facilities (cabins, recreation vehicles [RV] sites, etc.).
 - ◆ Forty-seven dispersed (undeveloped) lakeside (Lake Almanor and Butt Valley Reservoir) and riverside (Seneca and Belden Reaches) day use and overnight sites and trails.

Results

General Overview

Summary of Licensee and USFS developed recreation facilities in the Project area.

Area	Campsites	Group-oriented campsites	Picnic Sites	Boat Launches (Lanes)	Recreation Trails
Lake Almanor	226	22	61	2(4)	1
Butt Valley Reservoir	110	None	3	1(1)	None
Bypass Reaches	46	None	9	None	1
Total	382	22	73	3(5)	2

Provided by EDAW, Inc. 2001

- Recreation facilities and use areas in the study area are owned and operated by several different entities including:
 - Pacific Gas & Electric Company (Licensee)
 - United States Forest Service, Lassen National Forest (LNF)
 - United States Forest Service, Plumas National Forest (PNF)
 - Private entities
- There are 24 public developed recreation facilities in the study area:
 - 12 campgrounds
 - 7 day use areas
 - 2 boat launches
 - 2 recreation trails
- In total, 47 public undeveloped dispersed recreation sites were identified in the study area:
 - 22 sites were documented at Lake Almanor
 - 20 sites in the Belden Reach
 - 3 sites at Butt Valley Reservoir
 - 2 sites in the Seneca Reach

- There are 22 privately owned and operated recreation facilities at Lake Almanor. These facilities are operating either on privately owned land adjacent to Licensee-owned land or on Licensee-owned land where written agreements are in place for utilizing the adjacent land.
- Private recreation site experiences at Lake Almanor are generally more developed, compared to USFS and Licensee sites. These private sites include boating opportunities associated with marinas, gas docks, and boat rentals; overnight accommodations associated with resorts, cabins, motels, and condos. These types of opportunities are generally not provided by the USFS or Licensee in the Project area.

Public Recreation Sites and Facilities at Lake Almanor

- The following developed facilities are present at Lake Almanor:
 - Six campgrounds with 226 campsites (60 percent of total campsites in the study area).
 - Six day use areas with 61 picnic sites (84 percent of total study area picnic sites).
 - Two boat launches.
- Most of the facilities at Lake Almanor are in good condition and require only minor maintenance; however, some repair is needed primarily to picnic tables, toilets, water faucets, and boat ramp docks.
- There are 22 dispersed undeveloped recreation sites on Lake Almanor (47 percent of total dispersed recreation sites):
 - Fourteen of the 22 lakeshore sites (64 percent) provide vehicle access to the shoreline.
 - Overnight camping occurs at some of these sites.
 - Overnight use was documented at 12 dispersed sites (55 percent).
 - The remainder of the dispersed sites shows signs of day use only.

Public Recreation Sites and Facilities at Butt Valley Reservoir

- The following developed facilities are present at Butt Valley Reservoir:
 - One day use area/boat launch with 3 picnic sites (4 percent of total study area picnic sites) and one boat ramp.
 - Two campgrounds with 110 campsites (29 percent of total campsites in the study area).
- Most of the facilities at Butt Valley Reservoir are in good condition. Most facilities require only minor maintenance; however, some minor repair is needed primarily to access roads, cooking grills, and water faucets.
- There are 3 dispersed undeveloped recreation sites on the reservoir (6 percent of total dispersed recreation sites in the study area).

Public Recreation Sites and Facilities at the 2 Bypass Reaches

- The following facilities are present at the 2 Bypass Reaches:
 - One day use area with 4 picnic sites (5 percent of total picnic sites in the study area).
 - Three campgrounds with 46 sites (12 percent of total campsites in the study area).
- Most facilities at the 2 Bypass Reaches are in good condition, with only minor maintenance needed at each of the campgrounds. However, some recreation elements at Belden Rest Stop on Highway 70 are in need of maintenance or repair.
- There are 23 dispersed undeveloped recreation sites in the Bypass Reaches (49 percent of the total dispersed recreation sites in the study area).
- Twenty-one of these sites are at the Belden Reach, while only 2 are at the Seneca Reach. These sites are used primarily for dispersed overnight camping. Many of the sites likely function as informal overflow areas for the developed campgrounds provided by the Licensee and the USFS.
- There are 2 additional recreation use areas along Caribou Road at the Belden Reach: a 1.5-mile anglers' trail from Caribou No. 1 Powerhouse to Butt Creek, and an informal parking area at the Belden Forebay that serves as a trailhead for fishing and hiking access, and car-top boat launching at the forebay.

**SUMMARY RESULTS
RECREATION AND PUBLIC USE IMPACT STUDY**

**Upper North Fork Feather River Project
FERC No. 2105**

Prepared by:

**EDAW, Inc.
San Francisco, California
Seattle, Washington**

Prepared for:

**Pacific Gas & Electric Company
San Francisco, CA**

**March 27, 2001 Recreation, Land Use, and Aesthetics Meeting
Chester, CA**

Objective

- The objective of this study is to assess observed recreation and public use impacts to vegetation, soils, and water quality in the Project area. These resources are particularly important to the recreation and visual quality of the Project area.
- Potential impacts examined in the study area related to recreation and public use include:
 - Soil erosion and soil compaction, especially within and adjacent to campground and day use areas.
 - Visitor use near wetlands and riparian vegetation.
 - Lack of downed wood in high use areas due to wood collection for fire fuel.
 - Impacts to vegetation due to off-road vehicle (ORV) and pedestrian use.
 - Potential for water quality impacts due to soil erosion or sanitation problems at or near campgrounds and day use areas.
 - Litter in high use areas.
 - Vandalism of facilities.
 - Private structures built on Licensee or public land.
 - Observed erosion at recreation sites.

Study Area

- The study area consisted of a ¼-mile buffer surrounding public and Licensee lands around Lake Almanor, Butt Valley Reservoir, and the Seneca and Belden Reaches. Input on specific areas to focus the field work effort was sought from the USFS and the Licensee.

Methods

- To assess the impacts related to public use, each site was visited (Sept. and Oct. 2000) and the observed impacts were identified and noted, primarily in a qualitative fashion.
- EDAW solicited input from the Licensee and USFS staff to identify sites for field observations. Researchers observed these sites – both walking and driving – looking for signs of potential recreation and public use-related impacts. For each site where ecological impacts were identified, the following field data were collected:
 - Site photography of ecological impact areas.
 - Description of site and impacts.
 - Detailed location of the site.
- Variables considered at developed sites and undeveloped dispersed sites include the following:
 - Erosion - is erosion readily apparent – yes or no.
 - what activity appears to be causing site erosion – identify the activity (if possible).
 - Extent of Bare Ground - is bare ground readily apparent – yes or no.
 - what is the extent of bare ground – none, small, medium, or large.
 - Vegetation Damage – is vegetation damage readily apparent – yes or no.
 - identify what activity appears to be causing the damage (if possible).
 - Area Cleared of Firewood - is the area cleared of on-the-ground firewood – yes or no.
 - Amount of Litter – is litter readily apparent – yes or no.
 - what is the amount of litter – low, moderate, or high.
 - Sanitation Problems – does the site have readily apparent sanitation problems – yes or no.

- Vandalism – is vandalism readily apparent – yes or no.
- Proximity to Wetlands – is the recreation site near a wetland area based on observed wetland vegetation types and proximity of the site – yes or no.
 - proximity of less than 500 feet to the wetland area – estimate number of feet.
- Proximity to Riparian Areas – is the site near a riparian area based on observed riparian vegetation types and proximity of the site – yes or no.
 - proximity of less than 500 feet to the riparian area – estimate number of feet.
- Additional variables considered at undeveloped dispersed sites include:
 - Overall Level of Use – estimate of the overall level of use based on the extent of bare ground, vegetation damage, erosion, and firewood remaining – high, moderate, or low.
 - Vehicle Access to the Shoreline – is vehicle access to the shoreline readily apparent – yes or no.
 - Overnight Use – does the site appear to be a day use or overnight use site - is there a campfire ring and room for a tent or RV which would indicate overnight use.
 - Campfires – are user-constructed fire rings present – yes or no.
 - Dumping of Household Trash and Debris – is there evidence of prior or current dumping of appliances, furniture or other unwanted household items – yes or no.
 - ORV Use – is there evidence of ORV use – yes or no.
 - where is this use located – identify.

Results

Observed Impacts at Public Developed Recreation Sites and Use Areas

- There are 24 developed recreation sites in the study area (Lake Almanor Campground – Loops 1, 2, and 3 are considered one site).
 - 16 of the sites are on or adjacent to Lake Almanor.
 - 3 sites are on or adjacent to Butt Valley Reservoir.
 - 5 sites are located in the Belden Reach.
 - There are no developed recreation sites in the Seneca Reach.
- The following is a summary of observed recreation and public use impacts at these sites:
 - Almost two-thirds (63 percent) of the developed sites have at least some areas of erosion, however, these impacts are generally minimal.
 - Over half (54 percent) of the developed sites have at least some areas of bare ground, however, these areas are small and are generally confined to areas near fire rings and picnic tables.
 - Over half (54 percent) of the developed sites are in areas where the surrounding forest has been generally cleared of downed wood for use in campfires.
 - Less than one-quarter (21 percent) of the sites are located in or adjacent to riparian areas, however, impacts on these sensitive areas as a result of visitor use appear to be minor.
 - A small number (8 percent) of the sites are located in or adjacent to wetland areas, however, impacts on these sensitive areas as a result of visitor use appear to be minor.
 - Less than 20 percent of the sites have observed impacts related to vegetation damage, litter, sanitation, or vandalism.
- Based on these results, potential future management actions that may be considered include:

- Visitor education about the impacts of visitor pedestrian use near water bodies (erosion and water quality concerns) and gathering firewood near recreation sites.
- Continued provision of firewood in developed campgrounds.
- Additional hardening of heavily used recreation sites to reduce erosion and vegetation damage.
- Monitoring of future site conditions using the current data set as a baseline.

Observed Impacts at Public Undeveloped Dispersed Recreation Sites

- A total of 47 undeveloped dispersed recreation sites were identified in the study area.
 - Twenty-two sites were documented at Lake Almanor.
 - 20 sites in the Belden Reach.
 - 3 sites at Butt Valley Reservoir.
 - 2 sites in the Seneca Reach.
- Some characteristics of these undeveloped dispersed sites include:
 - Almost two-thirds (64 percent) of the undeveloped sites have evidence of campfires and are utilized for overnight use.
 - Almost two-thirds (64 percent) of the undeveloped sites adjacent to Lake Almanor have vehicle access to the shoreline or exposed low-pool areas of the reservoir.
 - Over one-third (34 percent) of the undeveloped sites have evidence of off-road vehicle (ORV) use, primarily in the low-pool areas of Lake Almanor.
 - Over half (57 percent) of the undeveloped sites are located in or adjacent to riparian areas, mostly in the Belden Reach.
 - Over one-fifth (21 percent) of the undeveloped sites are located in or adjacent to wetland areas.
 - Overall use levels at the undeveloped sites vary widely:
 - Over one-fifth (21 percent) have high levels of use.
 - Almost half (47 percent) have moderate levels of use.

- Almost two-thirds (32 percent) have low levels of use.
- The following is a summary of observed public use impacts at these undeveloped sites:
 - Over one-third (34 percent) of the undeveloped sites have areas of observed erosion, however, these impacts are generally minimal.
 - Almost one-third (30 percent) of the undeveloped sites have evidence of vegetation damage, primarily to trees near the sites.
 - Over one-quarter (26 percent) of the undeveloped sites have areas of bare ground, however, these areas are not extensive and are generally confined to the ground near fire rings.
 - One-quarter (25 percent) of the undeveloped sites are in areas where the surrounding forest has been generally cleared of downed wood for use in campfires.
 - A small number (11 percent) of the undeveloped sites have high amounts of litter.
 - Less than 4 percent of the sites have impacts related to litter, sanitation, vandalism, or the illegal dumping of household debris.
- Based on these results, potential future management actions that may be considered include:
 - Visitor education about:
 - The impacts of visitor pedestrian use near water bodies (erosion and water quality concerns).
 - Gathering firewood near recreation sites.
 - Regulations that prohibit campfires in some areas.
 - Visitor education and increased enforcement of ORV regulations.
 - Additional hardening of heavily used sites to reduce erosion and vegetation damage.
 - Monitoring of future site conditions using the current data set as a baseline.

RECREATION SITE ECOLOGICAL CAPACITY INDICATORS
Upper North Fork Feather River Project

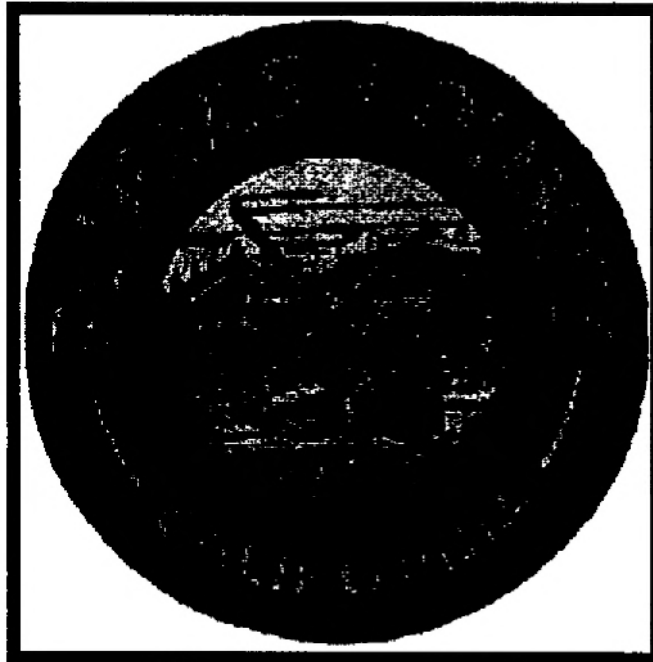
Site Name: _____ Date: _____

Land Ownership: _____ Researcher: _____ Roll: _____ Photo: _____

Indicators	Notes
General Site Description	
Built Features	
Bare Ground and Compaction	
Litter and Debris	
Sanitation Problems	
Erosion	
Vegetation Damage	
Proximity to Wetlands	
Proximity to Riparian	
Man-made Disturbances	
Other	

JANUARY 8, 2002

2105 Committee Report



Presentation to Plumas County Board of Supervisors

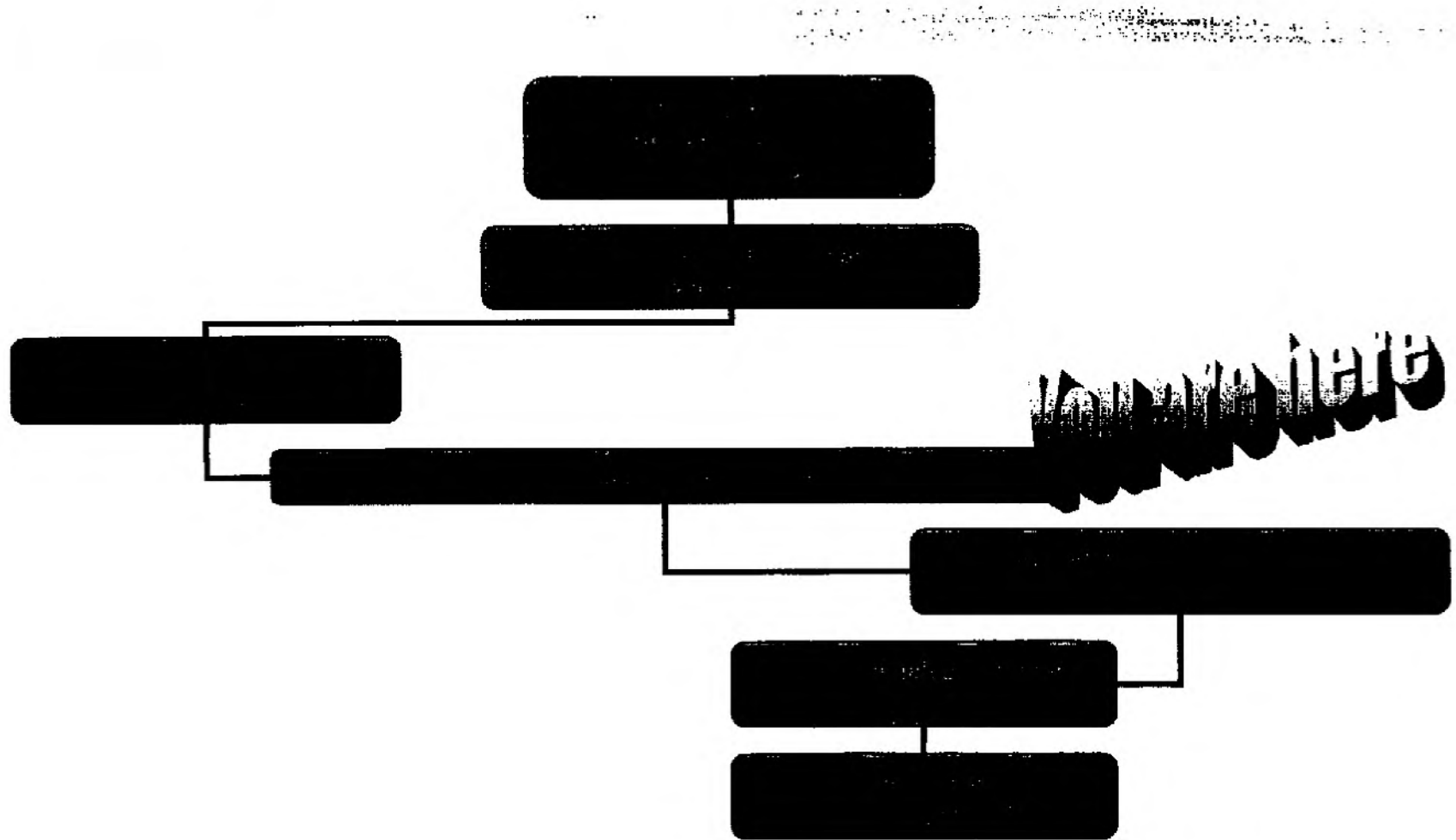
January 8, 2002

2105 Committee

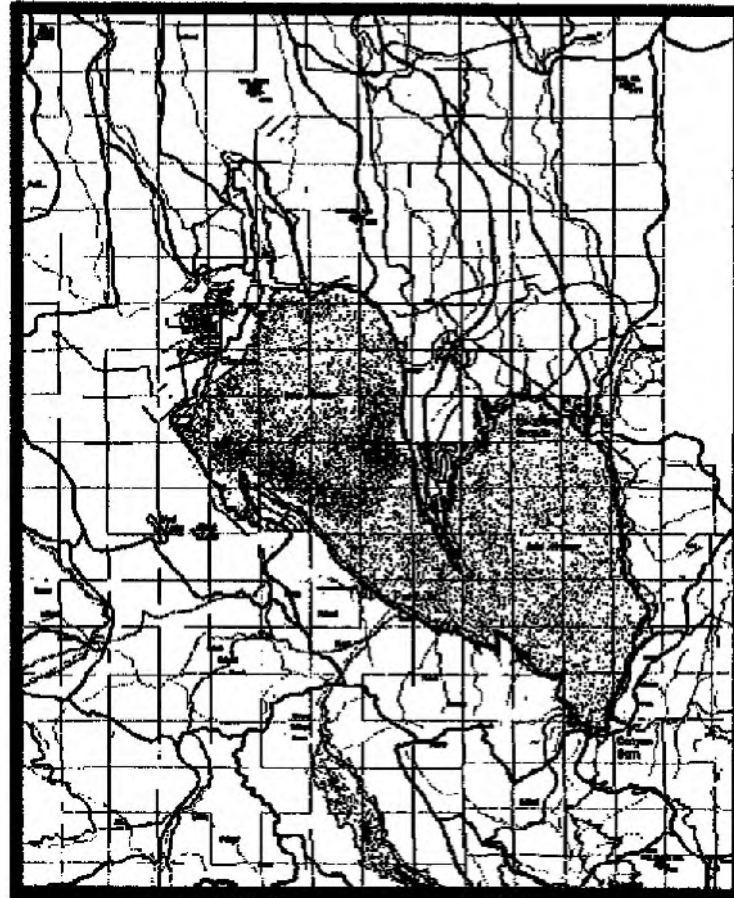
The 2105 Committee is an advisory group to Plumas County Board of Supervisors Whose primary purpose is to determine the needs of the community as required by Federal Energy Regulatory Commission

**PG&E's license to operate
expires October 31, 2004**

FERC 2105 Process Chart



Project Area Boundary



Project Area

Plumas County seeks to expand the defined project area outside of the 4500' maximum lake level under Article 17 because:

- PG&E has holdings outside the 4500' level that could be developed/protected for recreational use**
- The recreation plan should address the general area of impact**

Goals and Objectives

Plumas County 2105 Advisory Committee

**Shoreline Management Plan
Recreation Resources Management Plan**

**Prepared by
Plumas County 2105 Advisory Committee
P.O. Box 3343
Lake Almanor, CA 96137**

Goal # 1

Implement Recreation Resource Management and Shoreline Management Elements incrementally if the license is delayed beyond the 2004 renewal date

Objective -

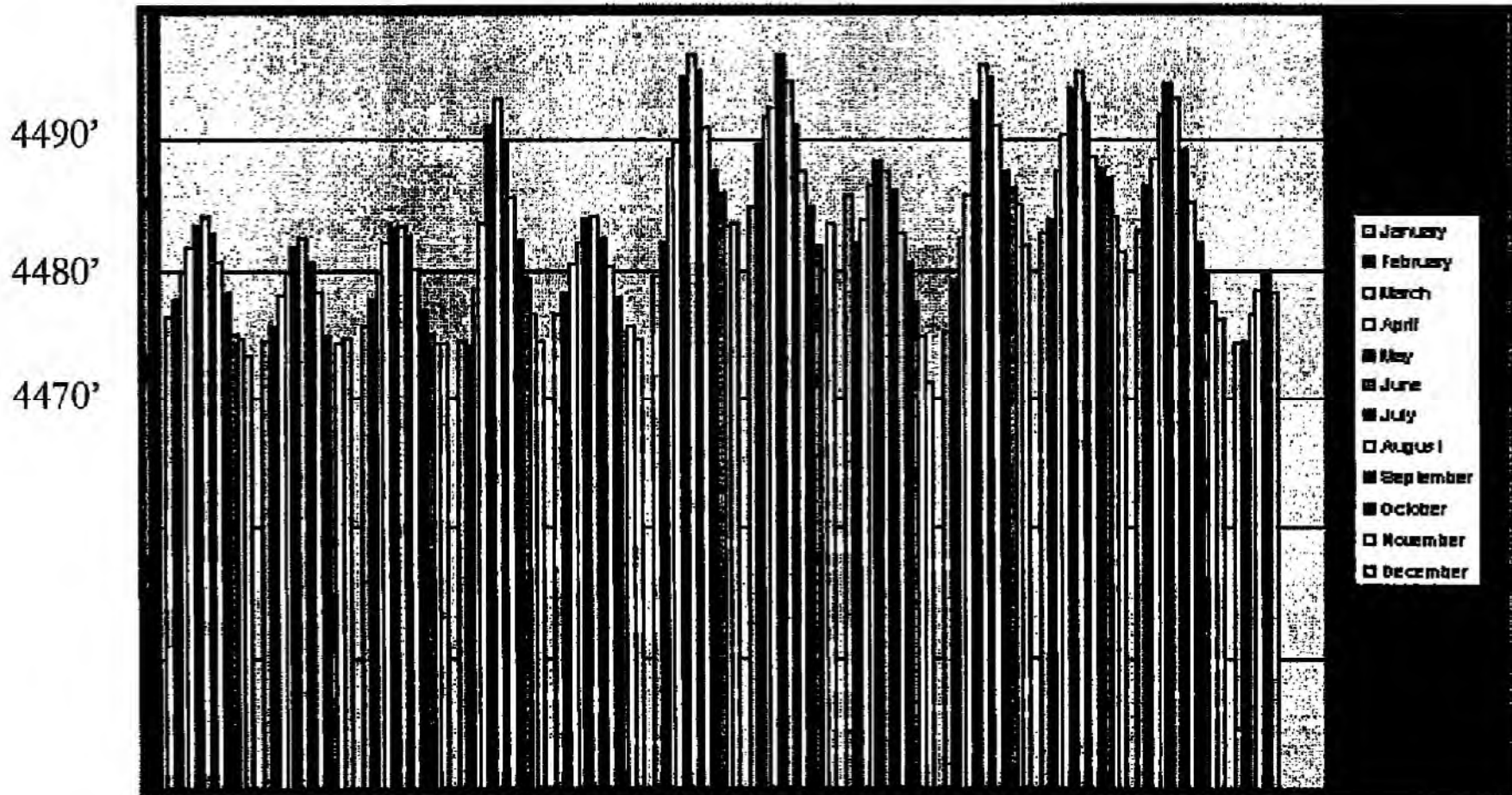
To avoid the long delays in implementing needed improvements to 2105 that other relicensing projects, like Rock Creek-Cresta, have experienced

Lake Level



Low Water at Big Cove- September

Annual Elevation Change 1990-2001



Goal # 2

Manage Water Level for Optimum Recreation Opportunities

•Objectives -

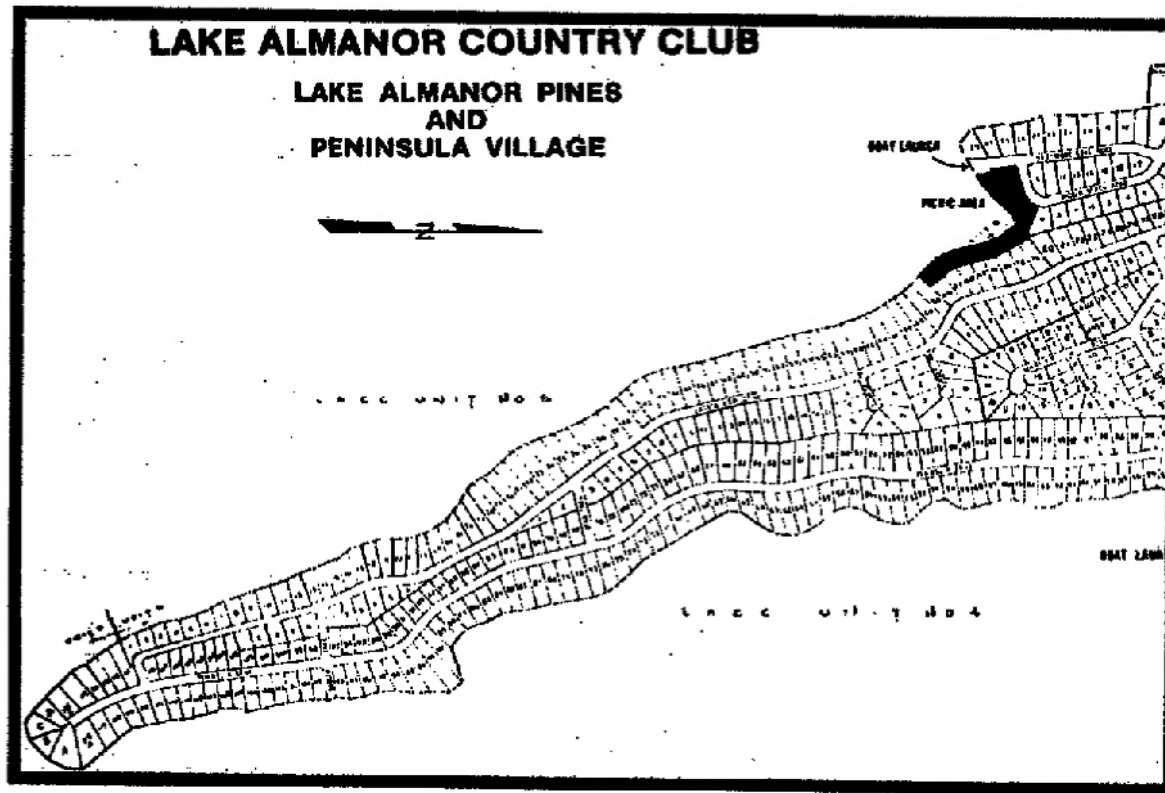
Maintain a minimum water level of 4485' elevation during the recreation season - Memorial Day through Labor Day - when precipitation conditions allow.

Continue the practices of the past 15 years, during which the Water Level Committee and PG&E met at least annually to discuss the manageable conditions of the water level for the coming recreation season.

Article 17

So far as is consistent with the proper operation of the project, the licensee shall allow the public free access, to the project waters and associated lands owned by the licensee for the purpose of full public utilization of such lands and waters for navigation and recreation, except for those areas to be reserved to protect life and limb

Private ownership patterns evolved in ways that have severely limited shoreline access



Goal # 3

Improve access to Lake Almanor

Objectives -

Embody the agreement points of the "Red River Deed" into the license and all Management Plans

Construct a lake access in close proximity to Chester

Allow public agencies to utilize environmentally acceptable corridors for public use on PG&E lands including between the usable water level limit of 4494' and 4500' elevation for public recreation uses



Goal # 3 - continued

Objectives -

Inventory and recommend and finance improvements to ramps (including private ramps) in order to make all ramps usable during increased variations in lake level brought about by drought and generation supply problems

Improve cooperation with property owners for permitting for such needs as tree trimming and modifications to shoreline and establish procedures for the same which will be clear, fair and applied equally to all applicants

Goal # 4

Improve Recreation Facilities

Objectives -

Construct three additional recreation facilities, of approximately 40 acres each; one providing Chester access to Lake Almanor, one on the East Shore and one at Butt Lake

Recreation Facilities would include:

- **ADA accessibility at one site on Lake Almanor and at the Butt Lake site**
- **Parking and public launch ramps with low water capabilities**

Goal # 4-continued

Recreation Facilities would include:

- Designated swimming areas**
- Shoreline fishing access with 1000' of "no-wake" boating restrictions**
- ADA accessible fish cleaning stations**

Goal # 4-continued

**Convert Canyon Dam trailer park to public
Recreational Vehicle facility**

**Rehabilitate Caribou Clubhouse for operation as
a conference center/lodging operation for the
economic benefit of Plumas County**

**Participate, using PG&E land where needed, in
the multi-agency project to complete a bicycle
trail around Lake Almanor (from Canyon Dam to
Highway 89 on the West Shore of Lake Almanor**

Goal # 4-continued



Establish a cultural interpretive center including local Native American role in the area

Consult with Maidu interest groups

Native plants culture and harvesting areas

Cultural learning center/museum

Repatriation of artifacts to families

Withhold from disposing any PG&E land in the project area until the license renewal is complete

Goal # 5

Develop, implement and effectively manage a comprehensive recreation safety plan

Objectives -

Conduct annual helicopter fly-over to locate and map floating and submerged hazards

Regular removal of floating and anchored hazards

Provide highly visible marker buoys for identifying hazards that cannot be removed

Goal # 5- continued

Continued from previous slide

Develop complete underwater charts for the lake, showing usual marine data, and in addition, show hazards that will emerge at various lake levels

Provide supplies of the “variable-water-level” charts at primary locations throughout the project boundary

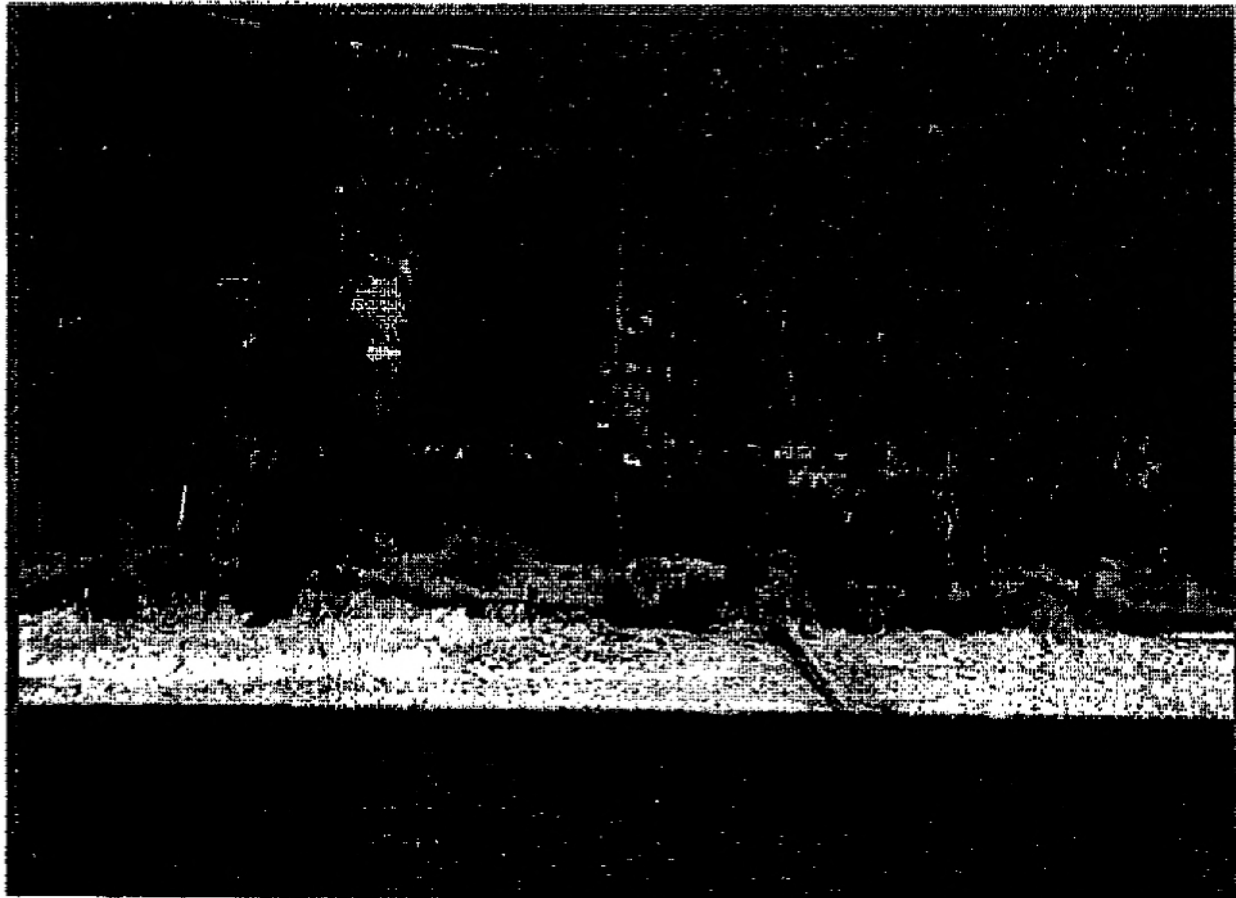
Install and maintain strobe lights at islands and tip of the Peninsula and other hazardous locations

Goal # 5 - continued

Maintain all PG&E forest lands within one mile of the shoreline to USFS/CDF fuel break standards

Provide increased fire protection capacity (additional emergency water tank, well and hydrants) at the hill above Prattville hydro facilities to protect PG&E buildings and property and adjacent structures and property.

Erosion



Standard Article 20

The Licensee shall be responsible for and shall take reasonable measures to prevent soil erosion on lands adjacent to the (stream)...FERC may order the Licensee to construct and maintain such preventative works to accomplish these purposes and re-vegetate exposed soil surface as the Commission deems

Goal # 6

Improve Erosion Management

Objectives -

PG&E to justify under CEQA, the continuing erosion of private and public property under “permissible erosion agreements”

Licensee to assist NRCS to publish soil survey

Goal # 6 - continued

Reduce the spillway height at Canyon Dam to the maximum allowable water level - 4494' elevation

Implement the use of environmental erosion controls, suggested by FERC in 1997, in place of rip-rap

Goal # 7

Manage Water Quality

Objectives -

Maintain the water quality monitoring program for Lake Almanor

Be a lead participant in exploring sewage treatment for the communities of the Lake Basin

Provide PG&E land on the East Shore for a sewage treatment plant

Goal # 7- continued

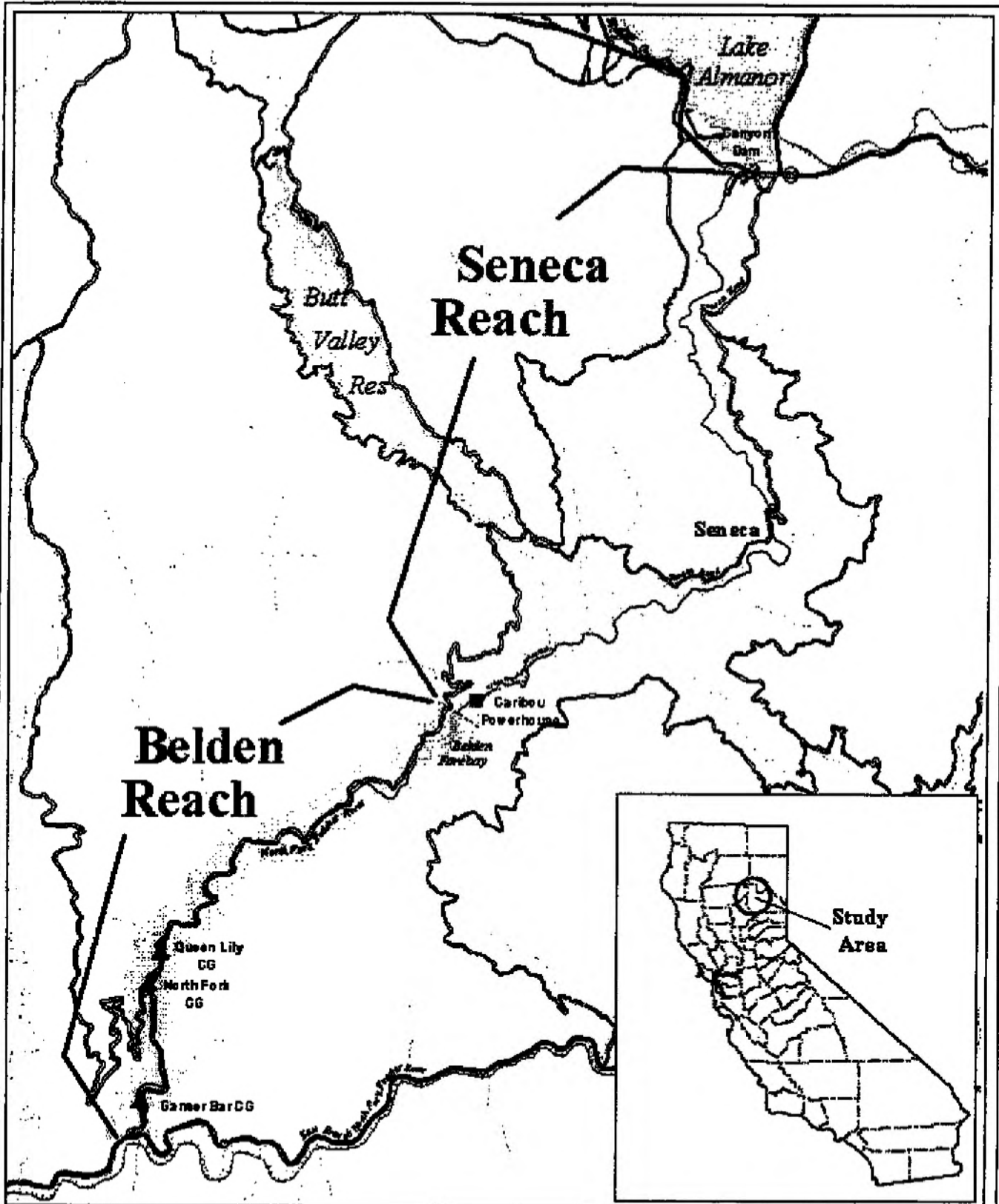
© 2011 PG&E, all rights reserved. Confidential

Provide the funding and leadership for instituting a Lake Almanor watershed management program which equals the management the PG&E has historically demonstrated for the dam and downstream water conveyance facilities

JANUARY 10, 2002

**UPPER NORTH FORK
FLOW ASSESSMENT FOR RECREATION
PRESENTATION OF STUDY RESULTS**

**Information Presented at
January 10, 2002 Chester Meeting
and January 30, 2002 Sacramento Meeting**



P:\2000\2105\2105-01\2105-01.dwg

Upper North Fork Feather River
 FERC No. 2105
Pacific Gas and Electric Co.
 Whitewater Boating Study -- Location Map
 Figure xxx

Source: Doug Wattaker 2001

1 0 1 2 Miles

Scale 1 : 50,000
 1" = 1.1 miles

DRAFT

EDAW

07/20/01

STUDY OBJECTIVES

Whitewater Boating

- Identify potential boating opportunities on the two reaches (craft, skill level).
- Identify attributes of boating opportunities, including rapid descriptions.
- Identify flow ranges for each boating opportunity.
- Asses the regional “uniqueness”/ importance of UNFFR boating opportunities
- Estimates the economic value of whitewater boating opportunities

Fishability

- Identify potential fishing opportunities on the reaches (fly, spin, and bait).
- Identify attributes of fishing opportunities
- Identify flow ranges for each fishing opportunity.

Swimming and General Recreation

- Develop rough relationships between flow levels and experience quality.

STUDY METHODS

- **Literature review and interviews with resource experts**
- **Resource reconnaissance**
- **Controlled flow assessments**
 - Scheduled flow releases
 - Panels of boaters and anglers
 - Pre-flow, flow, and post flow surveys
 - Post flow discussion
 - Video and photo documentation
 - Fishing wadeability
 - Swimming and general recreation assessments
- **Regional Whitewater Boating Assessment**
- **Whitewater Boating Valuation Literature Review**
- **Integration of Flow Information**

WHITEWATER BOATING STUDY RESULTS SENECA REACH

Boater Panel

Gender. 8 males and 1 female.

Age. Range 19 to 52 years. average = 33 years.

Typical craft. All usually paddle hard shell kayaks.

Skill levels. 8 expert (Class V) & 1 advanced (Class IV).

Years boating. Average = 12.4 years.

Frequency of boating. Average = 128 boating days per year.

WHITEWATER BOATING STUDY RESULTS SENECA REACH

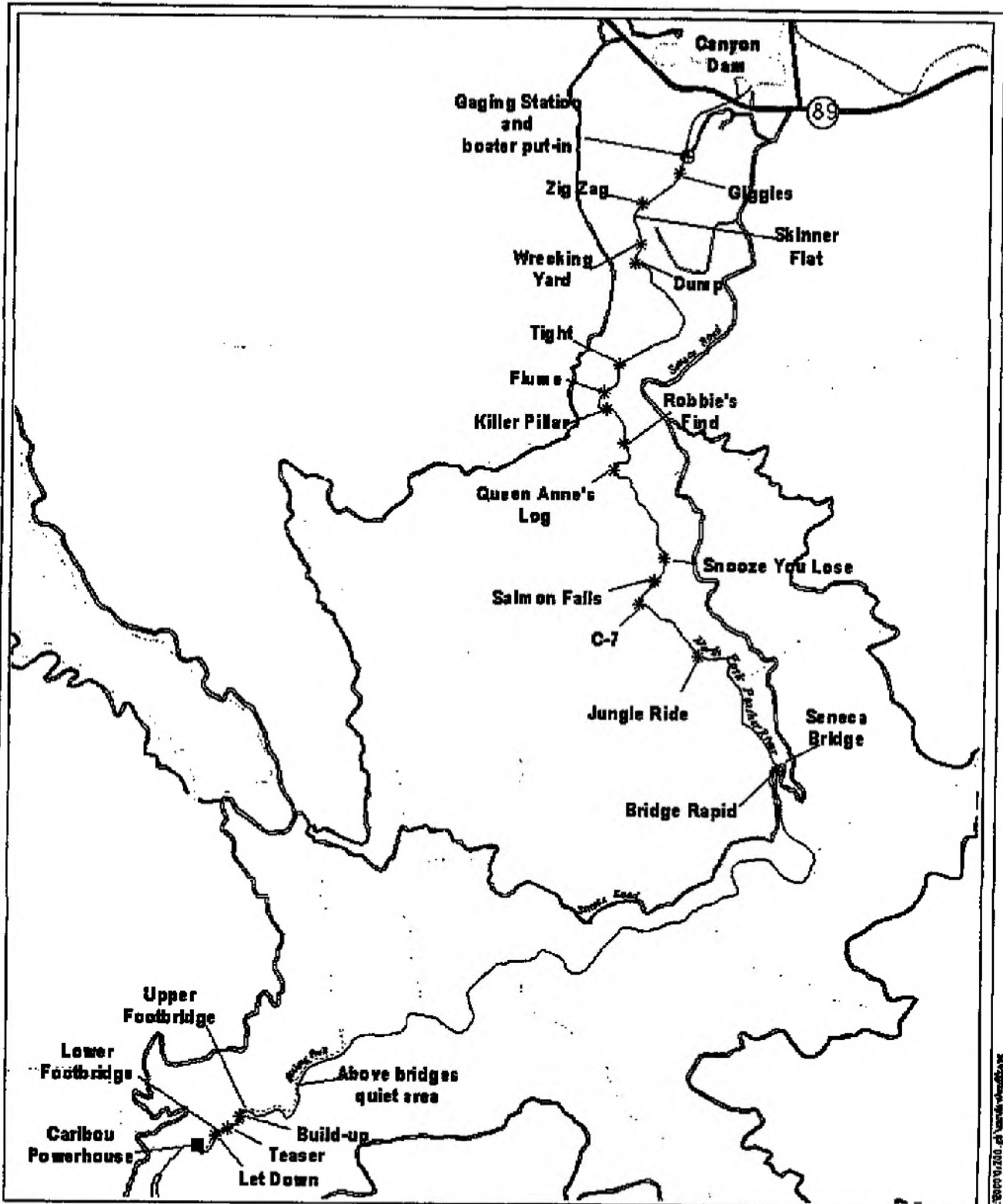
General Description

Class IV/V Run – Generally not raftable

Offers a steep, technical creek-boating opportunity rather than large hydraulics or numerous play areas.

Test Flows – October 2 – 4, 2001

- 220 cfs**
- A very technical opportunity
 - Limited rout options
 - Frequent contact with rocks
 - Pinning hazard with some rocks
- 320 cfs**
- A technical opportunity
 - Limited rout options
 - More pushy than 220 cfs
 - Less hydraulics than 410 cfs
 - More congested eddies and routes (with rocks and logs) than 410 cfs
- 410 cfs**
- Consensus best run
 - “Pushiest” run
 - Adequate eddies for scouting rapids
 - Most play and route options
 - Rocks and logs less likely to cause boatability or hazard problems
 - Considering higher speed of water, best to know rapids prior to boating. May be high as an entry flow.

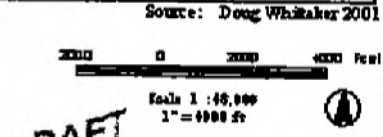


P:\2004\2105_04\UpperNorthFork

Upper North Fork Feather River
 FERC No. 2105
 Pacific Gas and Electric Co.

Whitewater Boating Study – Seneca Reach
 Figure xxx

Legend	
*	rapid
▲	campground
⊕	gaging station



DRAFT



WHITEWATER BOATING STUDY RESULTS SENECA REACH

KAYAKING



Potential Flow Options - Meets and Balances Recreation Needs and Minimizes Power Losses

- Single Flow - Initial Years
- Single Flow - After run becomes known
- Two Flows - Initial Years
- Two Flows - After run becomes known



Flow (CFS) at first downstream gauge

Flow Range Definitions

Technical = Boatable flow to minimum standard flow

Standard = Strong intermediate to advance boater flow

High Challenge = Advance to expert boater flow

BELDEN REACH

Boater Panel

Gender. 16 males and 8 females.

Age. Range 18 to 52 years. average = 40 years.

Typical craft. 21 kayakers and 3 rafters/catarafters

Skill levels. 50% expert, 33% advance, and 17% intermediate boaters

Years boating. Average = 14 years. 80% > 7 years. 30% > 20 years.

Frequency of boating. Avg = 58 boating days per year. 4 > 100 days per year.

WHITEWATER BOATING STUDY RESULTS BELDEN REACH

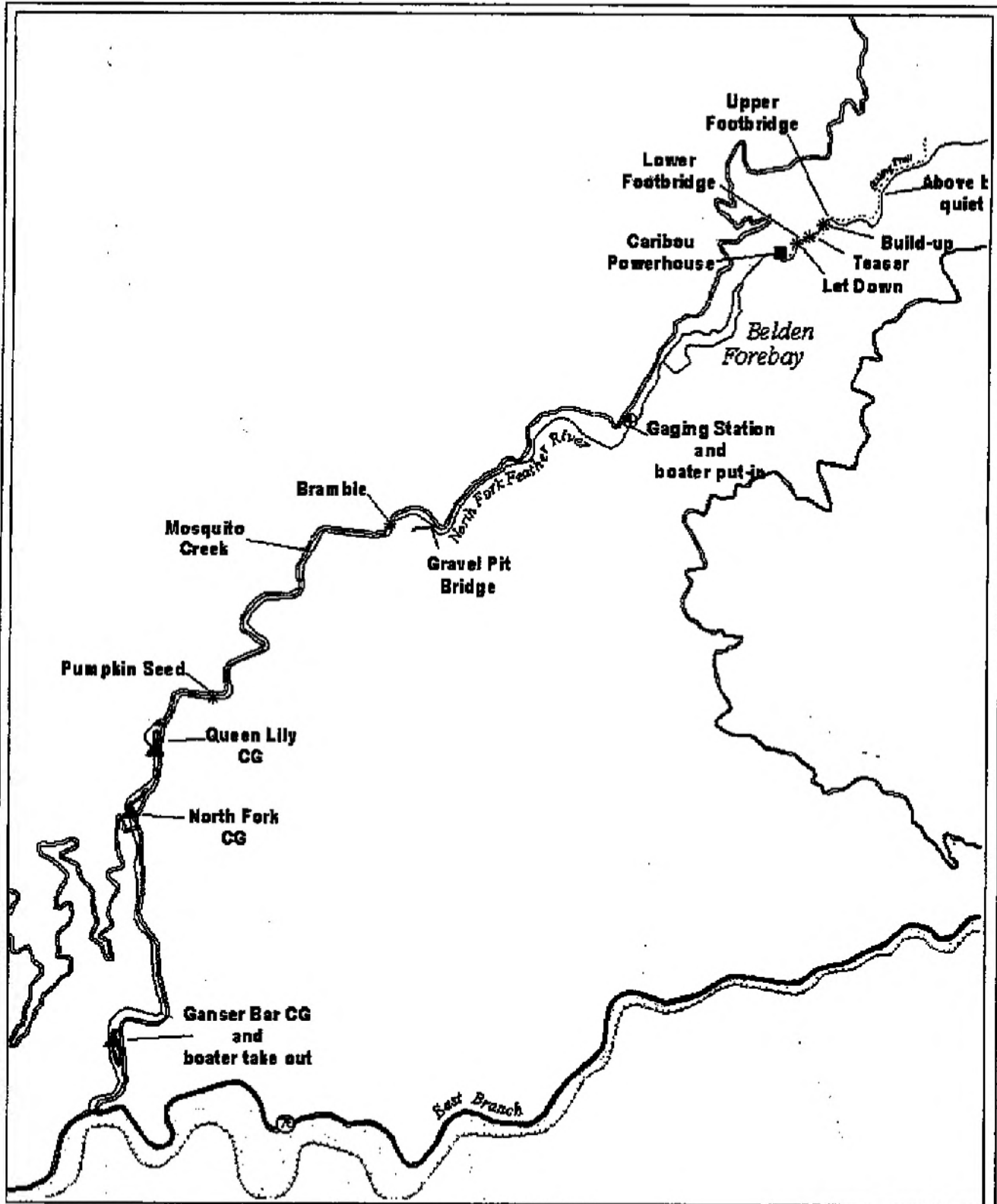
General Description of Resource

Class III/IV Run – Generally raftable at some flows

Offers an even gradient, active creek-boating, rather than a large hydraulics or numerous play areas.

Test Flows – Sept. 30 – Oct. 1, 2001

- 380 cfs
- “Bony”, multiple hits (average = 70 hits)
 - No significant problems
 - Two portaged Bramble, overhanging vegetation.
 - Frequent contact with rocks
 - Pinning hazard with some rocks
- 640 cfs
- More route opportunities
 - Less contact with rocks
 - Small raft, frequent contact w/rocks & vegetation
 - Small cataraft, put-in below Bramble, few problems
- 870 cfs
- More power than other runs
 - Continuous whitewater.
 - Strong hydraulics in steeper drops.
 - Raft and most kayakers no incidents.
 - Two intermediate kayakers chose not to run.
 - No boatability (hits or stop) problems.



P:\2005\0210.d\North Fork\Map.dwg

Upper North Fork Feather River
 FERC No. 2105
 Pacific Gas and Electric Co.

Whitewater Boating Study – Belden Reach
 Figure xxx

Legend

- * rapid
- ▲ campground
- ⊕ gaging station

Source: Doug Whitaker 2001

0 2000 4000 feet

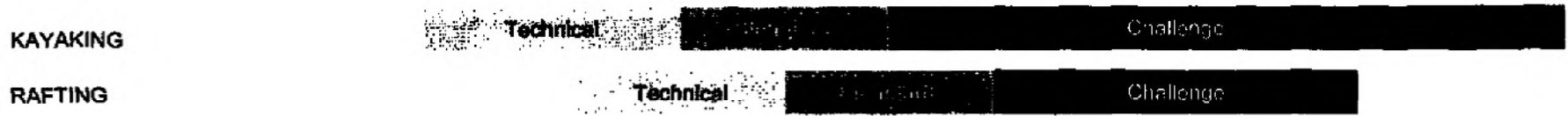
Scale 1" = 40,000 feet
 2" = 80,000 feet

DRAFT

EDAW

02/2001

WHITEWATER BOATING STUDY RESULTS BELDEN REACH



Potential Flow Options - Meets and Balances Recreation Needs and Minimizes Power Losses



WHITEWATER REGIONAL ASSESSMENT SENECA REACH

Regional Assessment of similar (Class IV/V) river segments

	Within 2 hours of Chico	Within 4 hours of Chico	Statewide
Number of segments	25	44	73
Season			
one season only	17	26	42
summer flows	2	3	11
all year flows	0	0	0

Other Factors

- One of easier Class IV/V regional runs
- At 11 miles, generally longer than other runs (7 – 9 miles)
- Similar gradients

Boater panel opinion in comparison to other rivers

- 33% to 44% - worse than average
- 55% to 66% - better than average to excellent

**WHITEWATER REAGIONAL ASSESSMENT
BELDEN REACH**

Regional Assessment of similar (Class III/IV) river segments

	Within 2 hours of Chico	Within 4 hours of Chico	Statewide
Number of segments	11	31	39
Season			
one season only	4	10	14
summer flows	4	10	11
all year flows	1	3	3

Other Considerations

- one of easier Class III/V regional runs
- At 8 or 9 miles, generally longer than other runs (4 - 7 miles)
- Similar gradients

Boater panel opinion in comparison to other rivers

- 50% to 55% felt was average to worse than average
- 45% to 50% felt was better than average to excellent

**WHITEWATER BOATING STUDY RESULTS
ESTIMATED PER DAY WEEKEND USE**

- DIFFICULT TO PREDICT FUTURE

SENECA REACH

Spring and Summer – Average less than 5 boaters/day

Mid-Summer or early fall – upwards of 10 to 20 boaters/day

BELDEN REACH

Spring or early Summer – probably less than 10 to 15 boaters/day

Summer – about 30 to 50 boaters/day

Summer with Commercial Outfitter - upwards to 100 boaters/day

WHITEWATER BOATING STUDY RESULTS ESTIMATED ECONOMIC USE VALUE

Use Value = the economic value of what a day of boating is worth to a boater above and beyond their actual costs.

Typical Value - \$30 to \$40 per person per day

SENECA REACH

Spring and summer – \$25 per person per day

Mid-summer or early fall – \$50 per person per day

BELDEN REACH

Spring or early summer – \$20 per person per day

Summer Months – \$40 per person per day

FISHABILITY STUDY RESULTS SENECA REACH

Fishing Panel

Gender

10 males and 1 female.

Median Years Fishing

Fly – 15 Years (n=10)

Spin – 25 Years (n=5)

Bait – 30 Years (n=1)

Frequency of Fishing.

15 to 100 days per year. Median = 30 days.

UNFFR Fishing.

7 neither reach

3 both reaches

1 Seneca Reach only.

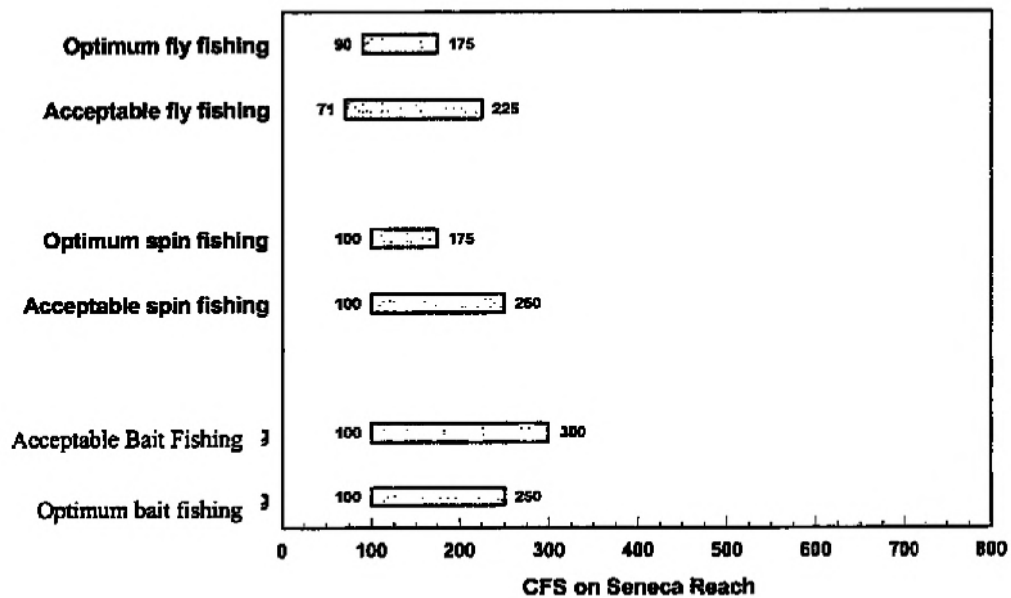
FISHABILITY STUDY RESULTS SENECA REACH

Test Flows – May 11 – 15 20011

General Description of Flows

- | | |
|---------|---|
| 700 cfs | Hazardous to wade
Poor Fishability |
| 300 cfs | Some wadeable fishing water
Caught some small to medium size trout |
| 100 cfs | More wading water
Caught multiple small to medium size trout |
| 35 cfs | Easy to cross river in all but deepest pools
Less fishing habitat and habitat variety
Trout likely in fewer deeper parts of river, likely
increasing fishing success
lessening fishing challenge. |

FISHABILITY STUDY RESULTS SENECA REACH



FISHABILITY STUDY RESULTS SENECA REACH

Integration of Fishing Information

75 to 200 cfs - acceptable fishing for all angler types

If one flow was to be provided....

125 cfs - high quality fly angling
- acceptable lure and bait angling.

If two flows were to be provided....

100 cfs - high quality fly angling
200 cfs - optimal lure/bait fishing
.... Without creating periods when either is unacceptable.

Fishing opportunities lost during whitewater flow releases.

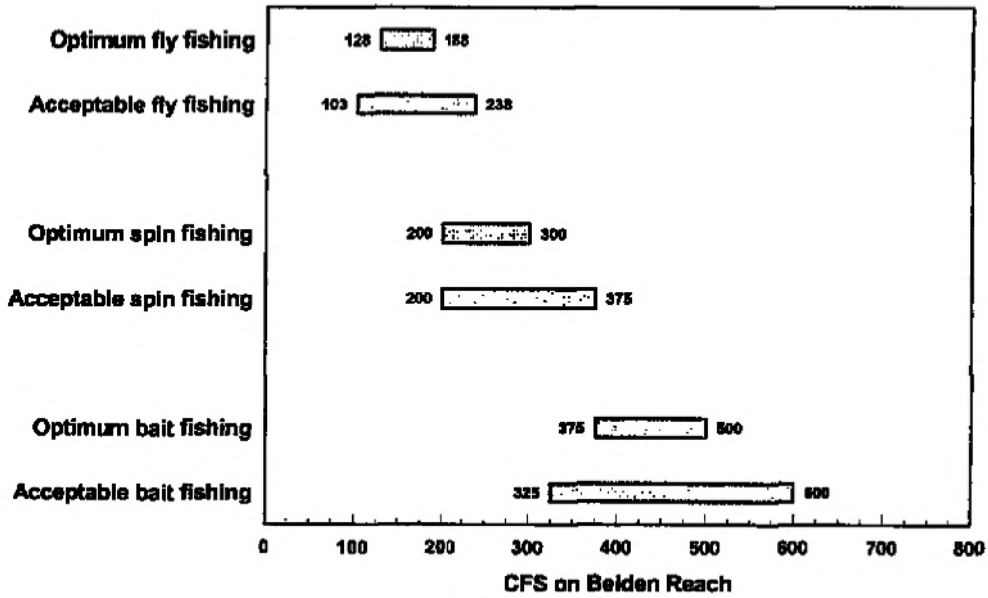
FISHABILITY STUDY RESULTS BELDEN REACH

Test Flows – May 11 – 15, 2001

General Description of Flows

- 700 cfs Filled channel and inundated streamside vegetation.
 Poor fishability
 A few locations fishable
- 300 cfs Wadeable conditions at some sites
 Possible to cross river at wide locations
 Swifter, steeper channels still hazardous
- 100 cfs Easy to cross river in all but deepest pools
 Less fishing habitat and habitat variety
 Trout likely in fewer deeper parts of river, likely
 increasing fishing success
 lessening fishing challenge.

FISHABILITY STUDY RESULTS BELDEN REACH



FISHABILITY STUDY RESULTS BELDEN REACH

Integration of Fishing Information

150 to 300 cfs - acceptable fishing for one or more angler types

If one flow was to be provided....

175 cfs - high quality fly angling
- acceptable lure and bait angling.

If two flows were to be provided....

150 cfs - high quality fly angling
250 cfs - optimal lure/bait fishing
.... Without creating periods when either is unacceptable

Fishing opportunities lost during whitewater flow releases.

FISHING STUDY RESULTS REGIONAL ASSESSMENT

Angler panel's opinion of fishing quality on the Seneca and Belden reaches in comparison to other rivers

- 66% to 100% felt was average to worse than average
- 0% to 33% felt was better than average to excellent

OTHER RECREATION OPPORTUNITIES BELDEN REACH

Swimming

- Primarily in pools around campgrounds during summer
- 150 to 350 cfs
 - o 3 to 5 foot pool depths,
 - o safe flow velocities
 - o acceptable water temperatures.
- Swimming currently not a big activity

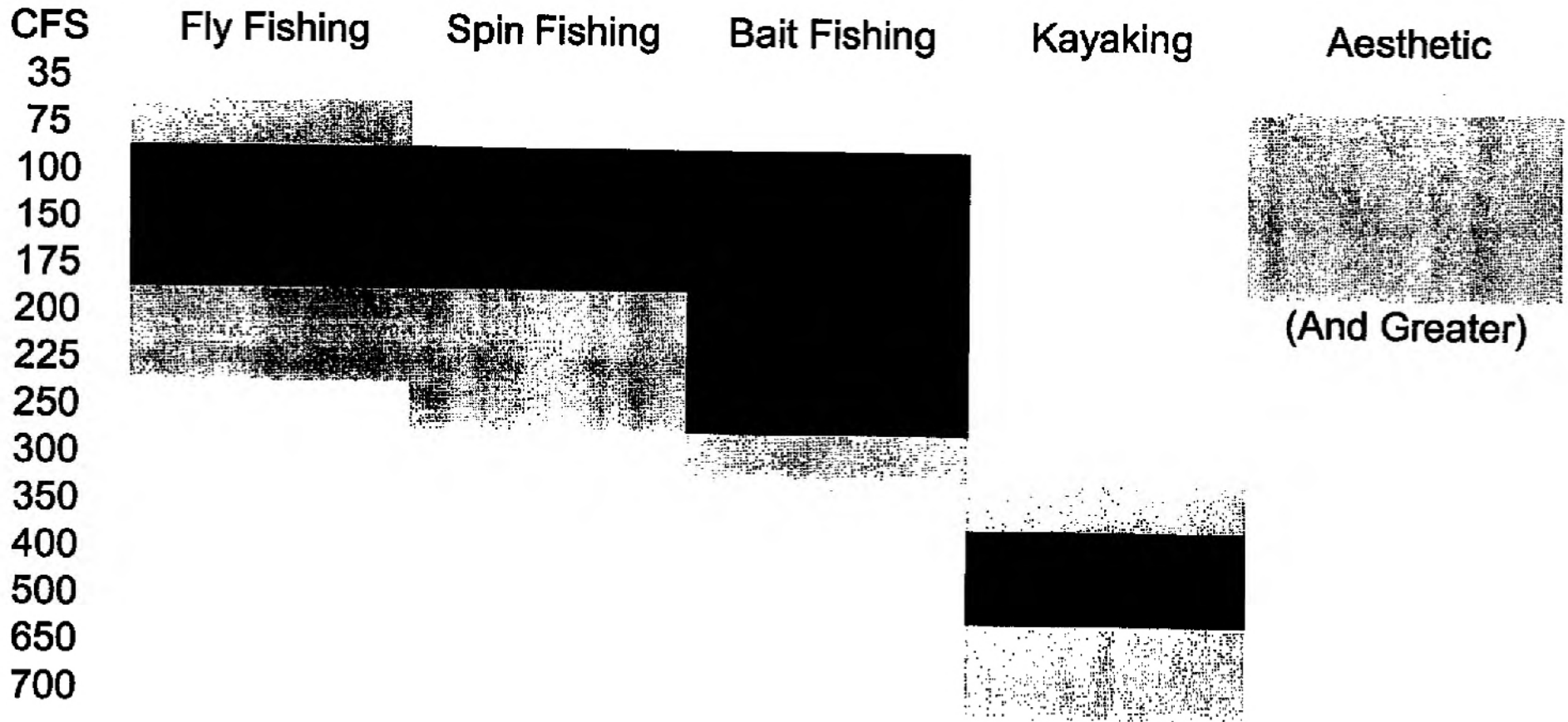
Tubing



- Sporadically occurs around campgrounds during summer
- 150 to 250 cfs - tubing opportunities over short river sections

Flow Enhanced Recreation Activities (Camping, hiking, picnicking, and general recreation)

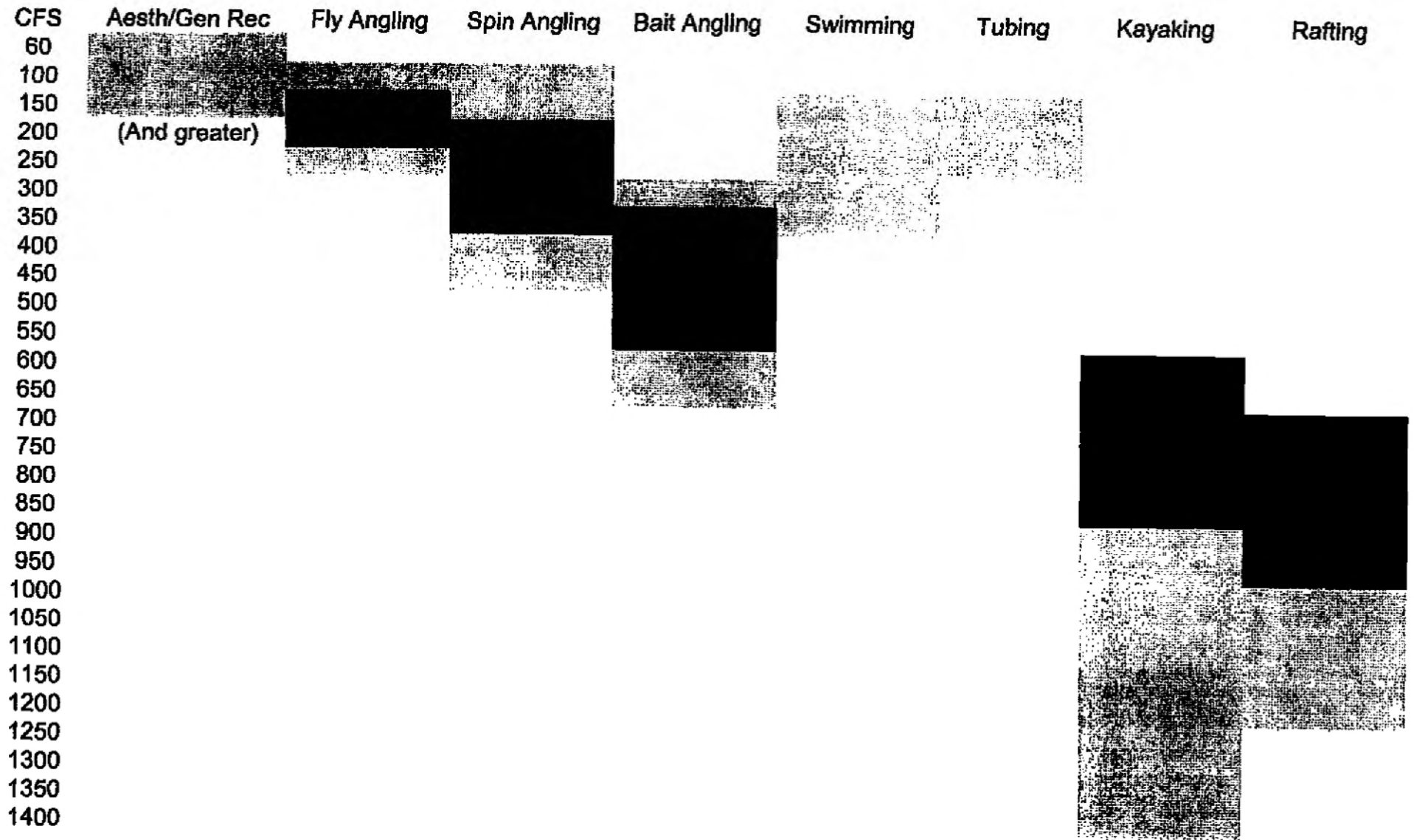
- Basically an aesthetic flow
- Existing base flows appear to offer adequate aesthetic quality.
- A higher Seneca base flow might improve aesthetics,
better covers bottom

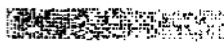

Seneca Reach - Summary of Flow Ranges



 Acceptable Range
 Optimum Range

Weldon Reach - Summary of Flow Range



 Acceptable Range
 Optimum Range

JANUARY 28, 2002

**PUBLIC USE ACCESS
ASSESSMENT**

**SUMMARY OF PRELIMINARY
RESULTS**

**Upper North Fork Feather River Project
FERC No. 2105**

**January 28, 2002, Chester, CA
January 30, 2002, Sacramento, CA**

EDAW, Inc.

INTRODUCTION

- An assessment of the public's ability to access the shoreline of Project reservoirs and bypass river reaches for day use activities.
- Land ownership considered in the study:
 - Licensee
 - U.S.D.A. Forest Service
 - Other Private
- This study does not yet include the results of other ongoing studies:
 - Rec. Needs Assessment
 - Cultural Resource Studies
 - Site Develop. Suitability

OBJECTIVES

- Identify areas of opportunities and constraints to public shoreline day use access to Project lands and waters.
- Ensure reasonable public access to the Project's land and water areas over the term of the new license.
- Protect sensitive resources and provide for public safety.

OBJECTIVES

(cont.)

To achieve objectives:

- Evaluate public versus private day use access opportunities.
- Consider the effect of future private development on shoreline access.
- Determine if public access may be precluded in the future as a result of Project operations.
- Identify options for improving public access in the Project area to be considered during relicensing.

STUDY AREA

The study area includes a 1/4-mile radius surrounding:

- Lake Almanor
- Butt Valley Reservoir
- Belden Reach
- Seneca Reach

Level 1 recreation sites:

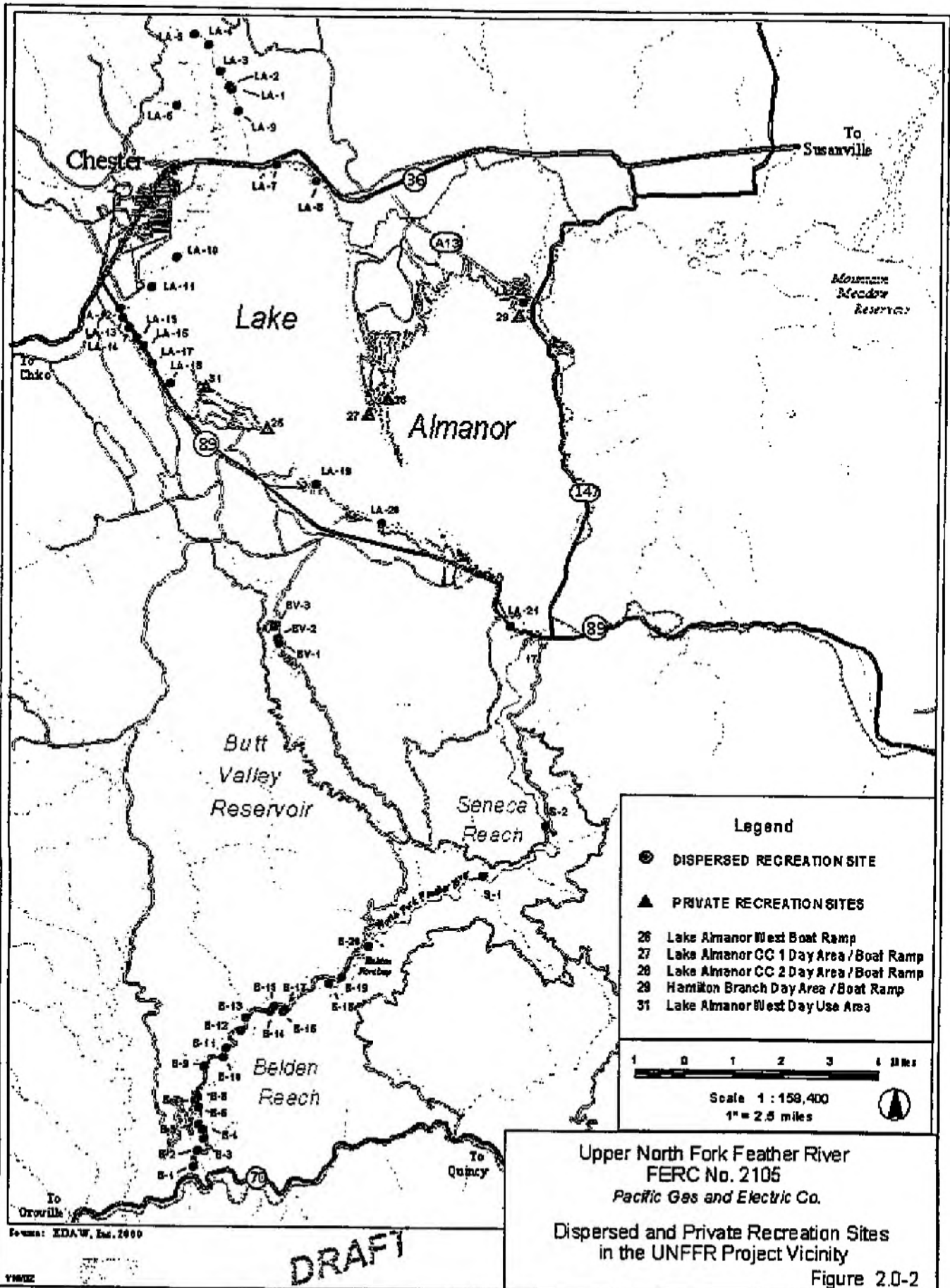
- Developed recreation sites
- Licensee
- Forest Service

STUDY AREA

(cont.)

Level 2 recreation sites:

- Private facilities, boat launches
- Dispersed, undeveloped lakeside and riverside day use and overnight sites



METHODS

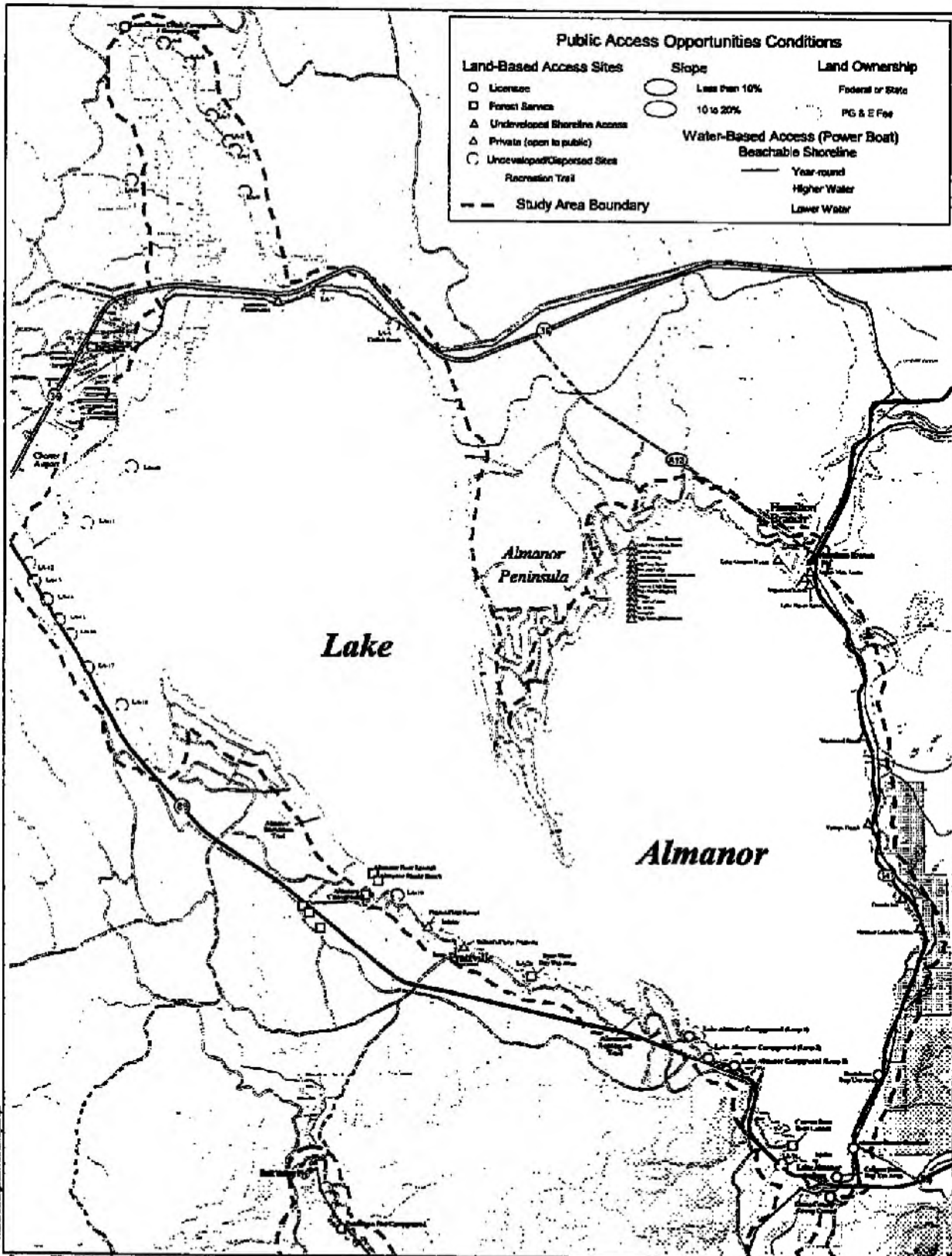
Public shoreline access was assessed using:

- Existing inventory data
- On-site visits
- GIS-based data layers
- Input from the 2105 Committee, Forest Service, and others

Public Access Opportunities

Variables Considered:

- . Existing recreation sites
- . Existing trails
- . Existing road access
- . Licensee land
- . Public land
- . Slopes of 0 to 10 percent
- . No sensitive biological resources
- . No Project hydroelectric facilities
- . Unrestricted water depth and access for motor boating
- . Year-round shoreline boat access



Source: EDAW, Inc., 2000 / PG&E GIS

1 0 1 2 Miles



Scale 1 : 63,360
1" = 1 mile

Upper North Fork Feather River Project
(FERC No. 2105)

Pacific Gas and Electric Co.

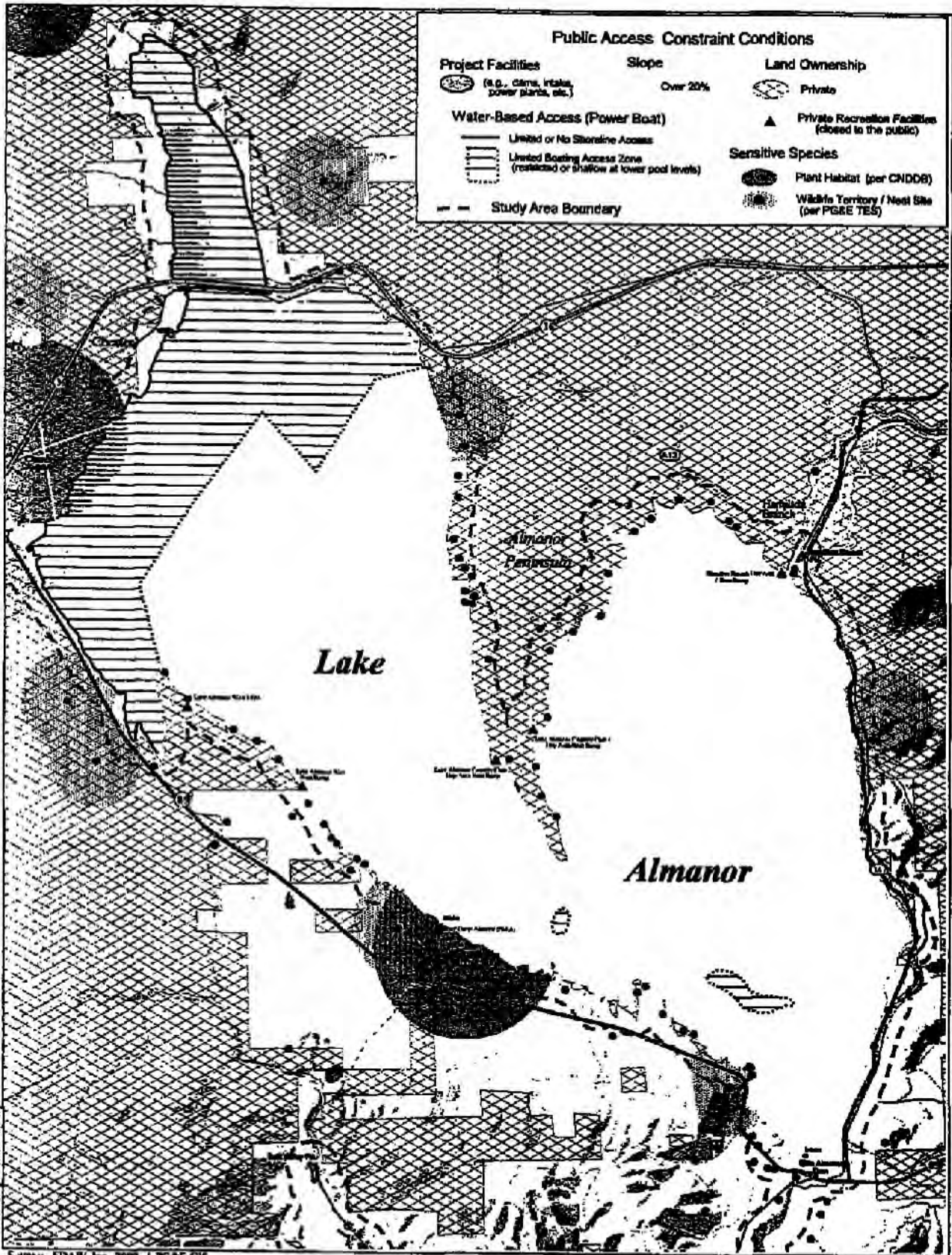
PUBLIC ACCESS OPPORTUNITIES

Lake Almanor

Public Access Constraints

Variables Considered:

- Project hydroelectric facilities
- Non-Licensee private land
- Biological constraints
- Areas of shallow water depth
- Restricted areas due to safety
- Slopes greater than 20 percent



Source: EDAW, Inc., 2000 / PG&E GIS



Scale 1 : 63,360
1" = 1 mile

Upper North Fork Feather River Project
(FERC No. 2105)
Pacific Gas and Electric Co.
PUBLIC ACCESS CONSTRAINTS

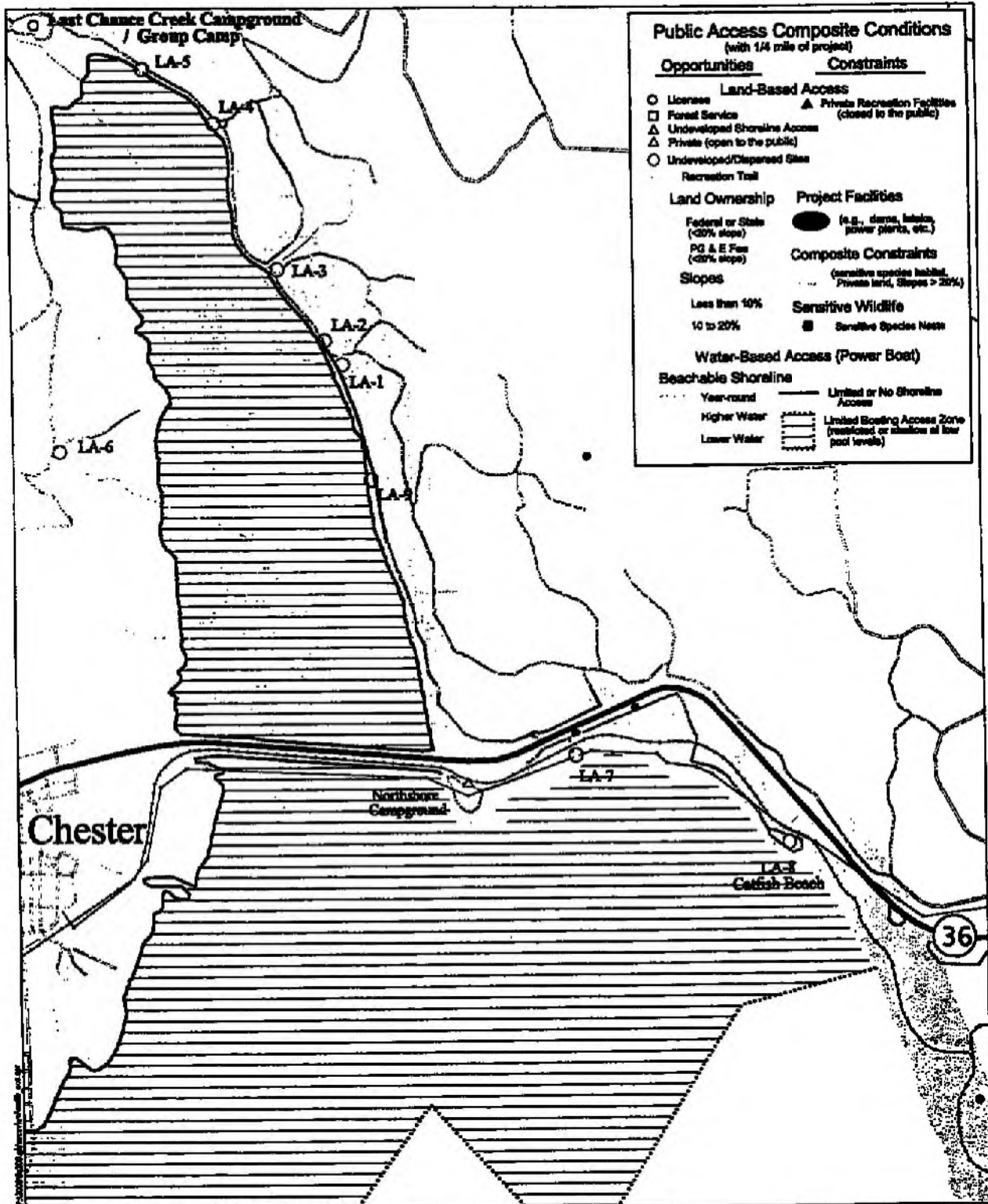
Lake Almanor

1:602

Figure 4.1-2a

Composite Maps

- Public day use access opportunities and constraints were overlaid and categorized into high, moderate, and low ratings.
- GIS overlay maps were created based on public access categories.
- 2 types of access were considered when analyzing the composite maps:
 - Vehicle and foot day use access to the shoreline
 - Boat access from the water



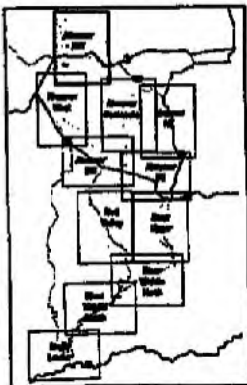
Source: EDAW 2001 / PG&E GIS / USGS

1000 0 1000 2000 3000 4000 Feet

1 : 24,000
1" = 2000 feet

DRAFT

1/16/02



Upper North Fork Feather River Project
(FERC No. 2105)

Pacific Gas and Electric Co.

LAKE ALMANOR
[Chester / North Shore]
PUBLIC ACCESS
COMPOSITE CONDITIONS

Almanor NW

Figure 4.2-2a

RESULTS SUMMARY

- Many public day use access opportunities exist in the Project area.
- However, public day use access is variable and dependent on location.
- A greater distribution of public developed day use sites would improve public access, particularly on Lake Almanor.

Lake Almanor

- Nearly all of the shoreline between the 4,500 ft elevation and the high water (4,494 ft) elevation acts as a public access buffer around lake for foot and boat access.
- Width of buffer is variable around lake depending on shoreline slope and lake drawdown.
- Site topographic conditions (i.e. steep slope with high water, as well as extremely shallow bathymetry) limit both foot and boat shoreline access in some areas.

- Existing developed public shoreline access opportunities are focused on the southwestern shoreline.
- Non-Licensee private land is a constraint to public access in some areas.
- At the same time, existing private RV resorts play an important role in providing public shoreline access (i.e. many have boat launches and other facilities available for public use).

RESULTS SUMMARY

(cont.)

Butt Valley Reservoir

- Existing public access is focused on the northeastern shoreline.
- Steep terrain and road access limits new public access opportunities.

RESULTS SUMMARY

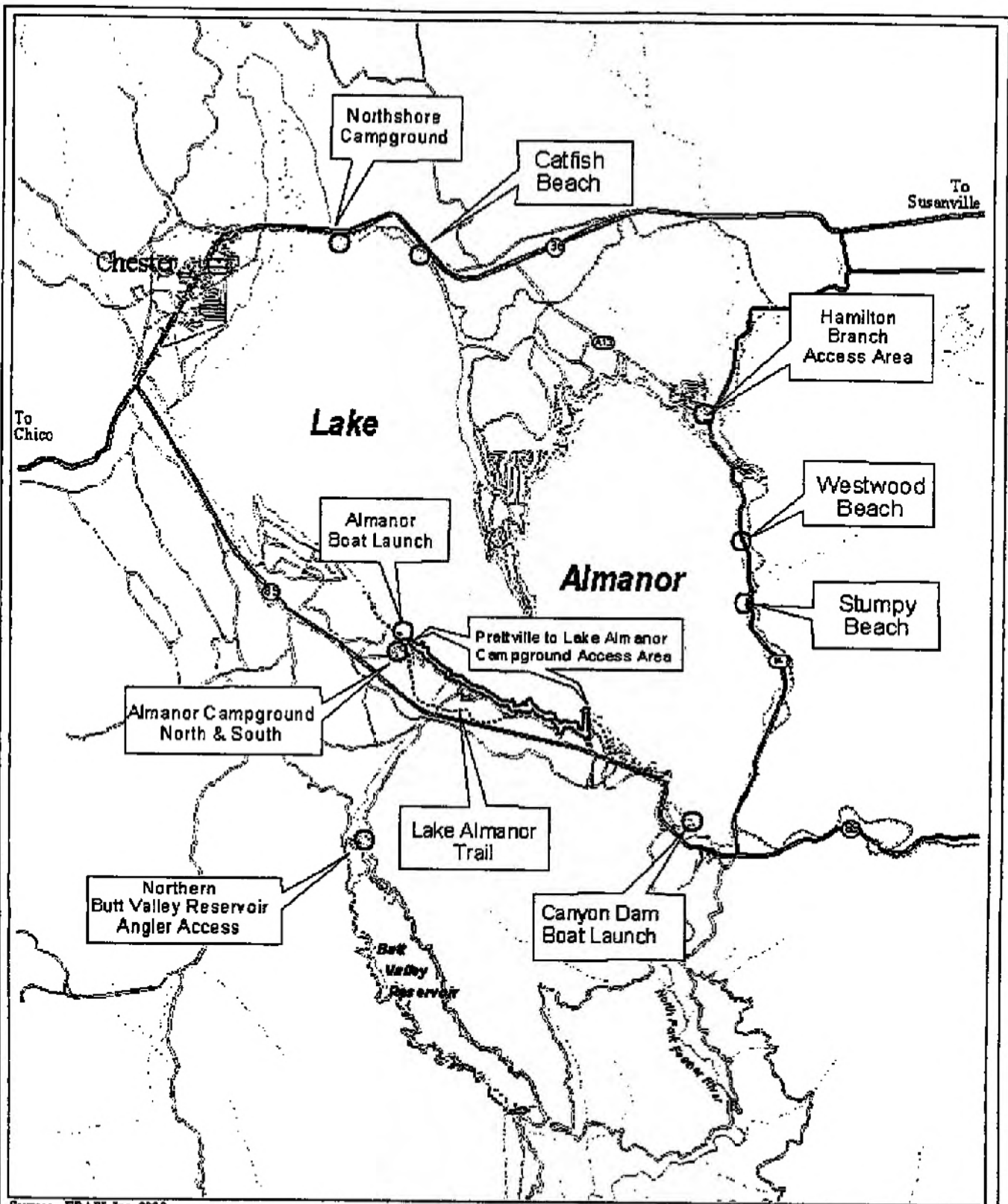
(cont.)

2 Bypass Reaches

- Several existing public access sites are in areas rated as high to moderate public access in the Belden Reach.
- Few possibilities exist for new public access opportunities, except for boater put-ins/take-outs (note: the Seneca bridge take-out is on private land, unless the parking area is within the County road ROW).

PRELIMINARY OPTIONS TO ENHANCE DAY USE PUBLIC SHORELINE ACCESS

- Existing plans underway
- Other potential options to consider



Source: EDAW, Inc. 2000

0 1 2 Miles



Scale 1 : 121,728
1" = 2 miles

PRELIMINARY

Upper North Fork Feather River
FERC No. 2105

Pacific Gas and Electric Co.

Potential Areas of
Improved Public Access

Figure 5.2-1

EXISTING PLANS TO IMPROVE PUBLIC SHORELINE ACCESS

- Hamilton Branch Angler Access
- Almanor Campground (North and South) Improvements (Forest Service)
- Almanor Boat Launch Improvements
- Lake Almanor Rec. Trail Extension
- Canyon Dam Boat Launch Improvements

OPTIONS TO FURTHER IMPROVE PUBLIC SHORELINE ACCESS

Lake Almanor

North Shore/Chester Options:

- Northshore Campground Area – Boat Launch Renovation and a New Chester Day Use Shoreline Park
- Catfish Beach Area Alternatives

East Shore Options:

- Stumpy Beach – Day Use
- Westwood Beach – Day Use

Southwestern Shoreline Options:

- Prattville to Lake Almanor
Campground – Day Use Vehicle
Access Zone (vehicles allowed on
the lakebed; only area available)
- Prattville to Lake Almanor West –
Shoreline Day Use (??)
- Canyon Dam to Lake Almanor
Campground – Shoreline Day Use
(??)

OPTIONS TO FURTHER IMPROVE PUBLIC SHORELINE ACCESS

(cont.)

Butt Valley Reservoir

- Northern Angler Access Improvements (near the powerhouse)

2 Bypass Reaches

- Potential Whitewater Put-ins/Take-outs being considered in the Whitewater Study
- Improved hand-launch boater access at the Belden Forebay/trail parking

OTHER STUDIES/PLANS

- Recreation Needs Analysis will synthesize all study results for a comprehensive list of existing and future recreation needs in the Project area.
- These needs will be integrated into a future Recreation Resource Management Plan (RRMP)

MAY 15, 2002

**Upper North Fork Feather River
Recreation, Land and Aesthetic Work Group Meeting
May 15, 2002 – 9AM to 3 PM.**

**Chester Memorial Hall
225 Gay Street, Chester, CA**

AGENDA

Introduction – John Mintz (PG&E)

Land Management and Aesthetics – Kirby Gilbert (Foster Wheeler)

- **Overview of Land Management and Aesthetics Exhibit Studies and Proposals**
- **Schedule**

Recreation – Chuck Everett (EDAW)

- **Schedule**
- **Overview of Recreation Exhibit Study and Proposals**
- **Recreation Resource Management Plan**

Discussion – All

Hamilton Branch

- **Land Management and Aesthetic Issues**
- **Initial proposed recreation studies**
- **Discussion**

UNFFR RELICENSING
FERC No. 2105
Recreation and Land Management Work Group Meeting
May 15, 2002
9 A.M to 2:30 P.M.
Memorial Hall, Chester, CA

Attendees:

Marvin Alexander	(530) 259-3768	Plumas10@aol.com
Bill Cheek		
Michael Condon	(530) 283-2870	mcondon@fs.fed.us
Bill Dennison	(530) 258-2058	dennison@citlink.net
Alta Garrick	(530) 258-3376	
Janie Ackley	(530) 258-2141	jackley@fs.fed.us
Peggy Gustafson	(530) 283-7622	pgustafson@fs.fed.us
Mike Taylor	(530) 534-6500	mftaylor@fs.fed.us
Sharon Stohrer	(916) 341-5397	sstohrer@waterrights.swrcb.ca.gov
Marian Liddell	(530) 258-3115	chesterprogressive@hotmail.com
Christi Goodman	(530) 283-6167	
Harry Williamson	(916) 414-2355	Harry_Williamson@nps.gov
Mike Meinz	(916) 358-2853	mmeinz@dfg.ca.gov
Kirby Gilbert	(425) 482-7701	Kgilbert@fwenc.com
Chuck Everett	(206) 622-1176	everettca@edaw.com
Sergio Capozzi	(206) 622-1176	capozzis@edaw.com
Mark Sanford	(530) 894-4653	AMS0@pge.com
John Mintz	(415) 973-5779	JSM9@pge.com

John Mintz called meeting to order and provided a general overview of the planned topics. This meeting is intended to be the first of several draft application review and consultation meetings. This meeting was set up to provide an overview of the draft application with respect to the recreation and land management sections. Presentations were made by Chuck Everett of EDAW to summarize the content and findings of the recreation exhibits and Kirby Gilbert presented a summary of the land management and aesthetic exhibits. John Mintz explained the overall application review and consultation process and mentioned that the public and agencies have until July 29th to comment on the Draft License Application. Comments will be addressed before the Final License Application. Many from the work group wanted to go step by step through the recreation plan results and recreation proposals. John also informed the group of the Hamilton Branch amendment. Throughout the meeting there were a series of comments and discussions on the review process for the draft application and Hamilton Branch amendment as well as many specific comments related to the recreation and land management/aesthetics findings. The comments, issues, and resolutions or clarifications are highlighted as follows:

Overall Review Process Issues and Comments – Hamilton Branch:

- Repeated concern and questions as to why the Hamilton Branch Project was being added to the Upper North Fork Feather River Project this late in the relicensing process. John Mintz explained it had to do with the PG&E reorganization plan under the bankruptcy proceedings and with settlement discussions with the California Public Utilities Commission (CPUC). Most attendees wanted more answers and John Mintz agreed to ask Tom Jereb to respond to the group's concerns and questions.
- Concern that the addition of Hamilton Branch will potentially delay the Final Draft Application and delay any improvements around Lake Almanor.
- Concern that there will not be time to comment on study plans for Hamilton Branch.
- Questions on what specific facilities are involved in the Hamilton Branch amendment.
- Some agency staff did not want to comment on study plans or have this meeting constitute any sort of formal consultation on study plans until a study process they could agree upon was worked out.

Overall Review Process Issues and Comments – Recreation:

- *RRMP* - Concern that the public will not get an adequate chance to comment on the Recreation Resource Management Plan (RRMP) because the plan is only outlined in the draft application. Chuck Everett explained that some special meetings in summer to further flush out the recreation plan and obtain comments on the plan.
- *Native Americans* - Bill Dennison expressed interest in having other groups including Native Americans involved in the comment process. John Mintz explained that letters will be sent to Native Americans informing them of upcoming recreation, land-use, and aesthetic meetings and that PG&E is working on posting the UNFFR Draft License, if possible, Application on the Internet.

Recreation Issues and Comments:

- *PM&E Proposals Not Enough* - Concerns that the monetary allotments/estimates in the Protection, Mitigation and Enhancement (PME) section of the Draft License Application are not enough to satisfy what some of the attendees felt are necessary to meet future needs, especially when considering the possible length of the new license term. Specific concern about funding amounts listed for developing campsites and a boat ramp on the north shore of Lake Almanor. EDAW representatives emphasized that the analysis does support the proposals and that participants should read the Needs Analysis and other sections to understand the basis for the proposals.

- *PM&E Commitment* - Desire for clarification on whether license articles will specify the amount of future recreation improvements based on monetary amounts (or limitations) or based upon an inventory or description of the proposed facilities. John Mintz explained he would look further into what is typical, but believed specific future needs and improvements were generally specified by facility descriptions not a funding allocation or level. In addition there would likely be thresholds to determine use levels that provide a "trigger" for the need to implement improvements.
- *Lake Level/Shoreline Areas* - Bill Dennison expressed concern that additional shoreline areas could be available and suitable for recreation development if the study were to consider higher summer lake levels, such as those recommended by the 2105 Committee (those that would maintain the reservoir at elevation 4,485). With this consistently higher lake level some shoreline areas would become permanently more useable and available for development.
- *Forest Service Plans* - Concern about having PG&E rely on other recreation providers to provide future recreation improvements. In specific, the Forest Service may not be able to complete planned recreation proposals on Federal lands in the future due to presence of the federally bald eagle.
- *PSEA Camp* - Bill Dennison expressed a desire to have the PSEA camp at Prattville opened to the public and for further recreation development. General agreement by all parties that expanding existing facilities was better than building all new facilities in previously undisturbed areas, however it was noted that there was no study finding showing it was necessary to convert PSEA Camp Almanor to a public facility to meet future public recreation needs.
- *ADA* - During the discussion of PM&Es associated with American with Disabilities Act (ADA) improvements, several agency personnel mentioned that they thought that ADA improvements should be considered as operation and maintenance (O & M) costs, not new PM&Es because these improvements are considered by them to be those that would be required with or without relicensing. It was pointed out by Harry Williamson of the National Park Service that typically these improvements are not required unless other improvements were planned and thus they are usually done when other facility upgrades or expansions are undertaken.
- *North Shore Campground* - Concerns that the North Shore Campground site will not be big enough to accommodate new public improvements especially with improvements planned for the boat ramp. Desire to have a back up location for a Chester day use facility besides North Shore.
- *Catfish Beach* - Desire to open up Catfish beach for day-use again. Concern that Catfish Beach is subject to vandalism and squatting as in the past.

- *Lake Almanor Trail* - Desire for PG&E to cooperate in the expansion of the Lake Almanor bicycle trail. John Mintz explained PG&E would assist by providing easements where possible. There was a specific recommendation that PG&E assist with a small day use facility at the trailhead of the proposed 1st Avenue Trail extension (picnic tables, restroom and water).
- *Fish Cleaning Stations* - Desire for more shoreline fishing facilities and fish cleaning stations in the Project area.
- *Almanor Pristine Nature* - Mike Mainz expressed concern that additional recreation development itself and through encouragement of additional use would change the special, pristine nature currently at Lake Almanor.
- *User Fees* - Bill Dennison expressed concern about a proposal for user fees related to recreation management related to on site managers or hosts. In particular while he was not opposed for fees to visitors, he was opposed to charging fees to local users.
- *Almanor Boat Ramps* - Questions related to the serviceability of boat ramps at low pool levels. John Mintz explained that there are plans to survey the elevations of the commercial boat ramps in 2002 to determine their range of operations. In addition, the USFS boat ramps toes will be surveyed.
- *Butt Valley Reservoir Trail* - Further discussion on the merits of having a Butt Valley shoreline trail for campers and even bicycles, although many thought that would not be appropriate for bicycle use given the setting and possible conflicts with shoreline anglers. Desire to have the proposed Butt Valley Trail be a multiple use trail that could accommodate bicycles. Concern expressed that paving or allowing bikers on trails would change the relatively low density, fishing character character/recreation experience at the lake. Increased erosion from Mtn bikes, if trail was dirt, was also expressed.
- *Water Rights* - Mike Mainz was the issue that if dredging occurred at the lake, this may raise water rights issue, because then the lake would store more water.
- *Ecological Resource Committee* - Mike Mainz indicated that an Ecological Resource Committee was referenced in the Executive Summary. He was wondering if this was error reference to the Rock Creek Cresta Project or if an Ecological Resource Committee was being proposed for the UNFFR Project.
- *Beldon Rest Stop* - Need to replace the restroom this rest stop's restroom expressed.

Land Management, Aesthetics and Shoreline Management Issues and Comments

- *Watershed Plan* - Concern that a watershed plan is needed and acknowledge (as needed) in the land management recommendations.
- *TPZ Zone* - Discussion that a Timber Protection Zone along the Southeast shoreline could conflict with recreation proposals. Bill Demmison thought the zoning could be changed if the area was needed.
- *Red River Lumber Deed* - Concern that the Red River Deed restrictions are not being adequately addressed. It was agreed that this issues would be further discussed at a future meeting.
- *Aesthetic Mitigation* - Concern that the aesthetic resource mitigation measures seem too small for a large project such as the UNFFR Project.

**UNFFR RELICENSING
FERC No. 2105
Work Group Meeting
May 15, 2002
Chester, California**

- **Land Management**
- **Aesthetics Analysis**
- **Draft Shoreline Management Plan**
- **Traffic Study & Road Management**

LAND MANAGEMENT

- **30,954 acres of land and water within Project boundary**
- **Licensee owns 97 percent of lands**
- **Forest Service manages 986 acres**
- **BLM administers 38 acres**
- **Lake Almanor permanent population is 4,620**
- **Year 2000 Census lists 2,051 permanently occupied housing units and 1,898 seasonal units**
- **Over 2,000 new housing units approved**
- **Sierra Nevada Forest Plan provides new land management allocations**
- **Land uses at Project found to generally be compatible with Project operations and uses**
- **Project operations are generally consistent with area land management**
- **Timber Protection Zones (TPZs) along Lake Almanor are not intended to allow recreation development**

AESTHETICS

- **Four landscape units**
- **Scenic Byways and the Pacific Crest Trail**
- **Forest Service Visual Quality Objectives**
- **19 Key View Points established**
- **Lake level assessment**
- **Average September Lake level is elevation 4,482**
- **Reservoir levels below 4,482 expose large shoreline areas that can be undesirable to many viewers**
- **Butt Valley Reservoir visual quality is generally preserved across normal reservoir operating levels**
- **Belden and Seneca bypass reach flows are generally protective of aesthetic values**
- **Recommended Project Enhancement Measures include:**
 - **Repainting the Prattville Intake Hoist House**
 - **Evergreen plantings around Prattville buildings**
 - **Regrade Oak Flat spoil site along Caribou Road**
 - **Tree planting at Oak Flat spoil site**

DRAFT SHORELINE MANAGEMENT PLAN

- **Specific to lands within the 4,500-foot elevation FERC Project Boundary surrounding Lake Almanor**
- **Shoreline buffer zone necessary to meet Project Purposes**
- **1,003 shoreline lots on 52 miles of shoreline**
- **22 commercial resorts and 13 public recreation areas**
- **Issues**
 - **Lake levels**
 - **Red River Lumber Company deed provisions**
 - **Lake navigation aids and hazard markings**
 - **Consistency in application of SMP policies**
 - **Shoreline erosion**
 - **Shoreline public access**
- **Water Quality and Shoreline Erosion findings**
- **Typical permits and permit authorities**
- **Shoreline Permitting Process**
- **Shoreline Management Zones**
- **Proposed information flyers and outreach information**
- **Voluntary shoreline stewardship practices**

TRAFFIC STUDY AND ROAD MANAGEMENT

- **State Highways and County Roads**
- **17 Project-related roads**
- **10 Project recreation roads**
- **Traffic Counts for Caribou and Butt Valley Roads**
- **Accident data**
- **Traffic Projections**
- **Findings indicate traffic levels are well below any threshold of concern related to road management and use**
- **Recommended Project Enhancement Measures include:**
 - **Continue to follow existing County and Forest Service agreements**
 - **Install additional warning signs on Caribou Road below Belden Dam**
 - **Install additional warning signs on Butt Valley Dam Road**
 - **Use dust palliatives on lower Butt Valley Dam Road**

2002 SCHEDULE

- **May – July: Application Review**
- **June – July: additional analysis**
- **June - August: further consultation**
- **June – July: Additional Shoreline Management Workshops**
- **September – October: Final Exhibit Preparation**
- **Before October 31, 2002 – File with FERC**

HAMILTON BRANCH LAND MANAGEMENT & ASTHETICS STUDIES

- **Identify and map existing land uses**
- **Identify and map existing land management**
- **Identify Project-related roads**
- **Comprehensive plans and zoning**
- **Proposed Developments**
- **Fire prevention and management**
- **Wetlands and floodplains**
- **Inventory visual resources of Project area**
- **Identify visual management considerations**
- **Identify highway and road scenery management provisions**
- **Evaluate and describe the compatibility of Project facilities with surrounding landscape**
- **Identify measures that might help reduce any contrast between the characteristic landscape and Project components**

Recreation Resources

**Upper North Fork Feather River Project
and
Hamilton Branch Development**

**FERC Project No. 2105
Relicensing**

**May 15, 2002 Meeting
Chester, CA**

Presentation Topics:

- 1. Overview of the Schedule**
- 2. Anticipated Meeting Topics and Schedule for 2002**
- 3. Overview of the Draft License Application: Exhibit E - Report E5: Recreation Resources**
- 4. Development of the Recreation Resource Management Plan (RRMP)**
- 5. Questions and Comments**
- 6. Planned Hamilton Branch Development Recreation Studies**
- 7. Questions and Comments**

OVERVIEW OF THE SCHEDULE

UNFFR Project:

- **Review of the Draft License Application for the UNFFR Project and Proposed Measures**
- **Preparation of a Recreation Plan (RRMP) for the UNFFR Project**
- **Preparation of the Final License Application for the UNFFR Project**

Addition of the Hamilton Branch Development:

- **Initiate the Hamilton Branch Development Recreation Studies**
- **Prepare a Draft and Final Amended License Application for UNFFR Project, including the Hamilton Branch Development**
- **Preparation of an Amended RRMP for the UNFFR Project, including Hamilton Branch**

Draft 2002-2003 UNFFRR Project & Hamilton Branch Development FERC Relicensing - Recreation Resources Schedule
 ED&W, Inc.
 FERC Project No. 2105

5/14/2002

Item	Activity	2002												2003											
		May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec				
1	UNFFRR/Hamilton Branch Recreation Studies																								
2	UNFFRR/Hamilton Branch Draft Amended License Application (DALA) Preparation																								
3	UNFFRR/Hamilton Branch Amended Recreation Resource Management Plan (RRMP)																								
4	UNFFRR/Hamilton Branch Draft Amended License Application (DALA) Reviews																								
5	UNFFRR/Hamilton Branch Final Amended License Application (FALA) Preparation																								
6	UNFFRR/Hamilton Branch Final Amended License Application (FALA) Reviews																								
7	UNFFRR Draft License Application (DLA) Reviews																								
8	UNFFRR Recreation Resource Management Plan (RRMP) Preparation																								
9	UNFFRR Final License Application (FLA) Preparation																								
10	UNFFRR Final License Application (FLA) Reviews																								
11	Meetings/Agency Consultation																								

Legend

■ Studies/Report Preparation and Reviews

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- Meetings Purpose**
- 1 Present an overview of the recreation component of the Draft License Application, remaining study results, proposed recreation PMEs, overall schedule, and Hamilton Branch activities.
 - 2 Answer agency and public questions on the DLA. Present UNFFRR study results and proposed PMEs. Present Hamilton Branch study plans. Introduce RRMP.
 - 3 Discuss RRMP preparation.
 - 4 Discuss RRMP preparation.
 - 5 Discuss RRMP preparation. Discuss proposed FLA changes. Hamilton Branch interim study results.
 - 6 Discuss RRMP preparation. Discuss proposed FLA changes. Hamilton Branch interim study results.
 - 7 Present an overview of the recreation component of the FLA, Hamilton Branch study results, and proposed recreation PMEs in the FLA.
 - 8 Answer agency and public questions on the FLA. Present Hamilton Branch study results. Discuss proposals in the DALA.
 - 9 Present an overview of the recreation component of the DALA, and proposed recreation PMEs in the DALA.
 - 10 Answer agency and public questions on the DALA. Discuss proposals in the DALA.
 - 11 Discuss Amended RRMP preparation.
 - 12 Discuss Amended RRMP preparation. Discuss proposed FALA measures.
 - 13 Present an overview of the recreation component of the FALA, and proposed recreation PMEs in the FALA.
 - 14 Answer agency and public questions on the FALA. Discuss proposals in the FALA.

ANTICIPATED RECREATION MEETING TOPICS AND SCHEDULE IN 2002

- May 15, 2002**
- **Overview of the Schedule**
 - **Anticipated Meeting Topics and Schedule for 2002**
 - **Overview of the Draft License Application: Exhibit E - Report E5: Recreation Resources**
 - **RRMP Development**
 - **Planned Hamilton Branch Development Recreation Studies**
 - **Questions and Comments**
- June 14, 2002**
- **Discussion of Proposed PME's and recreation study results**
 - **Hamilton Branch draft study plans**
- July 17-18, 2002**
- **Hamilton Branch final study plans**
 - **Discussion of Proposed PME's and recreation study results**
 - **Begin development of the Recreation Resource Management Plan (RRMP)**
 - **Answer questions prior to DLA comment deadline (7/29/02)**
- July 24-25, 2002**
- **Discussion of Proposed PME's and recreation study results**
 - **Development of the RRMP**

- **Answer questions prior to DLA comment deadline (7/29/02)**

**August 8-9,
2002**

- **Discussion of Proposed PME's and DLA comments**
- **Development of the RRMP**

**August 27-28,
2002**

- **Discussion of Proposed PME's and DLA comments**
- **Development of the RRMP**

**September 11-
12, 2002**

- **Discussion of Proposed PME's**
- **Development of the RRMP**

**To be
announced**

- **Hamilton Branch partial recreation study results**
- **Final License Application for the UNFFR Project**

OVERVIEW OF THE DRAFT LICENSE APPLICATION: EXHIBIT E - REPORT E5: RECREATION RESOURCES

- **Overview of the objectives of the 14 recreation studies conducted.**
- **Overview of the Recreation Needs Analysis Synthesis methodology**
- **Proposed recreation PME's in the Draft License Application**
- **Overview of the Recreation Plan (RRMP) and Outline**

Recreation Studies Conducted and Their Objectives

Fourteen recreation studies were conducted in 2000-2001 and reported in Report E5 of the Draft License Application including:

- 1. Regional Recreation Assessment**
- 2. Recreational Facility and Condition Inventory**
- 3. Recreation and Public Use Impact Assessment**
- 4. ADA Accessibility Study**
- 5. Questionnaire Survey**
- 6. Existing Recreation Use**
- 7. Reservoir Boating Study**
- 8. Projected Recreation Use Analysis**
- 9. Recreation Carrying Capacity Analysis**
- 10. Shoreline Day Use Public Access Analysis**
- 11. Recreation Suitability Analysis**
- 12. Whitewater Boating Study**
- 13. Economic Impacts of Lake Almanor and Project Recreation Resources**
- 14. Recreation Needs Analysis Synthesis**

Regional Recreation Assessment Objectives

- Analyze existing recreation information related to the supply and demand of regional recreation resources near the UNFFR Project and to place the Project in the context.
- Identify regional recreational resources that offer opportunities similar to those found in each Project area.
- Assess current use levels at, and estimated demand for, regional recreation resources.
- Identify regional trends in recreational demand for various activities.
- Evaluate current recreational supply in the region as it relates to current and future demand (i.e., is supply meeting demand).
- Evaluate latent demand, or the desire to participate in an activity that may not be available in each Project area, but perhaps could be provided for in the future.

Recreation Facility and Condition Inventory Objectives

- Analyze existing Project-related facilities to see if they are in good repair and are being well maintained.
- This study serves to identify possible facility improvements that may be needed, as well as facility operational and maintenance needs, that may become future proposed PMEs.

- In addition, this study provides detailed inventory and evaluation of recreation facilities, use areas, and site conditions for each of the sites in the Project area.

Recreation and Public Use Impact Assessment Objectives

- Assess recreation and public use impacts to vegetation, soils, and water quality to Project lands and waters, including:
 - Soil erosion and soil compaction, especially within and adjacent to campground and day use areas.
 - Impacts to wetlands and riparian vegetation from visitor use.
 - Lack of downed wood in high use areas due to wood collection for fire fuel.
 - Impacts to vegetation due to off-road vehicle (ORV) use and pedestrian use.
 - Water quality impacts due to soil erosion and sanitation problems at or near campgrounds and day use areas.
 - Litter in high use areas.
 - Vandalism of facilities.

ADA Accessibility Study Objectives

- Assess the present adequacies and future accessibility needs for people with disabilities to use project-related recreation facilities and to participate in the Project's primary recreation activities (i.e. camping, fishing, boating) occurring in the Project area.
- Compliance with the Americans with Disabilities Act (ADA) is a key issue with regards to potential facility upgrades.

Questionnaire Survey Objectives

- For each major recreation resource area within the study area, characterize visitor and area resident preferences, needs, perceived crowding, and perceptions.
- Characterize the Project areas' primary recreation user groups.
- Identify information collected that would be useful in planning, designing, and managing recreation areas associated with the Project through the term of the new license.

Existing Recreation Use Assessment Objectives

- Estimate existing project-related recreational use, primarily reservoir recreation.
- Estimate recreation use and activities occurring at individual developed recreation sites, as well as dispersed undeveloped recreation sites within the study area.
- Estimate recreation use for the different recreation seasons for each area.

Reservoir Boating Study Objectives

- Describe existing boating use and water surface management on Project reservoirs to assess if any management changes are appropriate.
- Identify any boating safety issues.
- Assess boating capacity by reservoir and reservoir segment.

Projected Recreation Use Analysis Objectives

- Project the amount of recreation use in the Project area at the end of the Project's license term (assumed to be 30 years for planning purposes).
- This information is useful in estimating when recreation facilities and use areas may reach capacity, when social carrying capacities of recreation areas may be exceeded, and when user contact levels and natural resource sustainability may become critical.

Recreation Carrying Capacity Analysis Objectives

- Assess levels of recreational facility development and use that will provide high quality recreational opportunities to the Project's primary recreational groups, protect the Project's sensitive and natural resources in the area, and is consistent with the planned operation of the Project.
- Assess what level of recreational use is sustainable, compatible, and within the overall capacity of the area during the term of the new license.

Shoreline Day Use Public Access Analysis Objectives

- Collect resource, facility, and land management information to determine the opportunities as well as constraints to public access to the Project's lands and water areas.
- Ensure that over the new license period that the public has reasonable access to the Project's land and water areas while protecting the Project's land and water resources.
- Evaluate public versus private access, the affect of future development on public access, and if public access may be precluded in the future as a result of Project operations.

Recreation Suitability Analysis Objectives

- Using GIS, determine areas suitable for potential new recreation facility development (if needed) in the Project area consistent with the resource opportunities and constraints of the area.

Whitewater Boating Study Objectives

- Assess whitewater boating opportunities on the two Project bypass reaches, and identify flow levels required to provide those opportunities. Opportunities vary by craft, skill level, or preferences for different types of whitewater conditions.
- Identify flow-related attributes for each of those opportunities.
- Develop relationships between flow levels and experience quality for each boating opportunity. Resulting “flow evaluation curves” identify minimum flows and optimum flow ranges for each opportunity.
- Identify other river recreation opportunities such as angling, swimming, hiking, picnicking, and camping and develop rough relationships between flow levels and experience quality for each.
- Assess relative impacts of providing boating flows on other river recreation opportunities.

Economic Impacts of Lake Almanor and Project Recreation Resources Objectives

- Assess property value effects due to the presence and lake level variations of Lake Almanor.
- Assess economic values associated with recreation visitation to the Project area recreation resources.

Recreation Needs Analysis Synthesis Objectives

- The FERC requires the development of a recreation needs analysis.
- Prior study results were synthesized to identify existing recreation needs and future needs.
- Future needs were projected for increments of time (i.e., 10-year periods) over the term of the new license.
- These results were used to analyze the potential effects of hydropower development and operations on recreation resources and to develop proposed PME measures based on these needs.
- Recreation needs identified in the study area were coordinated with other technical resource areas to identify any potential resource conflicts.

Overview of the Recreation Needs Analysis Synthesis Process

This study is a **synthesis of the results** of several previous recreation studies conducted as part of PG&E's relicensing process, including information presented in the analyses listed below.

Demand Analyses (6)

- Section E5.1.1—Regional Recreation Assessment;
- Section E5.2.2—Existing Recreation Use Study;
- Section E5.2.3—Reservoir Boating Study;
- Section E5.2.4—Projected Recreation Use Analysis; and
- Section E5.2.8—Whitewater Boating Study.

Supply Analyses (5)

- Section E5.1.1—Regional Recreation Assessment;
- Section E5.1.2—Recreation Facility and Condition Inventory;
- Section E5.1.3—Recreation and Public Use Impact Assessment;
- Section E5.1.4—ADA Accessibility Study; and
- Section E5.2.6—Public Access Assessment.

Capacity and Suitability Analyses (3)

- Section E5.2.5—Recreation Carrying Capacity Analysis;
- Section E5.2.6—Public Access Assessment; and
- Section E5.2.7—Recreation Suitability Analysis.

Results from these studies will be used in the development of the Recreation Resource Management Plan (RRMP) in 2002 and were used to develop the proposed recreation PME's in the Draft License Application.

Recreation Needs Analysis Synthesis Methods

This study synthesized previous study results into a single report that identifies existing and future recreation needs in the study area involving two steps below.

- **Step 1 - An analysis of overall “big picture” recreation needs over time (i.e., extent of new facilities that might be needed during the term of the new license (assumed to be 30 years) versus more focused needs on site-by-site bases).**
- **Step 2 - Identification of focused recreation needs on a “site-by-site basis,” both existing (current to 2015) and future (2015 to 2035, in 10-year increments), including developed recreation facilities and undeveloped dispersed recreation sites;**

Step 1: Assess Overall Recreation Needs in the Study Area

- Overall “big picture” recreation needs were assessed by comparing and contrasting demand, supply, capacity, and opportunity/ constraint factors to arrive at conclusions. Existing data (see Section E5.2.9.1) for the study area from demand and supply analyses and capacity and suitability analyses were used.
- This assessment focused on the “big picture” need for various types of facilities or opportunities, without specifying where or how such needs might be met. The assessment considered both developed and dispersed undeveloped recreation sites and use areas.
- With respect to existing facility utilization, a capacity threshold was identified to account for peak season and peak month recreation use. A recreation facility is generally considered to be at capacity when utilization is 60 to 90 percent, depending on the timeframe and facility type.
- Any projected utilization beyond these percentages represents demand that is in excess of capacity for planning purposes. This method was used to determine the number of facilities (campsites and picnic tables for example) that would need to be provided in the future in order to meet projected demand.
- A number of interrelated factors are considered in this overall needs analysis. These include recreation facility occupancy, visitor survey responses, facility conditions, and others.

- Sources of data for these factors include:
 - Recreation visitor survey responses;
 - Visitor perceptions of crowding and crowding criteria;
 - Projected increases in demand for various activities;
 - Seasonal and weekend occupancy rates;
 - Facility and use area capacity utilization;
 - Physical and spatial arrangement of existing facilities and use areas;
 - Existing facility conditions and accessibility guidelines and report recommendations;
 - Suitability analysis depicting potential sites or areas;
 - Opportunities for infill, redesign, or expansion of existing facilities;
 - Management goals and objectives of published plans;
 - Visual observations and observed impacts from existing use;
 - Professional judgment; and
 - Input from agencies and other stakeholders.

- Recreation-related needs in the study area were also projected into the future for a significant portion of the anticipated term of the new license (assumed to be 2005 to 2035).

- This analysis was performed by comparing National and California Statewide Comprehensive Outdoor Recreation Plan (SCORP) projected increases in activity participation to the current utilization of various recreation sites and facilities.

- This procedure was used to project the number of campsites, picnic tables, and boat launches that would be needed to meet projected future demand. In practice, recreation use will need to be monitored over time because of various factors.

Step 2 - Identify Recreation Needs on a Site by Site Basis

- This section considers these broader needs concurrently with other known existing needs at each site, and also identifies where they may be accommodated on a site-by-site basis, in conjunction with information from the Carrying Capacity, Public Shoreline Access, and Suitability analyses.
- Developed and dispersed sites are considered, as well as both private and public facilities. However, the emphasis of this analysis is on public recreation areas and facilities.
- Site-specific needs are identified through review and analyses of several data sources, including those previously mentioned.
- The identification of future recreation needs was derived from a list of existing (defined as current to 2015) site-specific needs.
- This analysis projected recreation needs into the future (2015 to 2035) in 10-year increments. Where new recreation facilities may be under consideration to help satisfy demands, their anticipated implementation phases were projected.
- The primary indicators used to define future need for developed facilities were: projected increases in demand over 30 years, and anticipated capacity; these needs were estimated for each developed facility, use area, and activity type.

Proposed Recreation Measures (PMEs) in the Draft License Application

- PG&E proposes to significantly complement the existing operations of other recreation providers in the study area for the term of the new license.
- PG&E proposes to complement the proposed or adopted plans of other organizations, such as the Forest Service's plans for the Prattville Management Area (USFS 1994).
- In this large and diverse area, all recreation providers have a shared responsibility to help meet the needs of both visitors and area residents. No one entity or group can accommodate all of the existing and future recreation needs.
- PG&E does not desire to compete with other private recreation providers in the area. PG&E, public agencies, and private recreation providers all play key roles in the study area.
- PG&E believes that it can best serve the general public and area residents by being responsible for the implementation, construction, and operation of the proposed recreation enhancements in the following table (from Section E5.5-1).
- Project priorities are based on the results of the Recreation Needs Analysis Synthesis and PG&E's selection of proposed PMEs for the UNFFR Project.
- Each priority ranking represents a 5- to 10-year timeframe of when the proposed action may be implemented.

- **Priorities include:**
 - **High/Existing Need is 2005 to 2010 (unless noted).**
 - **High/Threshold Required is 2010 to 2015.**
 - **Moderate/Threshold Required is 2015 to 2025.**
 - **Low/Threshold Required is 2025 to 2035.**
- **“Existing Need” in the table means that a recreation need currently exists and that the proposed enhancement should be accommodated in the first 5 years or so of the new license.**
- **“Threshold Required” in the table means that the proposed action would not be implemented until use levels or other indicators reach a defined capacity threshold level.**
- **As an example, a new or expanded campground would not be constructed until use levels at other campgrounds in the area have reached capacity.**
- **Actual decision-making regarding implementation of these proposed actions would be dependent on the proposed Recreation Monitoring Program to be further developed in the RRMP in 2002.**
- **Also in the table, ongoing and long-term recreation facility and program operations and maintenance (O&M) priorities for the 30-year period are similarly listed.**
- **The start of recreation facility O&M is dependent upon when a facility is constructed. Assumptions were made as to when these new facilities might be constructed; however, these dates may change over the 30-year timeframe.**

- **Estimated construction, operation, maintenance, and rehabilitation costs for the proposed recreation enhancements are summarized by site in the table. These costs are grouped into recreation facility (capital improvement) costs and recreation programmatic (O&M) costs.**
- **Estimated recreation facility or capital improvement costs total \$6,842,000 over 30 years.**
- **Estimated recreation programmatic or O&M costs total \$5,880,000 over 30 years.**
- **In total, the Licensee proposes to fund an estimated \$12,722,000 for recreation resources for the UNFFR Project over the term of the new license (assumed to be 30 years for planning purposes).**

Proposed Recreation Measures, Schedule, and Costs for the UNFFR Project (4/29/02)

RECREATION FACILITY (CAPITAL IMPROVEMENT) PROPOSALS BY AREA AND SITE	Schedule (H M L)*/ Status	Estimated Costs (2002 Dollars)
LAKE ALMANOR		
Last Chance Creek Campground		
<ul style="list-style-type: none"> Modify 2 campsites to be Americans with Disabilities Act (ADA)-accessible. 	High/ Existing Need	\$2000
<ul style="list-style-type: none"> Modify existing toilets to be ADA accessible. 	High/ Existing Need	\$3000
<ul style="list-style-type: none"> Provide an ADA accessible access route leading to the nearby creek. 	High/ Existing Need	\$1000
<ul style="list-style-type: none"> Provide 5 additional future campsites, estimated by 2010, to help keep use levels within capacity limits. Provide a new double vault toilet. 	Low/Threshold Required	\$38,000
Subtotal		\$44,000
Lake Almanor Campground (Loops 1, 2, and 3)		
<ul style="list-style-type: none"> Modify 10 campsites to be ADA-accessible (4 at Loop 1, 3 at Loop 2, and 3 at Loop 3). All of the elements provided in the campsite, such as the picnic table, fire ring, cooking grill, tent or RV area, and water faucet, will be accessible. In addition, retrofit 8 existing designated accessible campsite to meet ADAAG (4 at Loop 1, 2 at Loop 2, and 2 at Loop 3) and 1 additional ADA-accessible campsite is needed at both Loop 2 and Loop 3 to meet the minimum 10 ADA accessible campsites needed. 	High/ Existing Need	\$18,000
<ul style="list-style-type: none"> Provide an ADA accessible access routes to the water's edge and an accessible swim beach. 	High/ Existing Need	\$15,000

<ul style="list-style-type: none"> Retrofit existing facilities as needed, such as the camp library box, telephones, and the envelope box at the pay station, to meet ADAAG height standards; and provide ADA accessible access routes. 	High/ Existing Need	\$1000
<ul style="list-style-type: none"> Retrofit the existing water faucets near accessible elements, such as toilets and campsites, to meet ADAAG. 	High/ Existing Need	\$1000
<ul style="list-style-type: none"> Modify the surface and slope of the access routes of 2 of the toilets (near entry and near site # 100) to meet ADAAG (Loop 2). 	High/ Existing Need	\$1000
<ul style="list-style-type: none"> Relocate the interior pay station directly across the road on a level, firm, and stable surface (Loop 2). 	High/ Existing Need	\$2000
<ul style="list-style-type: none"> Convert the existing group site/overflow area south of Loop 3 (area where the Lake Almanor Trail is to be extended) into an expanded day use area/swim beach by 2010. 	High/ Existing Need	\$100,000
<ul style="list-style-type: none"> Replace older Klamath stoves (a low-style camp stove with a stovepipe). 	High/ Existing Need	\$10,000
<ul style="list-style-type: none"> Revegetate disturbed areas caused by pedestrian or vehicle traffic. 	High/ Existing Need	\$10,000
<ul style="list-style-type: none"> Relocate 20 campsites from the Loop 3 overflow area to the overflow area north of Loop 1. Provide a new double vault toilet by 2010. 	High/ Existing Need	\$100,000
<ul style="list-style-type: none"> Provide one new indoor shower for each of the 3 campground loops. 	High/ Existing Need	\$150,000
<ul style="list-style-type: none"> Provide a new entrance kiosk to serve the 3 campground loops. 	High/ Existing Need	\$30,000
Subtotal		\$438,000
Camp Conery Group Camp		
<ul style="list-style-type: none"> Provide 1 ADA accessible parking space to adhere to ADAAG. 	High/ Existing Need	\$500
<ul style="list-style-type: none"> Provide a new ADA accessible cabin with accessible restroom. 	High/ Existing Need	\$35,000
<ul style="list-style-type: none"> Reposition the telephone on the wall of the central group meeting facility so that its height does not exceed ADAAG. 	High/ Existing Need	\$500
<ul style="list-style-type: none"> Retrofit the water faucet near accessible elements to meet ADAAG. 	High/ Existing Need	\$500

<ul style="list-style-type: none"> Expand existing group facilities to provide for 1 additional group reservation area (space for approximately 1 to 5 RVs) adjacent to the existing group facilities. As an option, explore the potential of locating a new group site next to Canyon Dam DUA. Assessed in 2002. 	High/ Existing Need & Threshold Met	\$250,000
<ul style="list-style-type: none"> Repair and resurface the access road. 	High/ Existing Need	\$10,000
<ul style="list-style-type: none"> Provide showers (2). 	High/ Existing Need	\$45,000
Subtotal		\$341,500
Southeast Zone (New Licensee Facility)		
<ul style="list-style-type: none"> Provide a new campground on Licensee land with approximately 40 new tent and RV campsites, estimated to be needed in the 2025 to 2035 timeframe. The new campground would include overnight boat moorages, restrooms with outdoor showers, swimming areas in coves, camp host sites, and other amenities similar to existing Licensee campground facilities. Trail easements will be provided to facilitate linkage with the existing East Shore DUA and Almanor Scenic Overlook DUA, Canyon Dam DUA, and Canyon Dam Boat Launch. Provide a new group reservation campground (space for approximately 15 RVs/tents) that is separated from the main campground and day use areas. This measure will be further defined in 2002. 	Low/ Threshold Required	\$4,000,000
Subtotal		\$4,000,000
North Shore Campground Area Public Boat Launch/DUA		
<ul style="list-style-type: none"> In 2002, explore the potential of replacing the existing boat launch within/adjacent to the North Shore Campground area to provide better geographic distribution of public boat launch facilities at Lake Almanor, particularly in the northern area of Lake Almanor. The existing boat launch is now open to the public for a fee. An improved public boat launch would serve the adjacent Chester community, as well as other surrounding residents and North Shore Campground users. It is the Licensee's intent to work with the current Leasee to collocate a public boat launch facility within this zone. The current boat launch cannot accommodate increased public use due to site constraints and circulation/parking limitations. Some campsites may need to be relocated to the east or at the Catfish Beach area. The existing roadway through the campground to the boat launch will need to be upgraded or an alternate roadway to the north may be viable. Various boat launch access dredging options will be explored, as well as environmental costs. 	High/ Existing Need (Estimated 2010)	\$500,000

<ul style="list-style-type: none"> In 2002, explore the potential of providing a day use picnic area and swimming beach within/adjacent to the North Shore Campground area to provide increased public shoreline day use access in the northern area of Lake Almanor. The picnic area/swim beach would be open to the public and would serve the Chester community, as well as other surrounding residents and North Shore Campground users. It is the Licensee's intent to work with the current Leasee to collocate public day use facilities within this zone. The current day use area/swim beach cannot accommodate increased public use due to site constraints and circulation/ parking limitations. Sites to be explored include the current western end of the site and/or the eastern end of the site. Various access roadway options exist including upgrading the existing road through the campground to the current day use beach/boat launch, developing an alternate roadway to the north, or extending the existing roadway to the east. 	High/ Existing Need (Estimated 2010)	\$200,000
Subtotal		\$700,000
Eastshore DUA		
<ul style="list-style-type: none"> Provide 5 ADA accessible picnic tables at this site with 2 of the picnic tables connected to an accessible access route. 	High/ Existing Need	\$5000
<ul style="list-style-type: none"> Provide 1 ADA accessible parking space near the toilet. 	High/ Existing Need	\$500
<ul style="list-style-type: none"> Provide ADA accessible access routes to the trash receptacles. 	High/ Existing Need	\$500
<ul style="list-style-type: none"> Provide an improved trail down to the shoreline with switchbacks and provide erosion control on the hillside. 	High/ Existing Need	\$10,000
Subtotal		\$16,000
Almanor Scenic Overlook		
<ul style="list-style-type: none"> Provide an accessible access route leading to the restroom to adhere to ADAAG. 	High/ Existing Need	\$1000
<ul style="list-style-type: none"> Provide 1 accessible parking space to adhere to ADAAG. 	High/ Existing Need	\$500
<ul style="list-style-type: none"> Expand this site to include new day use picnicking with 5 new picnic tables linked by a trail. Perform vegetative brushing and clearing to restore the views from this site to Lake Almanor and the dam. 	High/ Existing Need	\$7500
Subtotal		\$9000

Canyon Dam DUA		
<ul style="list-style-type: none"> • Provide 1 accessible parking space to adhere to ADAAG located adjacent to the landscaped island in the center of the parking area. 	High/ Existing Need	\$500
<ul style="list-style-type: none"> • Replace the large informational sign at the site's entrance. 	High/ Existing Need	\$4000
<ul style="list-style-type: none"> • Retrofit the water faucets near accessible elements to meet ADAAG and reconnect the water system with the water supply across the highway. 	High/ Existing Need	\$5000
<ul style="list-style-type: none"> • Modify 8 picnic tables to be accessible and provide 8 more picnic tables. Improve the swim beach with an accessible route and provide a sandy beach. 	High/ Existing Need	\$25,000
<ul style="list-style-type: none"> • Provide approximately 15 additional parking spaces. 	High/ Existing Need	\$20,000
<ul style="list-style-type: none"> • Provide 1 outdoor shower. 	High/ Existing Need	\$30,000
Subtotal		\$84,500
Catfish Beach Area DUA		
<ul style="list-style-type: none"> • In 2002, explore potential new recreation development at this site including trail and vehicular access across private lands, provision of a camp host or a ranger, and development of walk-in/boat-in primitive picnic facilities (10 picnic sites). As an alternative, also consider overnight primitive camping facilities (10 campsites) at this site, or a combination of day use and overnight camping. The facilities at this site are to provide a primitive experience. These options will be further explored in 2002. 	High/ Existing Need	\$150,000
Subtotal		\$150,000
Westwood Beach DUA		
<ul style="list-style-type: none"> • Provide improved public shoreline day use access at this site by developing a new raised parking area separated from the highway with 1 ingress/egress point at the north end of the site (parking for 6-8 vehicles). Also provide signage, an ADA accessible portable toilet (or sealed vault toilet if allowed), and 6 picnic tables. Provide erosion control at the shoreline due to wind-caused wave action. This concept will be further explored in 2002. 	High/ Existing Need	\$85,000
Subtotal		\$85,000

Stumpy Beach DUA		
<ul style="list-style-type: none"> Provide improved shoreline day use access at this site by developing parking stalls parallel to the highway at the existing wide pull-out area along the highway (parking for 10-12 vehicles). Also provide signage, an ADA accessible portable toilet (or sealed vault toilet if allowed), and 8 picnic tables (at the south end of the site). Provide 4 benches at the parking level for use as a lake and mountain vista point. Provide erosion control at the shoreline due to wind-caused wave action. Provide trails at the northern and southern portions of the site, with the southern trail to be ADA accessible to the picnic area. This concept will be further explored in 2002. 	High/ Existing Need	\$90,000
Subtotal		\$90,000
Lake Almanor Recreation Trail		
<ul style="list-style-type: none"> Cooperate with the USFS and Almanor Recreation and Park District to allow non-motorized recreational trail access across Licensee-owned Project lands surrounding Lake Almanor, as long as such access does not negatively affect Project operations, public health and safety, or sensitive natural or cultural resources. 	High/ Existing Need	\$15,000
Subtotal		\$15,000
Southwest Shoreline Access Zone		
<ul style="list-style-type: none"> In consultation with the USFS and other landowners in the area, in 2002 conduct further study of the Southwest Shoreline Zone (defined as south of Lake Almanor West CC to the Canyon Dam area) to develop a program to address vehicle access management and shoreline resource protection needs in this zone. This analysis will identify vehicle access routes and trails used to access the shoreline in this zone and undeveloped dispersed sites. The program to be developed will likely include the closure and rehabilitation of some dirt roads, installations of barriers, placement of signs, and development of new roads, parking areas, trailheads, and trails at key locations. It is the intent of the Licensee to allow vehicular access to select shorelines in this area above the 4,494-foot-high pool level (Licensee 1997). 	High/ Existing Need	\$150,000
Subtotal		\$150,000
Total Estimated 30-Year Facility (Capital Improvement) Costs for Lake Almanor (2002 Dollars)		\$6,123,000

BUTT VALLEY RESERVOIR

Ponderosa Flat Campground

<ul style="list-style-type: none"> Modify 4 campsites to be ADA-accessible. All of the elements provided in the campsite, such as the picnic table, fire ring, cooking grill, tent or RV area, and water faucet, will be accessible. Retrofit the existing designated accessible campsites to be accessible per ADAAG. 	High/ Existing Need	\$4000
<ul style="list-style-type: none"> Provide an ADA accessible access route for the restroom near site #45. 	High/ Existing Need	\$500
<ul style="list-style-type: none"> Replace the vault toilets in the overflow area with a new restroom that is accessible in this area. Modify all other existing designated accessible toilets to meet ADAAG. 	High/ Existing Need	\$25,000
<ul style="list-style-type: none"> Provide 1 ADA accessible parking space located near the toilets. 	High/ Existing Need	\$500
<ul style="list-style-type: none"> Provide 1 ADA accessible swimming area at the campground shoreline. 	High/ Existing Need	\$10,000
<ul style="list-style-type: none"> Provide 1 ADA accessible fishing access trail and pier or platform near the overflow area. 	High/ Existing Need	\$10,000
<ul style="list-style-type: none"> Provide approx. 12 new primitive tent campsites, likely to the north in the current overflow area, approximately 2020-2025. 	Moderate/ Threshold Required	\$70,000
<ul style="list-style-type: none"> Provide a new overflow/group camp area to the north of the existing campground. 	Moderate/ Threshold Required	\$125,000
<ul style="list-style-type: none"> Provide 1 outdoor shower that accommodates 3 people. 	High/ Existing Need	\$30,000
Subtotal		\$275,000

Cool Springs Campground

<ul style="list-style-type: none"> Provide 1 new campsite to be ADA-accessible (2 campsites are already accessible). All of the elements provided in these campsites, such as the picnic table, fire ring, cooking grill, tent or RV area, and water faucet, will be made accessible. 	High/ Existing Need	\$2500
<ul style="list-style-type: none"> Retrofit the water faucets near accessible elements to meet ADAAG. 	High/ Existing Need	\$1000

<ul style="list-style-type: none"> • Provide 1 outdoor shower that accommodates 2 people. 	High/ Existing Need	\$30,000
Subtotal		\$33,500
Alder Creek DUA/Boat Launch		
<ul style="list-style-type: none"> • Modify the boat launch to be accessible to meet ADAAG. 	High/ Existing Need	\$50,000
<ul style="list-style-type: none"> • Provide 1 ADA accessible parking space near the toilet. 	High/ Existing Need	\$500
<ul style="list-style-type: none"> • Expand the existing parking area for added capacity with space for approximately 14 additional vehicles with trailers and circulation. Construct by approximately 2010. 	High/ Existing Need	\$70,000
Subtotal		\$120,500
Butt Valley Reservoir Shoreline Trails and Angler Access		
<ul style="list-style-type: none"> • Provide a non-motorized shoreline recreational trail (dirt, not paved) between the Butt Valley Powerhouse fishing area and Cool Springs Campground, with linkage to the three recreation facilities. One section of the trail will be ADA accessible (compacted material) from Ponderosa Flat Campground to the inlet near the powerhouse, terminating at an ADA accessible fishing pier or platform. 	High Existing Need	\$100,000
<ul style="list-style-type: none"> • Provide 2 improved angler access trails from 2 locations near the powerhouse. One non-paved trail (approx. 200 ft.) would extend from an existing gravel parking area next to the powerhouse and extend down a steep slope east of the powerhouse to the levee below. Use of stairs is likely at this location. The second trail (approx. 700 ft.) would be from one of several pull-outs along Prattville-Butt Valley Road near the powerhouse. A new trailhead parking area would be created. This trail would extend to the eastern shoreline of the inlet near the levee and would be ADA accessible (compacted rock-based material). 	High/ Existing Need	\$75,000
Subtotal		\$175,000
Butt Valley Reservoir Shoreline Dispersed Boat-in and Walk-in Sites		
<ul style="list-style-type: none"> • Provide approximately 5 boat-in shoreline dispersed campsites on the western shoreline of the reservoir near the dam. Each site would have a tent pad, fire ring, and picnic table near the shoreline. The sites will be pack-it-in/pack-it-out sites and will be located in suitable areas. A single vault toilet will be located nearby with road access. 	High/ Existing Need	\$20,000
<ul style="list-style-type: none"> • Provide approximately 3 walk-in shoreline dispersed day use sites near the old dam operator's house near the dam on the western shoreline. Each site will include a picnic 	High/ Existing Need	\$5,000

table. The vault toilet (see above) will be located nearby.		
<ul style="list-style-type: none"> Provide approximately 3 small roadside pull-outs with short trails along the eastern shoreline of the reservoir. 	High/ Existing Need	\$25,000
Subtotal		\$50,000
Total Estimated 30-Year Facility (Capital Improvement) Costs for Butt Valley Reservoir (2002 Dollars)		\$654,000
BELDEN FOREBAY AREA		
Belden Forebay Car-top Boating Access		
<ul style="list-style-type: none"> Provide a car-top boat launch and trailhead parking area at an existing undeveloped parking area next to the gate past the Caribou Village (parking for 10 to 15 vehicles). Modify the shoreline at this site to provide improved access for launching small watercraft (kayaks, canoes, rafts and small fishing boats) at the Belden Forebay. Provide a vault toilet. Post signage relative to the Plumas County ordinance stating that there is a boating speed limit of less than 5 mph and less than 10 hp boats for 35 acre or less reservoirs, such as this forebay. 	High/ Existing Need	\$28,000
Subtotal		\$28,000
North Fork Fishing Trail		
<ul style="list-style-type: none"> Provide improved trail access from a trailhead parking area located near the Caribou Village gate (see above) to the upstream side of the Caribou #1 Powerhouse. Provide new trail signage. Retrofit the existing metal trail decking at the powerhouse above the turbine outlets to provide increased access and safety. Improve the trail along the chain-link fencing at the powerhouse yard to provide a wider, even trail base. 	High/ Existing Need	\$30,000
Subtotal		\$30,000
Total Estimated 30-Year Facility (Capital Improvement) Costs for the Belden Forebay Area (2002 Dollars)		\$58,000

BELDEN REST STOP (SR 70)		
• Provide 2 ADA accessible picnic tables with accessible access routes.	High/ Existing Need	\$2000
• Provide accessible access routes to the gazebo and overlook area next to the creek and to the Eby Stamp Mill historical features. Also see I&E Program (listed elsewhere).	High/ Existing Need	\$2000
• Provide erosion control on the slope between the parking lot and upper picnic area.	High/ Existing Need	\$2000
• Relocate the existing picnic tables and grilles down to the lower level and disperse them from the Eby Stamp Mill to the gazebo near the creek.	High/ Existing Need	\$1000
Total Estimated 30-Year Facility (Capital Improvement) Costs for the Belden Rest Stop (SR 70) (2002 Dollars)		\$7000

Total Estimated 30-Year Facility (Capital Improvement) Costs for the UNFFR Project (2002 Dollars)		\$6,842,000
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RECREATION PROGRAMMATIC (O&M) PROPOSALS BY AREA AND SITE	Schedule */Status	Estimated Costs (2002 Dollars)
LAKE ALMANOR		
Last Chance Creek Campground		
<ul style="list-style-type: none"> • Provide annual O&M for the term of the new license, including long-term facility maintenance. 	License Term/ Existing Need	\$10,000/yr
Subtotal O&M Cost for 30 Years		\$300,000
Lake Almanor Campground (Loops 1, 2, and 3)		
<ul style="list-style-type: none"> • Provide annual O&M for the term of the new license, including long-term facility maintenance. 	License Term/ Existing Need	\$56,000/yr
Subtotal O&M Cost for 30 Years		\$1,680,000
Camp Conery Group Camp		
<ul style="list-style-type: none"> • Provide annual O&M for the term of the new license, including long-term facility maintenance. 	License Term/ Existing Need	\$10,000/yr
Subtotal O&M Cost for 30 Years		\$300,000
Southeast Zone (New Licensee Facility)		
<ul style="list-style-type: none"> • Provide annual O&M for the term of the new license, including long-term facility maintenance. 	Low/ Threshold Required	\$25,000/yr
Subtotal O&M Cost for up to 10 Years		\$250,000
North Shore Campground Area Public Boat Launch/DUA		
<ul style="list-style-type: none"> • Provide annual O&M funding for the term of the new license, including long-term facility maintenance. Assume open by 2010. 	License Term/ Existing Need	\$6,000/yr
Subtotal O&M Cost for 25 Years		\$150,000
Catfish Beach Area DUA		
<ul style="list-style-type: none"> • Provide annual O&M for the term of the new license, including long-term facility maintenance. This area may also be a primitive camping area. Assume open by 2010. 	License Term/ Existing Need	\$4000/yr
Subtotal O&M Cost for 25 Years		\$100,000

Westwood Beach DUA		
• Provide annual O&M for the term of the new license, including long-term facility maintenance. Assume open by 2010.	License Term/ Existing Need	\$1000/yr
Subtotal O&M Cost for 25 Years		\$25,000
Stumpy Beach DUA		
• Provide annual O&M for the term of the new license, including long-term facility maintenance. Assume open by 2010.	License Term/ Existing Need	\$1000/yr
Subtotal O&M Cost for 25 Years		\$25,000
Eastshore DUA		
• Provide annual O&M for the term of the new license, including long-term facility maintenance.	License Term/ Existing Need	\$3500/yr
Subtotal O&M Cost for 30 Years		\$105,000
Almanor Scenic Overlook		
• Provide annual O&M for the term of the new license, including long-term facility maintenance.	License Term/ Existing Need	\$2500/yr
Subtotal O&M Cost for 30 Years		\$75,000
Canyon Dam DUA		
• Provide annual O&M for the term of the new license, including long-term facility maintenance.	License Term/ Existing Need	\$8000/yr
Subtotal O&M Cost for 30 Years		\$240,000
Southwest Shoreline Access Zone		
• Provide annual cost share O&M funding to the USFS for the term of the new license, including long-term facility maintenance.	License Term/ Existing Need	\$5000/yr
Subtotal O&M Cost for 30 Years		\$150,000
Total Estimated 30-Year Programmatic (O&M) Costs for Lake Almanor (2002 Dollars)		\$3,400,000

BUTT VALLEY RESERVOIR		
Ponderosa Flat Campground		
<ul style="list-style-type: none"> Provide annual O&M for the term of the new license, including long-term facility maintenance. 	License Term/ Existing Need	\$15,000/yr
Subtotal O&M Cost for 30 Years		\$450,000
Cool Springs Campground		
<ul style="list-style-type: none"> Provide annual O&M for the term of the new license, including long-term facility maintenance. 	License Term/ Existing Need	\$10,000/yr
Subtotal O&M Cost for 30 Years		\$300,000
Alder Creek DUA/Boat Launch		
<ul style="list-style-type: none"> Provide annual O&M for the term of the new license, including long-term facility maintenance. 	License Term/ Existing Need	\$4000/yr
Subtotal O&M Cost for 30 Years		\$120,000
Butt Valley Reservoir Shoreline Trails and Angler Access		
<ul style="list-style-type: none"> Provide annual O&M for a dirt trail between Cool Springs Campground and the Butt Valley Powerhouse area and two angler access trails near the powerhouse for the term of the new license, including long-term facility maintenance. Assume open by 2010. 	License Term/ Existing Need	\$2000/yr
Subtotal O&M Cost for 25 Years		\$50,000
Butt Valley Reservoir Shoreline Dispersed Boat-in and Walk-in Sites		
<ul style="list-style-type: none"> Provide annual O&M for 5 boat-in dispersed shoreline campsites on the western shoreline near the dam, including a vault toilet, for the term of the new license, including long-term facility maintenance. Assume open by 2010. 	License Term/ Existing Need	\$1000/yr
<ul style="list-style-type: none"> Provide annual O&M for 2 shoreline dispersed day use sites near the dam on the western shoreline for the term of the new license, including long-term facility maintenance. Assume open by 2010. 	License Term/ Existing Need	\$500/yr
<ul style="list-style-type: none"> Provide annual O&M for 3 roadside pull-outs and trails on the eastern shoreline for the term of the new license, including long-term facility maintenance. Assume open by 2010. 	License Term/ Existing Need	\$500/yr
Subtotal O&M Cost for 25 Years		\$50,000
Total Estimated 30-Year Programmatic (O&M) Costs for Butt Valley Reservoir (2002 Dollars)		\$970,000

BELDEN FOREBAY AREA**Belden Forebay Car-top Boating Access**

- Provide annual O&M for a car-top boat launch and trailhead parking area with vault toilet at the Caribou Village gate at the Belden Forebay for the term of the new license, including long-term facility maintenance.

License Term/
Existing Need

\$1000/yr

Subtotal O&M Cost for 30 Years**\$30,000****North Fork Fishing Trail**

- Provide annual O&M for trail maintenance from the new trailhead to Caribou Powerhouse #1 for the term of the new license, including long-term facility maintenance.

License Term/
Existing Need

\$500/yr

Subtotal O&M Cost for 30 Years**\$15,000****Total Estimated 30-Year Programmatic (O&M) Costs for the Belden Forebay Area (2002 Dollars)****\$45,000*****BELDEN REST STOP (SR 70)***

- Provide annual O&M for the term of the new license, including long-term facility maintenance.

License Term/
Existing Need

\$3000/yr

Total Estimated 30-Year Programmatic (O&M) Costs for the Belden Rest Stop (SR 70) (2002 Dollars)**\$90,000**

PROJECT PROGRAMS AND PLANS

Interpretation & Education (I&E) Program

- Licensee will develop a I&E Program for the Licensee's Project facilities (a RRMP program element). It is anticipated that the I&E Program will be multiple-resource based and will include improvements such as interpretive or informational signs, kiosks, and reservoir boating safety and hazard information signs and brochures, informational signs on recreation facilities and visitor choices in the area. The I&E Program will be developed (in consultation with other stakeholders) during the first 5 years after the new license is received.

I&E Program
Development
High/Existing
Need (2005-
2010)

\$75,000 once for
I&E Program
development

I&E Program
Implementation
License Term
(after 2006-2010)

\$10,000/yr for
I&E Program
implementation
(after 2006-2010)

Subtotal O&M Cost for 25 Years

\$325,000

Lake Almanor Seasonal Resource Protection and Visitor Management Control

- An additional part-time Plumas County Sheriff's Department Marine Patrol position is proposed. This new position will focus on improved visitor management and enforcement of on-water rules and laws, peak period visitor crowd management and monitoring of safety buoys at Lake Almanor. This position would be funded through either a boat launch or permit fee, or a campground surcharge fee at Lake Almanor. This approach has been very successful at Bass Lake in California.

License Term/
Existing Need

\$0
(paid by new user
fees)

Subtotal O&M Cost for 30 Years

\$0

Recreation Resource Management Plan (RRMP)

- The Licensee will develop a RRMP between the draft and final license applications. The RRMP will likely include several programs including a Facility Development Program, O&M Program, Monitoring Program, I&E Program (previously discussed), Resource Integration Program, and Plan Review and Update Program. The Facility Development Program and O&M Program will further detail the items listed above. The Monitoring Program will likely include both customary data collection efforts (such as paid fee receipts and vehicle counts used for completing FERC Form 80 every 6 years), as well as periodic visitor surveys every 12 years (if needed). These efforts will be used to assess facility capacity thresholds over time. The Resource Integration Program will define how recreation decision-making is coordinated with other resource areas through periodic

License Term/
Existing Need

\$30,000/yr
(Licensee staff
admin)

\$75,000 every 12
years
(assumes 2
surveys)

coordination meetings. The Plan Review and Update Program will define how the RRMP may be updated over time to address changing conditions.		
	Subtotal O&M Cost for 30 Years	\$1,050,000
	Total Estimated 30-Year Programmatic (O&M) Costs for Project Programs and Plans (2002 Dollars)	\$1,375,000
	Total Estimated 30-Year Programmatic (O&M) Costs for the UNFFR Project (2002 Dollars)	\$5,880,000
	Total Estimated 30-Year Facility (Capital Improvement) and Programmatic (O&M) Costs for the UNFFR Project (2002 Dollars)	\$12,722,000

* Notes: Proposed recreation resource enhancements, or PMEs, are prioritized as: High / Existing Need and High / Threshold Required, Moderate / Threshold Required, or Low / Threshold Required. These priorities are based on the results of the Recreation Needs Analysis and the Licensee's selection of proposed enhancements for the UNFFR Project. Each priority ranking represents a 5- to 10-year timeframe of when the proposed action might be implemented: High / Existing Need = 2005 to 2010 (unless noted), High / Threshold Required = 2010 to 2015, Moderate / Threshold Required = 2015 to 2025, and Low / Threshold Required = 2025 to 2035. Existing Need means that a need currently exists and the proposed action should be accommodated in the first 5 years or so of the new license. Threshold Required means that the proposed action would not be implemented until use levels or other indicators reach a defined capacity threshold level. As an example, a new or expanded campground would not be constructed until use levels at other campgrounds in the area have reached capacity. Actual decision-making regarding implementation of these proposed actions would be dependent on the proposed *Recreation Monitoring Program to be further developed in the RRMP in 2002*. Ongoing and long-term O&M priorities for the 30-year period are also similarly listed and the start of facility O&M is dependent upon when a facility is constructed. Assumptions were made as to when these new facilities might be construction; however, these dates may change over the 30-year period. The new license term is assumed to be 30 years for planning purposes (2005 to 2035). The FERC may grant a new license term of up to 50 years. This table would be modified if that action were taken. Belden Forebay would be managed based on a county ordinance (similar to rock Creek and Cresta Reservoirs (Section 10-1.19) that provides doe no swimming or boating within 0.25 miles of Belden Dam, no swimming at night, and no boat speeds higher than those noted previously.

DEVELOPMENT OF THE RECREATION RESOURCE MANAGEMENT PLAN (RRMP)

- To be developed from June through October 2002 and included in the Final License Application.
- A sample outline of the RRMP is provided below.
- The key components are the 6 programs.

Sample RRMP Outline

INTRODUCTION

OVERVIEW OF THE IMPLEMENTATION PLAN

1. **PURPOSE AND INTENT**
2. **PLAN VISION**
3. **METHODOLOGIES USED**
4. **LIMITS OF ACCEPTABLE CHANGE**
5. **OVERVIEW OF RRMP PROGRAMS**
6. **ISSUES AND ASSUMPTIONS**
7. **EXPLANATION OF TERMS**

GOALS AND OBJECTIVES

PLANNING AREAS

1. REGIONAL DEMAND AREA
2. PROJECT AREA
3. FERC PROJECT BOUNDARY
4. MANAGEMENT UNITS

RECREATION IMPLEMENTATION PROGRAMS (6)

1. RECREATION FACILITY DEVELOPMENT PROGRAM
 - a. Recreation Facility Development and Upgrades
 - b. Recreation Development Locations
 - c. Recreation Facility Design Guidelines
 - d. Americans with Disabilities Act Compliance and Facility Upgrades
 - e. NEPA Compliance and Environmental Project Review
 - f. Agency and Public Review
 - g. Facility Construction Coordination, Scheduling, and Phasing
2. RECREATION OPERATIONS AND MAINTENANCE PROGRAM
 - a. Operations and Maintenance Standards
 - b. Shoreline Access
3. RECREATION MONITORING PROGRAM
 - a. Limits of Acceptable Change Monitoring
 - b. Study Requirements and Survey Scheduling and Techniques
 - c. Reporting Requirements
 - d. Future Facility and Recreation Resource Decision Making

4. RESOURCE INTEGRATION AND COORDINATION PROGRAM
5. PLAN REVIEW AND REVISION PROGRAM
6. INTERPRETATION AND EDUCATION PROGRAM

REFERENCES AND LITERATURE CITED

EXHIBITS

1. Proposed Recreation Measures
2. Estimated Costs for Proposed Recreation Measures
3. Locations of Proposed Recreation Measures and Conceptual Site Plans
4. Land Management Units
5. Limits of Acceptable Change Indicators and Standards
6. Monitoring Sites
7. Recreation Studies Conducted During Re-licensing (include all completed recreation studies here as a baseline reference)

Questions and Comments on the Draft License Application Proposals

PROPOSED HAMILTON BRANCH DEVELOPMENT RECREATION STUDIES

Study Area

- **The study area for this study includes PG&E lands surrounding the Hamilton Branch Development, including Mountain Meadows Reservoir, the water conveyance system, the Hamilton Branch drainage of the Upper North Fork Feather River.**
- **The following developed recreation facilities will be included in the analysis:**
 - **Indian Ole Dam Boat Launch and Day Use Area**
 - **Hamilton Branch Powerhouse Fishing Access Site**
- **Public and Licensee dispersed (undeveloped) lakeside (Mountain Meadows Reservoir) and riverside (Hamilton Branch Reach) recreation sites will also be included in this analysis.**
- **This analysis will also include trails on or near these shorelines.**
- **The Development's water conveyance system (pipelines, penstocks, canals, flumes, etc.) corridors will be investigated as well; however, few recreation sites are anticipated.**

Note: These study plans were handed out, but only briefly discussed.

Anticipated Recreation Studies for Hamilton Branch

**Recreation studies anticipated for the Hamilton Branch
Development of the UNFFR Project (expanded) include:**

- 1. Recreation Supply Analysis**
- 2. Recreation Demand Analysis**
- 3. Recreation Capacity and Suitability Analysis**
- 4. Recreation Needs Analysis**
- 5. Amended Recreation Resource Management Plan (RRMP)**

Hamilton Branch Recreation Supply Analysis

Objectives of Study

- **Analyze existing recreation information related to the supply of recreation resources near the Hamilton Branch Project and to place the Project in the proper regional context.**
- **Provide an inventory and evaluation of developed recreation facilities, undeveloped dispersed sites and use areas, site and facility conditions, as well as an assessment of Americans with Disabilities Act (ADA) access at recreation areas.**
- **Determine opportunities and constraints to public shoreline access to the Project, and assessing recreation and recreational public use impacts at recreation sites and use areas.**
- **Identify undeveloped dispersed recreation sites and use areas in the Project area, regardless of ownership and management responsibility.**

Study Methods

The recreation supply analysis focuses on **4 main tasks**:

- **An identification of regional recreation resources;**
- **An inventory and condition assessment of developed and undeveloped dispersed recreation sites and use areas; and**

- **An assessment of public shoreline access and an assessment of public use impacts at recreation sites and use areas.**

Task 1—Regional Recreation Analysis

- **The UNFFR Regional Recreation Assessment will be used to summarize regional recreation resources in proximity (approximately a 50-miles radius) to the Hamilton Branch Development.**
- **The results of the UNFFR regional study will be reanalyzed, focusing on a comparison between regional recreation resources and those related with the Hamilton Branch Development.**

Task 2—Recreation Facility and Condition Inventory

- **This task will provide a detailed inventory and evaluation of recreation facilities, use areas, and conditions for each of the sites in the study area.**
- **A universal accessibility assessment will be conducted as part of this task. Universal access or ADA-related compliance needs will be evaluated.**
- **Planned or future recreation facilities or use areas will be documented through review of existing plans and through agency consultation, such as the Dyer Mountain Resort proposal.**
- **Interviews with recreation providers will be held such as Plumas County and Lassen County.**

- **To characterize facility conditions, each public developed recreation site will be rated using criteria.**
- **Site impact information will be gathered including observed sanitary problems, erosion, and vegetative damage associated with recreational use at dispersed undeveloped recreation sites and use areas.**
- **Unsafe conditions and signs of overuse will be noted for both developed and dispersed undeveloped recreation sites.**

Task 3—Public Shoreline Access Assessment

- **Public access in the Project area will be identified and assessed by driving public roads and walking formal and informal trails on land open to the public. Particular attention will be paid to shoreline access opportunities and constraints.**
- **GIS mapping will be used to identify land ownership, public use leases and easements across private lands, recreational facilities, formal and informal parking areas, roads and trails, and resource and other access constraints to shoreline and waters within the Project area.**
- **A proposed private development (Dyer Mountain Resort) adjacent to the southwestern shoreline of Mountain Meadows Reservoir will also be included in the assessment.**
- **Public access areas in the Project area will be evaluated using three ratings: high, medium, and low shoreline accessibility to the public. Criterion for each rating will be defined and include ease of access and obstacles encountered at each location, perceived or otherwise.**

- **A descriptive analysis will then summarize areas that the public will likely have reasonable access during the term of the license.**

Task 4—Recreation and Public Use Impact Assessment

- **This task will focus on developing an assessment of public use recreation-related impacts in and adjacent to Project recreation sites.**
- **The results of this study will provide a baseline of information for future long-term monitoring of public recreational impacts.**
- **Researchers will drive and walk the study area looking for recreation-related impacts. For each site where recreational impacts have been identified, field data will be collected.**
- **Erosion impacts will be assessed via a pedestrian survey of shoreline areas.**

Task 5—Summary Report Preparation

- **The results of Tasks 1 through 4 will be presented in a summary report.**

Hamilton Branch Recreation Demand Analysis

Objectives of Study

- **The three primary objectives of the Recreation Demand Analysis are to:**
 1. **Understand the preferences and characteristics of the Project areas' primary recreation user groups;**
 2. **Estimate existing Project-related recreational use; and**
 3. **Project the amount of recreation use in the Project area at the end of the Project's license term (assumed to be 30 years for planning purposes).**

Study Methods

The study will focus on four tasks:

- **Questionnaire survey**
- **Existing recreation use estimate**
- **Projected recreation use estimate**
- **Summary report**

Task 1—Questionnaire Survey

This study task involves three subtasks detailed below.

Subtask 1—Develop Questionnaire Survey Strategy and Survey Administration

- One visitor contact survey will be used to assess the attitudes, preferences, and characteristics of Project area visitors.
- This survey will focus on area residents, as well as other recreational visitors.
- The visitor contact questionnaire will be similar in form to the mail survey used in the UNFFR Questionnaire Survey and will be used to obtain basic information about the respondents' visit, perceptions of crowding, activities participated in, attitudes toward potential management actions, and socio-demographics.
- Visitors will be contacted on randomly selected days at the recreation sites and facilities in the study area. Sampling will be stratified from the early, peak and late season, as well as from weekdays and weekends. The exact number of survey days has not been determined yet.
- Sites surveyed will include developed and dispersed recreation sites and use areas in the Project area.
- For dispersed use sites in the Project area, popular sites will be surveyed using a different methodology. Locations where visitors regularly park their vehicles along roads near the de-watered reaches will be identified.

- Surveys will be distributed at these locations by placing survey forms on vehicle windshields. Visitors will be asked to mail back the on-site survey form using a pre-stamped envelope.

Subtask 2—Design the Questionnaires and Administer the Survey

- This subtask will develop the design of the questionnaire survey form to be used and will describe the methods for administering the survey once developed.
- The focus of the survey will be on crowding and capacity related issues, the overall recreation experience in the Project area, visitor perceptions of recreation-related items, and trip characteristics and destinations.

Subtask 3—Analysis of the Survey Data

- Data gathered from the questionnaire survey will be entered into a database. These data will be subject to Quality Assurance/Quality Control procedures.
- These data will then be analyzed using statistical modeling software to produce results that can be queried and summarized into major points.

Task 2—Existing Recreation Use

Four subtasks have been developed to address this task of the Recreation Demand Analysis.

Subtask 1—Preparation for Field Work

- This preparatory subtask will involve logistical preparation for this study. A user count survey protocol will be prepared.

Subtask 2—Seasonal Visitation

- This subtask will provide an estimate of day and overnight project-related annual recreation visitation to recreation sites and major recreation resources within the study area and the Project as a whole.
- Recreation visitation will be estimated in recreation days (a recreation day (RD) is defined as a visit by a person to an area for recreational purposes during any portion of a 24-hour period).
- Visitation will be estimated primarily through on-site observations. This will involve observing vehicles at facility entrances on randomly selected days.
- This subtask will estimate people, vehicles and boat trailers, as well as the utilization (% occupancy) of parking spaces, picnic units, and campsites during specified time periods.
- A number of days (not yet determined) during the early, peak, and late seasons will be selected using a stratified random sampling procedure for on-site observations.

- Researchers will travel by vehicle to each of the sites selected on a pre-selected random stratified date to do the counts. Researchers will also observe vehicles entering each site on randomly selected dates to assist in determining the average number of visitors in each vehicle and the average length of stay.

Subtask 3—Recreation Activities

- This subtask will estimate the number of visitors participating in recreation activities occurring at each recreation site and in the Project as a whole.
- The documentation of this data will allow for sufficient determination of both total recreation days by activity type and the average percentage of visitors participating in the various activities.

Subtask 4—Use Distribution

- This task will calculate a percent distribution of the amount of recreation use occurring within each site or area and a total number for the entire Project area.

Task 3—Projected Recreation Use Analysis

This task will estimate total annual recreation use in the Project area for 2002. Recreation use will then be projected out to the end of the anticipated Project license term (assumed to be 30 years for planning purposes) using three subtasks described below.

Subtask 1—Visitor Origin Assessment

- The first subtask will be to assess population growth in the areas where visitors reside or their origins. Specifically, population projections of the counties where the Project recreation visitors originated from will be investigated.
- These origins will be identified based on the results of the Questionnaire Survey.
- Recreation use will be projected to the end of the license term based on a composite growth rate from the major counties in which the recreation use originated.

Subtask 2—Activity Participation Assessment

- The second subtask will be to review recreation activity trends for specific activities occurring in the Project area.
- Annual historical trends in fishing and hunting license sales will be investigated using CDFG historical license data or other appropriate source.
- Statewide Comprehensive Outdoor Recreation Plan (SCORP) data from CDPR and NDSP will be reviewed.
- Survey results from the Public Opinions and Attitudes on Outdoor Recreation in California by CDPR will be reviewed.
- Additionally, national activity participation trends will be reviewed (Cordell et al. 1999).

- These reviews will focus on identifying annual activity participation rates and anticipated annual increases by activity type for the region and for activities that occur at the Project.

Subtask 3—Regional Recreation Opportunities Assessment

- It is important to understand the context of the Project's recreation resources and how this may affect future recreation use at the Project. The previous UNFFR study will be revised for this project.
- Factors to be considered in this subtask include other opportunities in the region that may also satisfy recreation demand, particularly water-based recreation, and future plans for accommodating new recreation use in the surrounding areas.

Task 4—Summary Report Preparation

The results from Tasks 1 through 3 will be presented in a summary report with tables and descriptive text.

Recreation Capacity and Suitability Analysis

Objectives of the Study

- **Recreation carrying capacity has been defined in a number of ways, but a useful definition is “the level of use beyond which impacts exceed standards.”**
- **Identify if potential new recreation facilities and activities would be suitable in the Project area while maintaining the integrity of the resources and meeting the long-term needs of visitors.**
- **Assess what level of recreational use is sustainable, compatible, and within the overall capacity of the area during the term of the new license.**
- **Determine areas suitable for potential new recreation facility development and dispersed undeveloped recreation use in the Project area consistent with the resource opportunities and constraints of the area.**

Study Methods

- **Methodologies for the two inter-related components (recreation capacity and recreation suitability) are described below.**

Task 1—Recreation Carrying Capacity Analysis

This task assesses the recreation capacity of the Project area using various types of capacity consideration. A large body of research exists on crowding and resource deterioration in recreation settings. In this research, it is useful to distinguish between four types of carrying capacity in recreation settings:

- **Ecological Capacity** (concerned with the impacts of the ecosystem, such as the percent of specific types of ground cover, number of certain plants or animals observed, soil compaction, and soil erosion).
- **Physical/Spatial Capacity** (concerned with space impacts, such as people per square foot of flat sleeping area, people per acre or square mile, camping parties per beach, or number of people in critical areas).
- **Facility Capacity** (concerned with facility impacts, such as number of people, groups, or vehicles per boat ramp, rest room, parking lot, or campground, visitor-staff ratios, percent occupancy for various facilities, time waiting to use facilities, or number of campground refusals).
- **Social Capacity** (concerned with social impacts, such as encounters with other parties per hour or day, number of encounters with groups of a particular size or type, percent of nights camped away from others, percent of attraction sites where people are out of sound and sight of others, or number of people encountered at each attraction site).

- **Once these four capacity types have been investigated, it is important to identify which type (or types) is a limiting factor(s).** The limiting factor often drives decision making regarding capacity determinations and is often the “trigger” that determines when recreation use has reached a level of capacity.
- **Different levels of capacity are also important in determining where capacity concerns exist and where management priorities and monitoring programs should be directed. Two levels of capacity need to be assessed: site-specific level and reservoir-wide level.**
- **In summarizing overall recreation capacity at a site and reservoir-wide level, judgments will be made as to whether a site or area is below, approaching, at, or exceeding capacity.**
- **This task involves conducting three inter-related subtasks:**
 - Subtask 1 – Data collection for the four capacity types.
 - Subtask 2 – Identification of limiting factor(s).
 - Subtask 3 – Assessment of overall capacity at site and reservoir-wide level.

Task 2—Recreation Suitability Analysis

- **EDAW will conduct an analysis of recreation suitability for potential recreation development that balances recreation needs and visitor experience with resource protection and land use/management needs.**

- **This task will be a GIS-based overlay mapping exercise for the Project area that will indicate areas of opportunity for public recreation use and development and areas with significant constraints to public recreation development and use.**
- **This GIS analysis will look at a number of opportunity and constraint factors based on available data layers.**
- **The results of this study will be used to provide resource/recreation compatibility information and the limitations of potential new recreation development that may be considered during relicensing, such as new or expanded campgrounds and day use sites on the reservoirs.**
- **Using the GIS data layers, opportunity and constraint polygons will be identified and mapped.**
- **Each of the opportunity or constraint variables/polygons will be ranked as high, medium, and low opportunities. Once ranked, the GIS data layers will then be overlaid. GIS maps showing these three rank categories will be produced and composite recreation suitability maps will next be prepared.**
- **Highly suitable recreation areas will be those areas where high opportunities and low or no constraints exist, such as where good slopes, forests, and soils for recreation development all occur in the same location.**

- **Moderately suitable recreation areas** will be identified by relaxing the high opportunity criteria to include areas that provide medium recreation opportunities and low or no recreation constraints.
- **Low suitable recreation areas** will be identified by further relaxing the opportunity criteria to include areas that provide low recreation opportunities and moderate to high constraints.
- **Some areas where public recreation use cannot exist**, such as existing residential and commercial areas and Project facilities, will be excluded from the analysis or could be labeled unsuitable.

Task 3—Summary Report Preparation

- The results will be presented in a summary report. **The report will include a discussion recreation carrying capacity, recreation development opportunities and constraints, and GIS recreation development suitability maps.**

Recreation Needs Analysis

Objectives of the Study

- **FERC requires the development of a recreation needs analysis.** To satisfy this requirement, a synthesis of prior study results is needed.
- **Existing recreation needs will be identified and future needs will be projected for increments of time (i.e., 10-year periods) over the term of the new license.**
- **Some identified recreation needs will be considered by the Licensee for potential PME's in the license application.**

Study Methods

- **In general, the Recreation Needs Analysis synthesizes the results from previous studies into a single document.**
- **Specific tasks include:**
 - **Review the results from previous recreation studies;**
 - **Analyze overall recreation needs in the study area over time (i.e., estimate of the number of total campsites needed in the future based on current demand);**
 - **Identify developed and dispersed recreation needs on a site-by-site basis, both existing and future (estimated in 10-year increments);**
 - **Compile recreation needs into a Recreation Needs Analysis Summary report.**

Task 1—Review of Results from Previous Recreation Studies

- **This task will compile and review recreation data and results for the Project area, including the supply analysis, demand analysis, and capacity and suitability analysis.**

Task 2—Identify Overall Recreation Needs

- **Overall recreation needs in the Project area will be assessed by comparing and contrasting recreation study results and indicators related to supply, demand, capacity, and suitability factors to arrive at conclusions regarding recreation needs. This process will essentially follow a generalized formula: $\text{supply} - \text{demand} = \text{needs}$.**
- **Sources of data for these factors may include:**
 - Recreation visitor survey responses;
 - Visitor perceptions of crowding and crowding criteria;
 - Projected increases in demand for various activities;
 - Seasonal and weekday/weekend occupancy rates;
 - Facility and use area capacity utilization;
 - Physical and spatial arrangement of existing facilities and use areas;
 - Existing facility conditions and accessibility guidelines and report recommendations;
 - Suitability analysis depicting potential sites or areas;
 - Opportunities for infill, redesign, or expansion of existing facilities;

- Management goals and objectives of published plans;
- Visual observations and observed impacts from existing use; and
- Professional judgment.

Task 3—Identify Recreation Needs on a Site-by-Site Basis

- **This task takes overall identified needs and identifies where they may be accommodated on a site-by-site basis.**
- **Site-specific needs will be identified through review and analysis of several data sources, including:**
 - Recreation survey responses about specific sites;
 - Seasonal and weekday/weekend occupancy rates at specific sites;
 - Spatial arrangement of sites and design problems observed;
 - Facility conditions;
 - Accessibility compliance and guideline recommendations at sites;
 - Potential sites as identified in the GIS-based suitability analysis;
 - Opportunities for infill, redesign, or expansion at each site;
 - Observed impacts of use at each site; and
 - Professional judgment.
- **The identification of future needs will build off of a list of identified existing needs. This analysis will project overall recreation needs into the future in 10-year increments.**

Task 4—Recreation Needs Analysis Summary Report

- **The results will be presented in a summary report with tables and descriptive text. This report will synthesize the results of the previous studies by activity type.**
- **Existing and future recreation needs will be defined using indicators from the various supply, demand and capacity/suitability analyses.**
- **Sites where these needs might be accommodated will be discussed.**

**QUESTIONS AND COMMENTS ON THE
HAMILTON BRANCH DEVELOPMENT**

Upper North Fork Feather River Relicensing Project Recreation, Land, and Aesthetics Work Group 2002 Meeting Schedule

Date	Location	Anticipated Topics
May 15, 2002	Memorial Hall	<ul style="list-style-type: none"> • Anticipated Meeting Topics and Schedule for 2002 • Overview of the Draft License Application (DLA): Recreation Resources • Recreation Resource Management Plan (RRMP) Development • Planned Hamilton Branch Development Recreation Studies
June 14, 2002	ABC Center	<ul style="list-style-type: none"> • Discussion of Proposed Project Mitigation & Enhancements (PMEs) and recreation study results
June 19, 2002	Wildwood Senior Center	Lake Almanor Shoreline Management Plan – Public Workshop (4 pm to 8 pm)
July 17-18, 2002	7/17 – Memorial Hall 7/18 – Court House	<ul style="list-style-type: none"> • Discussion of Proposed PMEs and recreation study results • Begin development of the Recreation Resource Management Plan (RRMP) • Answer questions prior to DLA comment deadline (7/29/02)
July 24-25, 2002	Memorial Hall	<ul style="list-style-type: none"> • Discussion of Proposed PMEs and recreation study results • Development of the RRMP • Answer questions prior to DLA comment deadline (7/29/02)
July 29, 2002	.	Written comments to the DLA due to PG&E
August 8-9, 2002	Memorial Hall	<ul style="list-style-type: none"> • Discussion of Proposed PMEs and DLA comments • Development of the RRMP
August 27-28, 2002	Memorial Hall	<ul style="list-style-type: none"> • Discussion of Proposed PMEs and DLA comments • Development of the RRMP

Meeting times are tentatively scheduled from 9 AM to 3 PM, except as noted for the Shoreline Management Workshop.

JUNE 14, 2002

MEETING AGENDA

Upper North Fork Feather River Project Recreation, Land Use, and Aesthetics Work Group

June 14, 2002
ABC Resource Center
Chester, CA
9:00am to 3:00pm

- 9:00am Introductions, Review agenda items
- 9:15am Review meeting notes
- 9:25am Responses to previous comments:
- Previous meeting
 - Letters/E-mails
 - Hamilton Branch
- 10:30am Break
- 10:45am Recreation site options:
- North Shore Campground options
 - Alternative sites to North Shore Campground
 - Catfish Beach
 - Westwood Beach
 - Stumpy Beach
- 12:00pm Lunch
- 1:00pm Recreation site options (continued):
- Southwest Zone
 - Southeast Zone
- 2:00pm Break
- 2:15pm RRMP annotated outline—comments
- 3:00pm Wrap up

UNFFR RELICENSING
FERC No. 2105
Recreation and Land Management Work Group Meeting
June 14, 2002
9 A.M. to 12:30 P.M.
ABC Resource Center, Chester, CA

Attendees:

Alta Garrick	(530) 258-3376	
Janet Walther	(530) 894-4770	
Mike Willhoit	(530) 259-3647	
Ryan Beck	(530) 258-3376	ryan@ryanbeckphoto.com
Bill Dennison	(530) 258-2058	dennison@citlink.net
Jerry Duffy	(530) 256-3227	dvermountain@citilink.com
Bill Cheek	(530) 596-4601	voyagers@psln.com
Marvin Alexander	(530) 259-3768	Plumas10@aol.com
Marian Liddell	(530) 258-3115	chesterprogressive@hotmail.com
Aaron Seandel	(530) 259-4335	aseandel@psln.com
Janis Miller	(530) 596-3740	jamham@the.net
Janie Ackley	(530) 258-2141	jackley@fs.fed.us
Peggy Gustafson	(530) 283-7622	pgustafson@fs.fed.us
Christi Goodman	(530) 283-6167	
Chuck Everett	(206) 622-1176	everettca@edaw.com
Sergio Capozzi	(206) 622-1176	capozzis@edaw.com
Mark Sanford	(530) 894-4653	AMS0@pge.com
John Mintz	(415) 973-5779	JSM9@pge.com
Tom Jereb	(415) 973-9320	TAJ3@pge.com

John Mintz called the meeting to order and provided a general overview of the planned topics. This was the second draft application review and consultation meeting. The intended focus of the meeting was to discuss identified issues and recreation development alternatives around the Lake Almanor Shoreline. Presentations were made by John Mintz (response to previous meeting comments), Tom Jereb (the addition of Hamilton Branch), and Chuck Everett (explanation of recreation development alternatives). Throughout the meeting there was a series of comments and discussions on previously identified issues with the development of a Recreation Resource Management Plan, Hamilton Branch, and the recreation development alternatives around Lake Almanor. The comments, issues, resolutions, and/or clarifications are summarized as follows:

Responses to comments/issues identified at previous meeting and in emails:

- John Mintz walked through specific recreation issues and provided PG&E's response to each issue. Future meetings will be dedicated to exploring issues in more detail as needed. Bill Dennison voiced his desire to have agencies at the

meetings. John Mintz and Tom Jereb both replied that all agencies are invited to the meetings.

- *PM&E proposals not enough*—Bill Dennison voiced concern over O&M costs these costs should not be included in the recreation proposals. John Mintz indicated these costs are new costs associated with new proposals and are required by FERC to be included in the application. Bill felt that in some instances there may be improved O&M proposals for existing facilities (i.e. roads). John indicated that he would review the costs for such instances.
- *PM&E commitment*—Question was raised whether PM&E costs were stated in today's dollars and were PG&E commitment based on the elements stated in the proposals or the cost to implement the proposal. John Mintz replied that the costs are in today's dollars. Tom indicated the PG&E commitment reflects both elements. The cost portion provides and indication of the relative scope of the commitment. Actual implementation costs may be slightly higher or lower, but would not be significantly higher lower.
- *Lake level*—Bill Dennison wants to make sure recreation areas are usable at lower lake levels, as he doesn't want people to have to walk long distances to reach the water.
- *Forest Service Recreation Plans*—John Mintz stressed the fact that there are many recreation providers in the area and all have a shared responsibility when it comes to providing future recreation facilities in the area. Bill Dennison stated that his concern is not over the facilities, but the timing of construction of new facilities and basing the timing on a Forest Service plan that is no longer being implemented (Prattville Area Management Plan).
- *PSEA Camp*—Bill Dennison restated his desire to look into opening the PSEA Camp at Prattville to public use. Mike Willhoit stated that the desire to open the PSEA Camp to public use is specific to the beach area and not the overnight facilities. The Red River Deed was mentioned, but John Mintz stated that the deed will be the subject of a future meeting and thus would not be discussed at today's meeting. John Mintz indicated that perhaps, after discussion with PSEA, the PSEA Camp beach could be made public. Some indicated that the public is using the beach now.
- *ADA Accessibility Enhancements*—Chuck Everett stated that this project had the highest response by the public for ADA improvements of any FERC projects he has worked on. This is part of the reason ADA improvements were focused on in the recreation proposals. Also, FERC focuses on ADA compliance.
- *Lake Almanor Trail*—Bill Dennison would like PG&E to consider adding construction costs for a trail from Canyon Dam day use area to Hamilton Branch to the PG&E recreation proposals.

- *User fees*—Tom Jereb explained that by FERC guidelines, PG&E can not discriminate between locals and visitors when charging user fees. Bill Dennison would like to see a yearly flat fee pass for locals only.
- *Almanor boat ramps*—Mark Sanford explained the survey work that had been recently done at all public and resort boat ramps at Lake Almanor to determine the elevation of boat ramp toes. This information will be provided at a future meeting
- *Watershed Plan*—Bill Dennison would like PG&E to be involved in the watershed-planning group. John indicated that Lake Almanors water quality is currently very good and that maintaining good water quality in the future is largely dependent on how Plumas County manages land uses and development around the lake. The Project was found to have very little impact on the lake's water quality. John also indicated that watershed lands are outside of FERC jurisdiction and PG&E's influence, since it owns relatively little watershed lands. Tom, though, indicated that PG&E would participate in the watershed planning process as a committee member.
- *Aesthetic Mitigation*—Bill Dennison brought up concern over felled trees below the 4,500ft-elevation being left on the shoreline and that this should be in the aesthetics plan. Mark Sanford explained PG&E policy of felling hazard trees along the shoreline. John Mintz stated that this issue should be discussed as a shoreline issue a future shoreline topic meeting.

Additional comments/issues identified:

- *Water quality*—concern that water quality is not addressed in the recreation studies and question over PG&E's role in water quality.

Water quality is not addressed in the recreation section of the Draft License Application; it is addressed water quality section of the document. Currently, water quality is very good based on scientific studies. PG&E has been working with Bill Dennison to work with Plumas County in monitoring water quality.

- *Recreation development*—question about why proposed recreation developments are phased in 20 to 30 years from now.

Proposed recreation developments are based on projected needs. Projected needs are based on best estimates of population increases, demographics, and changes in recreation participation among other factors, and need to be updated as these factors change. The exact timing of the proposed recreation developments will be based on the monitoring program in the Recreation Resource Management Plan. Results of the monitoring program may require some proposed recreation developments to be implemented sooner or later than anticipated.

- *Estimated costs*—questions concerning break-out of estimated costs associated with proposed recreation developments.

All cost estimates for the proposed recreation developments are based on reasonable costs associated with contractor fees and overhead. The estimated costs represent direct expenses only, and do not represent true financial costs (no financing costs). In general, the estimated costs would be allocated to engineering, permitting, design, materials, and labor expenses. There are no PG&E overhead expenses in the cost estimates.

Hamilton Branch Development Amendment to the UNFFR License Application:

Tom Jereb explained that PG&E has added the Hamilton Branch Development (that has no FERC license now) to the new UNFFR FERC Project No. 2105 license application as part of PG&E's reorganization plan to get out of bankruptcy. An amendment to add the Hamilton Branch Development needs to be filed by June 1st, 2003. This is a very recent addition to the relicensing effort, but is needed because of comments received from the CPUC indicating that the Hamilton Branch Development is currently "unregulated." Two other small PG&E hydro/irrigation developments were also identified, but will not be licensed under FERC jurisdiction as they are already under CPUC regulation. Hamilton Branch is also currently under CPUC and other regulations, but would be a logical addition to the UNFFR Project. 2105 committee members generally agreed with this, but were concerned about its delaying the UNFFR application.

Tom Jereb stated that he doesn't know how the addition of Hamilton Branch will affect the timing of the UNFFR application, but he doesn't want any significant delays. In order to expedite the amendment and avoid significant delays to the UNFFR application, agency consultation, as required by FERC regulation, is currently in the works. Some studies are currently underway given this short time frame.

It is important to note that the Hamilton Branch amendment to the UNFFR license application is dependent on a bankruptcy court ruling. Hamilton Branch is currently in only one of two plans for reorganization (and not in PG&E's plan). A bankruptcy judge should decide in November, 2002, which plan will be implemented. There is a chance that the reorganization plan that is ultimately chosen will not include Hamilton Branch in the UNFFR license application, at which point the amendment would not be pursued by PG&E.

While this new amendment may delay the UNFFR application several months at a minimum, PG&E cannot begin to implement its proposed recreation enhancements until FERC makes a decision on the full license application. This is due to potential changes to the proposed enhancements that FERC may make in their final license order.

Recreation development alternatives at Lake Almanor:

Chuck Everett presented various recreation development alternatives at sites around Lake Almanor. The development alternatives focused on providing new day use facilities at various locations around the reservoir. The following alternatives were presented:

- *North Shore Campground*—development options included four boat launch and day use/beach area alternatives.

The four North Shore Campground alternatives were developed with the intention of providing day use/boat launch shoreline access in proximity to Chester. All four plans would require some modification to the current campground and boat launch. PG&E has been very pleased with the existing Campground permittee, and intends to work with him, so he can continue a viable private venture under each alternative.

Concerns with the North Shore Campground alternatives include disruption of existing operations, restroom/shower use, moving prime campsites to other less desirable locations, campground security, and aesthetics. Also, water depth is a major concern at this site related to swimming. Some dredging may be involved for boat launching.

- *Other Shoreline Park Alternatives near Chester*— As alternatives to developing a day-use/beach at North Shore Campground, three day use/swim beach alternatives at various locations along the western shoreline were discussed.

Two relatively small alternative sites are located north of Lake Almanor West Country Club. The third alternative is located to south of the country club. This southern area is generally more desirable location for swimming and beach development.

Concerns with the shoreline park alternatives include their proximity to the country club, potential encroachment on private lands, distance to the town of Chester, and the high concentration of existing recreation development along the southwestern shoreline. Water depth is not a concern at the third southern alternative, making it ideal for beach/swimming development, but is the farthest away from Chester (but linked by the trail).

The proposed 1st Avenue Lake Almanor Recreation Trail extension (Chester Recreation and Park District/USFS grant application) was also mentioned as an option. While not a good swim beach, proposed facilities associated with a trail grant application could provide a shoreline access site for Chester residents.

- *Catfish Beach*—development options include two basic alternatives, providing either walk-in or drive-in access to the area. For either of these options, day use or overnight facilities could be provided.

Concerns with the Catfish Beach alternatives include security issues, distance to site of walk-in alternatives, and lower water level.

- *Eastshore Shoreline Access*—development options include two day use/beach sites: Westwood and Stumpy Beach.

These areas are currently receiving use and could potentially be good sites for developed day use/beach areas, especially since water level is less of a concern along this shoreline.

Concerns with the Eastshore shoreline alternatives include the small area of available land for development, development in or near the CalTrans right-of-way, and the ingress/egress safety of visitors given the proximity of these sites to the highway.

- *Southwest Shoreline Public Access Zone*—PG&E's policy is not to allow shoreline vehicle access below the 4,500 foot elevation (except in approved developed day-use areas) to protect shoreline resources. Relicensing study results indicated that currently, the southwest shoreline receives illegal vehicular use below the 4,500 as well as the 4,494-ft level.

In order to better manage this vehicular use, it is proposed that several existing access points be closed to vehicular traffic and several vehicular access areas just above the 4,494 ft level be developed to better accommodate the public shoreline access desire, while protecting resources. From these areas, dispersed pedestrian shoreline use below the 4,494 foot elevation would also be accessible.

- *Southeastern Shoreline*—Based on future demand, a PG&E operated campground is proposed in this area. Additional elements of this proposal will be presented at a future meeting.

In general, there was strong support for new shoreline day use facilities around Lake Almanor. Support was voiced for the following proposed enhancements:

- *North Shore Campground*—public boat launch only, no swim beach.
- *Swim beach for Chester residents*—south of Lake Almanor West Country Club; farther south on USFS or private land, or near the jetty in conjunction with other potential improvements.
- *Other shoreline access for Chester residents*—a site associated with the proposed 1st Avenue trail route/trail rest stop.
- *Catfish Beach*—strong support for drive-in day use and/or camping.

- *Stumpy Beach*—strong support. CalTrans has since OK'd the concept, except for the toilet.
- *Westwood Beach*—strong support.
- *Canyon Dam Day-Use Area* – Support for the addition of sand
- *Conversion of PG&E Campground loop to a day use/beach area* – general support.
- *Southwest Shoreline Public Access Zone*—strong support for improving some (~4) access points and in closing/rehabilitating others.

PG&E 6/14/02 Response to 5/15/02 Meeting Comments

UNFFR RELICENSING

FERC No. 2105

Recreation and Land Management Work Group Meeting

May 15, 2002

9 A.M to 2:30 P.M.

Memorial Hall, Chester, CA

Attendees:

Marvin Alexander	(530) 259-3768	Plumas10@aol.com
Bill Cheek		
Michael Condon	(530) 283-2870	mcondon@fs.fed.us
Bill Dennison	(530) 258-2058	dennison@citlink.net
Alta Garrick	(530) 258-3376	
Janie Ackley	(530) 258-2141	jackley@fs.fed.us
Peggy Gustafson	(530) 283-7622	pgustafson@fs.fed.us
Mike Taylor	(530) 534-6500	mftaylor@fs.fed.us
Sharon Stohrer	(916) 341-5397	sstohrer@waterrights.swrcb.ca.gov
Marian Liddell	(530) 258-3115	chesterprogressive@hotmail.com
Christi Goodman	(530) 283-6167	
Harry Williamson	(916) 414-2355	Harry_Williamson@nps.gov
Mike Meinz	(916) 358-2853	mmeinz@dfg.ca.gov
Kirby Gilbert	(425) 482-7701	Kgilbert@fwenc.com
Chuck Everett	(206) 622-1176	everettca@edaw.com
Sergio Capozzi	(206) 622-1176	capozzis@edaw.com
Mark Sanford	(530) 894-4653	AMS0@pge.com
John Mintz	(415) 973-5779	JSM9@pge.com

John Mintz called meeting to order and provided a general overview of the planned topics. This meeting is intended to be the first of several draft application review and consultation meetings. This meeting was set up to provide an overview of the draft application with respect to the recreation and land management sections. Presentations were made by Chuck Everett of EDaw to summarize the content and findings of the recreation exhibits and Kirby Gilbert presented a summary of the land management and aesthetic exhibits. John Mintz explained the overall application review and consultation process and mentioned that the public and agencies have until July 29th to comment on the Draft License Application. Comments will be addressed before the Final License Application. Many from the work group wanted to go step by step through the recreation plan results and recreation proposals. John also informed the group of the Hamilton Branch amendment. Throughout the meeting there were a series of comments and discussions on the review process for the draft application and Hamilton Branch amendment as well as many specific comments related to the recreation and land management/aesthetics findings. The comments, issues, and resolutions or clarifications are highlighted as follows:

Overall Review Process Issues and Comments – Hamilton Branch:

- Repeated concern and questions as to why the Hamilton Branch Project was being added to the Upper North Fork Feather River Project this late in the relicensing process. John Mintz explained it had to do with the PG&E reorganization plan under the bankruptcy proceedings and with settlement discussions with the California Public Utilities Commission (CPUC). Most attendees wanted more answers and John Mintz agreed to ask Tom Jereb to respond to the group's concerns and questions.
- Concern that the addition of Hamilton Branch will potentially delay the Final Draft Application and delay any improvements around Lake Almanor.
- Concern that there will not be time to comment on study plans for Hamilton Branch.
- Questions on what specific facilities are involved in the Hamilton Branch amendment.
- Some agency staff did not want to comment on study plans or have this meeting constitute any sort of formal consultation on study plans until a study process they could agree upon was worked out.

Overall Review Process Issues and Comments – Recreation:

- *RRMP* - Concern that the public will not get an adequate chance to comment on the Recreation Resource Management Plan (RRMP) because the plan is only outlined in the draft application. Chuck Everett explained that some special meetings in summer to further flush out the recreation plan and obtain comments on the plan.

PG&E Response: The Draft License Application that currently is out for public review contains the PG&E recreation proposals and, in some cases, proposal options, which describe the scope (i.e. number of picnic tables), location, and approximate costs commitment to implement the proposals. The RRMP will provide the details as far as design and site plan of the recreation proposals. These details are currently being developed and, during this summer's work group meetings, the recreation proposals and RRMP details will be further flushed out. In this way, community members are part of the decision making process, as they have expressed a desire to be.

In addition, after the Final License Application, including the RRMP, is submitted to FERC, FERC will hold its own public comment period to obtain public comments on the final UNFFR license application.

- *Native Americans* - Bill Dennison expressed interest in having other groups including Native Americans involved in the comment process. John Mintz explained that letters will be sent to Native Americans informing them of upcoming recreation, land-

use, and aesthetic meetings and that PG&E is working on posting the UNFFR Draft License, if possible, Application on the Internet.

PG&E Response: Written notice of Recreation, Land-Use and Aesthetic Work Group summer meetings was sent to Native American representatives on June 5, 2002. In addition, PG&E's has informed resource agencies of proposed Recreation, Land-Use and Aesthetic Work Group Meeting dates, and has attempted to accommodate their scheduling needs. Scanning of the UNFFR draft license application was recently completed and it should be up on the Internet shortly.

Recreation Issues and Comments:

- *PM&E Proposals Not Enough* - Concerns that the monetary allotments/estimates in the Protection, Mitigation and Enhancement (PME) section of the Draft License Application are not enough to satisfy what the some of the attendees felt are necessary to meet future needs, especially when considering the possible length of the new license term. Specific concern about funding amounts listed for developing campsites and a boat ramp on the north shore of Lake Almanor. EDAW representatives emphasized that the analysis does support the proposals and that participants should read the Needs Analysis and other sections to understand the basis for the proposals.

PG&E Response: PM&E proposals are supported by the recreation studies, analysis and needs assessment over the License period as identified in the Draft License Application. This analysis contains the most thorough assessment to date of current and future recreation issues at the Project area. Costs estimates for PM&E's are based on PG&E's and EDAW experience with implementing recreation proposals. Recreation implementation costs vary depending on site conditions. The \$12.7 million allotted for recreation enhancements over the license term is the largest PM&E recreation package ever proposed for a PG&E relicensing Project.

Costs estimates for North Shore Campground improvements are preliminary, and will be updated as the preferred alternative is better defined.

- *PM&E Commitment* - Desire for clarification on whether license articles will specify the amount of future recreation improvements based on monetary amounts (or limitations) or based upon an inventory or description of the proposed facilities. John Mintz explained he would look further into what is typical, but believed specific future needs and improvements were generally specified by facility descriptions not a funding allocation or level. In addition there would likely be thresholds to determine use levels that provide a "trigger" for the need to implement improvements.

PG&E Response – The recreation proposal description provides a description of what will be implemented and the costs estimate indicates the relative scope and costs commitment to implement the proposal. The actual implementation costs maybe slightly higher or lower.

- ***Lake Level/Shoreline Areas*** - Bill Dennison expressed concern that additional shoreline areas could be available and suitable for recreation development if the study were to consider higher summer lake levels, such as those recommended by the 2105 Committee (those that would maintain the reservoir at elevation 4,485). With this consistently higher lake level some shoreline areas would become permanently more useable and available for development.

PG&E Response – We recognize that the shallowness of the reservoir's north shore limits the opportunities for recreation development and use at lower elevations. Much of the lake's shoreline (east, west, and southern shorelines), though, is steeper and provides shoreline recreation opportunities even at lower elevations. As with the shorelines of most water bodies, Mother Nature does not provide a uniform but a varied opportunity for recreation around its shores.

- ***Forest Service Plans*** - Concern about having PG&E rely on other recreation providers to provide future recreation improvements. In specific, the Forest Service may not be able to complete planned recreation proposals on Federal lands in the future due to presence of the federally bald eagle.

PG&E Response - Recreation facilities and services at Lake Almanor and the rest of the Project area are currently provided by a variety of service providers, including the Licensee, the Forest Service, private organizations, private commercial businesses, and Plumas County. In such a large and diverse recreation resource area, all recreation providers have a shared responsibility to help meet the needs of the recreating public. PG&E's recreation proposal recognizes and complements the plans of these other providers to provide recreation improvements in the area.

PG&E will consult further with the Forest Service to determine which of its current recreation proposals contained in its management plans, it will not be able to implement or perhaps may need to be modified because of endangered species issues (i.e. bald eagle) along the southwest shoreline. If bald eagle issues prohibit the Forest Service from developing recreation facilities in this area, these issues will also likely prevent PG&E from developing recreation facilities in the same area.

It has been PG&E' experience that bald eagle nesting areas are the most sensitive eagle areas and that the United States Fish and Wild Life Service (FWS). Lassen Forest Service 1994 Pratville Management Plan proposes to

provide additional campground sites in the southern portion of the campground site within outer limits of an eagle nesting area. Based on the Draft License Application information, there is room, outside of eagle nesting area, for campground expansion on the northern side of the Almanor Campground. Obviously, the Forest Service will need to fully consult with the FWS to identify acceptable options to implement their Prattville Management Plan, if they did not conduct such consultation during the development of the plan.

- ***PSEA Camp*** - Bill Dennison expressed a desire to have the PSEA camp at Prattville opened to the public and for further recreation development. General agreement by all parties that expanding existing facilities was better than building all new facilities in previously undisturbed areas, however it was noted that there was no study finding showing it was necessary to convert PSEA Camp Almanor to a public facility to meet future public recreation needs.

PG&E Response – Under its FERC license, PG&E is allowed to permit private use within the FERC boundary, and has permitted 1,000 residential docks and several private organizational recreation facilities, including recreation beach areas for the Lake Almanor Country Club and Lake Almanor West developments. There is no difference between these facilities and the Camp PSEA.

Considering that there are PG&E and Forest Service land available around Lake Almanor's shoreline to accommodate estimated public recreation use over the license term, there is no need to start considering the conversion of private permitted areas to public use at this time. In addition, the primary recreation demand at Lake Almanor is for expanded day-use areas, and other areas, particularly along the southwest shoreline, provide better shoreline day-use, beach, and swimming opportunities than that offered at the PSEA camp shoreline.

Finally, the PSEA Camp is fully utilized throughout the summer recreation season with members throughout northern California. Conversion of this facility to public use would just displace one user group for another.

- ***ADA*** - During the discussion of PM&Es associated with American with Disabilities Act (ADA) improvements, several agency personnel mentioned that they thought that ADA improvements should be considered as operation and maintenance (O & M) costs, not new PM&Es because these improvements are considered by them to be those that would be required with or without relicensing. It was pointed out by Harry Williamson of the National Park Service that typically these improvements are not required unless other improvements were planned and thus they are usually done when other facility upgrades or expansions are undertaken.

PG&E Response - The ADA assessment and proposals are, in part, in response to a request by Plumas County representatives on the 2105 committee to address the needs of the elderly and persons with disabilities at the Project. ADA improvements are also one of FERC's primary concerns for study and implementation during relicensing.

Current ADA regulations primarily require improvements to buildings. Although under review for many years, the federal government has not approved, except for a few, of the draft ADA recreation guidelines. These proposed regulations require that recreation facilities be brought into compliance when upgraded or constructed. They do not require the installation of ADA recreation elements, when a recreation facility currently does not exist at an area (i.e. Fishing Station).

The PG&E proposal is to implement ADA improvements at PG&E existing recreation sites, prior to the needed rehabilitation, and to incorporate draft ADA guideline measures into new facilities.

The description of the ADA proposals in the Draft License Application provides clarification of each of the proposals, just as indicating the number of picnic tables at a day-use area provides clarification. This is standard planning and project management practice. Finally, the County and agencies may be under a misguided assumption, that eliminating the ADA proposals will increase the recreation development needs at the Project and thus will somehow increase the number and/or scope of PG&E recreation proposals. The Draft License Application's recreation proposals address the general public recreation needs over the term of the license. The proposed ADA elements of the proposals ensure that these proposals also accommodate use by persons with disabilities. Eliminating the ADA elements from the proposals does not create a new public need for other additional recreation facilities.

- ***North Shore Campground* - Concerns that the North Shore Campground site will not be big enough to accommodate new public improvements especially with improvements planned for the boat ramp. Desire to have a back up location for a Chester day use facility besides North Shore.**

PG&E Response - PG&E and EDAW are conducting assessments at North Shore Campground and several options for North Shore Campground. The North Shore and alternative site location options will be discussed at the June 14, 2000 work group meeting.

- ***Catfish Beach* - Desire to open up Catfish beach for day-use again. Concern that Catfish Beach is subject to vandalism and squatting as in the past.**

PG&E Response – PG&E agrees that day-use has the potential of providing day-use and/or camping use, assuming several of this site's issues can be overcome. These options will be discussed during the June 14, 2002 meeting.

- *Lake Almanor Trail* - Desire for PG&E to cooperate in the expansion of the Lake Almanor bicycle trail. John Mintz explained PG&E would assist by providing easements where possible. There was a specific recommendation that PG&E assist with a small day use facility at the trailhead of the proposed 1st Avenue Trail extension (picnic tables, restroom and water).

PG&E Response – As stated PG&E will assist the community in developing a trail around Lake Almanor by providing trail easement(s) on PG&E lands around the lake where possible. PG&E and Plumas County are currently working on an agreement that would provide an easement to the County for a trail on PG&E properties along the lake's southeast shoreline.

- *Fish Cleaning Stations* - Desire for more shoreline fishing facilities and fish cleaning stations in the Project area.

PG&E Response – While there appears to be a user desire for fishing cleaning stations, particularly at Butt Valley Reservoir, PG&E has concerns about the potential environmental effects to water quality of fishing stations and the feasibility of being able to install leech fields at appropriate locations.

- *Almanor Pristine Nature* – Mike Meinz expressed concern that additional recreation development itself and through encouragement of additional use would change the special, pristine nature currently at Lake Almanor.

PG&E Response – Comment noted.

- *User Fees* - Bill Dennison expressed concern about a proposal for user fees related to recreation management related to on site managers or hosts. In particular while he was not opposed for fees to visitors, he was opposed to charging fees to local users.

PG&E Response – As clearly expressed by Lon Crowe of FERC and by FERC regulations, a Licensee is able to charge user fees to help recover recreation costs, as long as these fees are reasonable. PG&E currently does charge fees at many of its day and overnight facilities throughout its service territory.

Local recreation users place just as much demand on recreation facilities and resources as do visiting recreation users; and, as such, should be sharing in the costs in providing these facilities.

- *Almanor Boat Ramps* - Questions related to the serviceability of boat ramps at low pool levels. John Mintz explained that there are plans to survey the elevations of the

commercial boat ramps in 2002 to determine their range of operations. In addition, the USFS boat ramps toes will be surveyed.

PG&E Response – During the week of June 10, 2002, boat ramps toes were surveyed and results can be discussed at a future work group meeting.

- *Butt Valley Reservoir Trail* - Further discussion on the merits of having a Butt Valley shoreline trail for campers and even bicycles, although many thought that would not be appropriate for bicycle use given the setting and possible conflicts with shoreline anglers. Desire to have the proposed Butt Valley Trail be a multiple use trail that could accommodate bicycles. Concern expressed that paving or allowing bikers on trails would change the relatively low density, fishing character character/recreation experience at the lake. Increased erosion from Mtn bikes, if trail was dirt, was also expressed.

PG&E Response – The Butt Valley shoreline trail is proposed as a multi use, dirt trail, except for portions that are designed for ADA purposes, which will be surfaced with crushed rock, decomposed granite, or equivalent material.

- *Water Rights* - Mike Mainz was the issue that if dredging occurred at the lake, this may raise water rights issue, because then the lake would store more water.

PG&E Response – The volume of dredge is insignificant compared to the overall volume of Lake Almanor, which is approximately 1,000,000 acre-feet.

- *Ecological Resource Committee* – Mike Mainz indicated that an Ecological Resource Committee was referenced in the Executive Summary. He was wondering if this was error reference to the Rock Creek Cresta Project or if an Ecological Resource Committee was being proposed for the UNFFR Project.

PG&E Response – At this time PG&E is not proposing a Ecological Resource Committee for the UNFFR Project, but this may be appropriate in the future.

- *Beldon Rest Stop* - Need to replace the restroom this rest stop's restroom expressed.

PG&E Response – The restroom at Belden Rest Stop is currently functional, and when appropriate will be re-habilitated as part of on going operations.

Land Management, Aesthetics and Shoreline Management Issues and Comments

- *Watershed Plan* - Concern that a watershed plan is needed and acknowledge (as needed) in the land management recommendations.

PG&E Response – The watershed lands surrounding the Project are primarily managed by Plumas County and the National Forest Service. Waters from these lands run into Lake Almanor and other Project waters. Proper management of the development and uses of these lands is important to maintain the water quality of Lake Almanor and other Project waters. This management responsibility lies with Plumas County and the National Forest, and outside of FERC and Licensee's purview.

- *TPZ Zone* - Discussion that a Timber Protection Zone along the Southeast shoreline could conflict with recreation proposals. Bill Dennison thought the zoning could be changed if the area was needed.

PG&E Response – PG&E is in general concurrence with Bill Dennison's assessment and will further clarify if this is the case.

- *Red River Lumber Deed* - Concern that the Red River Deed restrictions are not being adequately addressed. It was agreed that this issues would be further discussed at a future meeting.

PG&E Response – As mentioned this issue will be scheduled in as a discussion item during a future work group meeting.

- *Aesthetic Mitigation* - Concern that the aesthetic resource mitigation measures seem too small for a large project such as the UNFFR Project.

PG&E Response – FERC relicensing regulations primarily require a licensee to address the aesthetic effects of major additions or modification to a Project. The relicensing of the UNFFR does not propose a new addition or significant modification to the existing hydroelectric facilities and are appropriate in scope.

Upper North Fork Feather River Relicensing Project Recreation, Land, and Aesthetics Work Group 2002 Meeting Schedule

Date	Location	Anticipated Topics
May 15, 2002	Memorial Hall	<ul style="list-style-type: none"> • Anticipated Meeting Topics and Schedule for 2002 • Overview of the Draft License Application (DLA): Recreation Resources • Recreation Resource Management Plan (RRMP) Development • Planned Hamilton Branch Development Recreation Studies
June 14, 2002	ABC Center	<ul style="list-style-type: none"> • Discussion of Proposed Project Mitigation & Enhancements (PMEs) and recreation study results
June 19, 2002	Wildwood Senior Center	Lake Almanor Shoreline Management Plan – Public Workshop (4 pm to 8 pm)
July 17-18, 2002	7/17 – Memorial Hall 7/18 – Court House	<ul style="list-style-type: none"> • Discussion of Proposed PMEs and recreation study results • Begin development of the Recreation Resource Management Plan (RRMP) • Answer questions prior to DLA comment deadline (7/29/02)
July 24-25, 2002	Memorial Hall	<ul style="list-style-type: none"> • Discussion of Proposed PMEs and recreation study results • Development of the RRMP • Answer questions prior to DLA comment deadline (7/29/02)
July 29, 2002	.	Written comments to the DLA due to PG&E
August 8-9, 2002	Memorial Hall	<ul style="list-style-type: none"> • Discussion of Proposed PMEs and DLA comments • Development of the RRMP
August 27-28, 2002	Memorial Hall	<ul style="list-style-type: none"> • Discussion of Proposed PMEs and DLA comments • Development of the RRMP

Meeting times are tentatively scheduled from 9 AM to 3 PM, except as noted for the Shoreline Management Workshop.

JUNE 19, 2002

PUBLIC WORKSHOP

LAKE ALMANOR SHORELINE MANAGEMENT PLAN

FERC #2105

Pacific Gas & Electric Company

Wednesday, June 19, 2002

4 P.M to 8 P.M.

Wildwood Senior Center

366 Meadowbrook Loop

Chester, California

Pacific Gas & Electric Company, as part of its relicensing of the Upper North Fork Feather River Project (FERC 2105), is conducting an open house to answer questions regarding the Draft Shoreline Management element of the Draft License Application.

The Shoreline Management Plan is just one element of the Draft License Application, which will later become part of the comprehensive operating license issued by FERC. The Shoreline Management Plan is a tool to manage the multiple resources and uses of the project's shoreline

The Draft Application was released on April 29, 2002 with comments due to PG&E by July 29, 2002. The Draft Shoreline Management Plan is incorporated into the application as Appendix E6-E in Volume 8 of 8 Draft Application for New License. The complete application is available for review at the Chester, Quincy, Greenville and Oroville Public Libraries and will soon be on the Internet at: http://www.pge.com/006_news/006b1a_relicense.shtml.

This workshop is a continuation of the shoreline meetings held around Lake Almanor in June 2001. Interested parties are encouraged to stop by at their convenience to review the draft shoreline materials and provide input for the plan during this workshop where consultants and PG&E staff will be available to answer questions.

UNFFR RELICENSING
FERC No. 2105
Draft Shoreline Management Plan Public Open House & Workshop
June 19, 2002
4 P.M to 8:00 P.M.
Wildwood Senior Center, Chester, CA

Attendees:

Kirby Gilbert	Foster Wheeler	Kgilbert@fwenc.com
Mark Sanford	PG&E	AMS0@pge.com
John Mintz	PG&E	JSM9@pge.com
Carl & Rita Felts	5231 Quarry Rd	Lake Almanor, CA 96137
Richard Fording	106 Kokanee	Chester, CA 96020
Mark Reno	947 Long Iron Dr.	Chester, CA 96020
Marvin Alexander	703 Peninsula	Lake Almanor, CA 95973
Michael DeSpain	P.O. Box 3282	Paradise, CA 95969
Dale & Georgia Knutsen	361 Osprey Loop	Chester, CA 96020
Mike Willhoit	259 Osprey Loop	Chester, CA 96020
Ed Wing	313 Lk Almanor W.Dr.	Chester, CA 96020
Lanis & Mark LeBaron	P.O. Box 869	Greenville, CA 95947
Rob Hart	432 Peninsula Dr.	Lake Almanor, CA 96137
John Hancock	179 Lk Almanor W.Dr.	Chester, CA 96020
Norman Sollid	3154 Big Springs Rd	Lake Almanor, CA 96137
Marian Liddell	P.O. Box 557	Chester, CA 96020
William Collins	210 Riverwood Dr.	Chester, CA 96020
Steve Robinson	P.O. Box 40	Westwood, CA 96137
E.D. Gerbe	110 Fox Glove	Chester, CA 96020

The meeting was held as an open house and workshop and advertised in the Chester Progressive as a meeting for the public to attend at their convenience to find out more about the draft shoreline management plan for Lake Almanor. A series of displays with maps and posters extracted from the draft shoreline management plan were presented. Blow ups of the 18 detail shoreline maps were available for viewing. Most parties attending provided written comments and are presented herein. Other comments were communication during the workshop to Kirby Gilbert or Mark Sanford or John Mintz. Issues raised at the open house included:

- Lake elevation levels including general support by Mike Willhoit of the PG&E Operating Guidelines attached in the June 25, 1986 PG&E that are the basis for the proposed continued operating plan except that Mike felt maybe the lower level target could be different.
- Concern about boat slips in Big Cove coming together when lake levels drop
- Concerns about the lack of marina space and accommodation for boats over 26 feet in length



JULY 17, 2002

**Upper North Fork Feather River Project
Recreation, Aesthetics, and Land-Use Work Group
July 17 and 18, 2002 Meeting
Chester Memorial Hall**

July 17, Wednesday (9 am to 3 pm)– Recreation Issues

1. Southeast Shoreline Zone - potential new campground/ relocated sites here
2. Chester Swim Beach/Picnic Area - North Prattville Area
3. Defining existing needs versus future needs
4. Capacity thresholds
5. Monitoring activities
6. Westwood Beach & Stumpy Beach - CalTrans OK
7. PSEA Camp - public access to the beach
8. 1st Avenue Trail Rest Stop/Shoreline Access in Chester
9. Proposed PME's and Conceptual Site Plans - other sites

July 18, Thursday (9 am to 2 pm) – 2105 Committee Goals

- Manage Water Level for Optimum Recreation
- Improve Erosion Management
- Develop a comprehensive safety plan
- Improve Shoreline Access
- Improve Recreation Facilities
- Implement Recreation and Shoreline Plan incrementally if license is delayed beyond 2004.
- Manage Water Quality

UNFFR RELICENSING
FERC No. 2105
Recreation, Land Use, and Aesthetics Work Group Meeting
July 17, 2002
9 A.M. to 12:30 P.M.
Memorial Hall, Chester, CA

Attendees:

Marian Liddell	(530) 258-3115	chesterprogressive@hotmail.com
Harry Williamson	(916) 414-2355	harry_williamson@nps.gov
Janie Ackley	(530) 258-2141	jackley@fs.fed.us
Chuck Everett	(206) 622-1176	everettca@edaw.com
Sergio Capozzi	(206) 622-1176	capozzis@edaw.com
Kirby Gilbert	(425) 482-7701	Kgilbert@fwenc.com

Chuck Everett called the meeting to order and provided a general overview of the planned topics. This was the third draft application review and consultation meeting. The intended focus of the meeting was to discuss recreation development alternatives around the Lake Almanor shoreline, as well as previously identified issues. Presentations were made by Chuck Everett (recreation development plans, capacity thresholds, and monitoring activities) and Sergio Capozzi (explanation of existing needs versus future needs). Throughout the meeting there was a series of comments and discussions on previously identified issues including potential recreation development plans on the Lake Almanor shoreline and recreation surveys, needs, capacity, and monitoring. The comments, issues, resolutions, and/or clarifications are summarized as follows:

Additional comments regarding the meeting notes from the June 14, 2002, meeting:

- Janie Ackley expressed concern regarding Lassen County's stewardship of Mountain Meadows Reservoir and potential environmental impacts (water quality and erosion) from Dyer Mountain Resort. Water quality, erosion, and other environmental impacts may not be as much of a concern in Lassen County as in Plumas County. This concern will be added to the previous meeting's notes.

Conceptual site plans for proposed recreation development at Lake Almanor:

Chuck Everett presented various conceptual site plans for possible recreation development areas around Lake Almanor. The site plans focused on providing new day use facilities at various locations around the reservoir. The following site plans were presented:

- *Southeast Shoreline Zone*—site plan included development of a campground (potentially 45-90 sites), swimming area, group site, and temporary boat moorage.

Concerns with the Southeast Shoreline Zone site plan that need to be addressed include:

- Possible cultural sites in the area

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- Steep banks along most of the shoreline in this area
- Vegetative screening between potential campsites and the highway
- Timber Protection Zone (TPZ) classification the area currently has

In response to these comments, Chuck Everett explained the following:

- PG&E cultural resource specialists did not voice concern over possible development of a campground in this location.
- The shoreline along much of this area is steep; however, the far northern and far southern ends provide good pedestrian access to the shoreline.
- The current vegetation is fairly dense along the highway, though the actual distance between proposed campsites and the highway needs to be enlarged a bit from the plan shown.
- Bill Dennison explained at the June 14 meeting that the TPZ classification of the area could be changed if needed to develop the area as a campground.

Chuck Everett also explained that the potential implementation date of this campground may potentially move up from the date listed in the PME's if the Forest Service does not increase capacity at its campgrounds in the future as originally planned.

- *Chester Swim Beach/Picnic Area*— from the last meeting and site visits, it was determined that North Shore Campground is likely a good location for a public boat launch, but not for a public swim beach. The current site plan for a boat launch at North Shore includes a separate entrance for the launch, a new boat ramp (would require some dredging of the channel), and parking for approximately 40 vehicles with trailers and 12 single vehicles (could be completed in 2 phases). Approximately 20 campsites would be lost in this plan that could potentially be relocated elsewhere to the east on dredge material.

Concern with this plan centered on the number of trees that would be lost and the aesthetic quality of the area. These concerns will need to be addressed as the site plan for this area is further developed in the future.

The southwest shoreline of Lake Almanor may be a potential area for a swim beach for Chester area residents. There are no realistic development areas along the shoreline near or adjacent to Chester for a swim beach. Three areas being considered along the southwest shoreline for a potential swim beach include an area to the south of Almanor West County Club on Forest Service land, an area farther south on private land, and the existing Forest Service swim beach that might be expanded. The area directly adjacent to the existing Prattville jetties or immediately to the north near the cabins was also discussed (Forest Service land). The leased cabins (approximately 7) on Forest Service land may ultimately be removed, though the Forest Service will likely not make a decision regarding these cabins until the current lease agreements expire in 2008. (Based on a

subsequent site visit after the meeting, the area adjacent to or near the 2 jetties is much less attractive for swimming compared to the existing Forest Service swimming area that is in a cove and might be expanded.)

Concern about these 3 potential swim beach locations was raised regarding the likely small number of Chester residents who currently use the public use areas along the southwest shoreline (anecdotal conclusions only) and the probable willingness of Chester residents to travel the distance to use any of these potential sites.

Janie Ackley suggested that the area near the Super Ditch may also be considered as a potential swim beach area. However, it would only be usable during higher pool elevations. It is likely that this area is no better than the North Shore Campground option that was already explored and dropped.

No definitive conclusions were made about a swim beach for Chester area residents. Some commented that it is a goal that may not be achieved.

- *PSEA Camp*—PG&E may be willing to consider opening the PSEA beach area to public use (not the inland cabin area). This could occur when the PSEA permit expires at the end of the current FERC license. This beach area will likely need some improvements before it was opened to public use, such as a parking area, trail, toilets, and benches. It was also discussed that the timber on the site should be thinned out per fire prevention guidelines. A site visit is scheduled to explore improvement/development options at this site.
- *Chester Shoreline Access along the planned LART extension (1st Avenue trail extension)*—PG&E may be open to being involved in the planning and development of a Chester shoreline access site/trailhead along planned 1st Avenue trail extension to the LART. Two areas are currently being explored for the potential Chester shoreline access site/trailhead: (1) at the end of 1st Avenue to the west near the Super Channel, and (2) on 1st Avenue closer to Chester near the rock facility and airport. A site visit is scheduled to explore shoreline access site development options in the 1st Avenue area. The site that is farther east near the airport/rock facility would be closer for area residents.

The planned LART USFS/Chester Rec. and Parks District trailhead and trail along 1st Avenue would provide connectivity between the town of Chester and the southwest shoreline of Lake Almanor. A dry trail crossing of the Super Ditch (with seasonal closures) might be considered. A previous trail grant application for this route (not approved) took a longer route around the Super Channel. A portion of 1st Avenue to be used as a trail route was previously proposed for closure as a county road. However, the County would not agree upon its closure because they would lose road maintenance money. The road was recently resurfaced by the County. This area does get inundated at full pool (rare),

therefore, it would need to be designed to accommodate occasional inundation or be raised.

- *Westwood Beach and Stumpy Beach*— Cal Trans has given verbal approval (according to Mark Sanford) for recreation development to occur at both of these sites. Permanent restrooms, however, could not be located at Stumpy Beach. Ingress/egress at Westwood Beach would need to be located at the northern end of the site as there are better site lines at this location.

Existing and Future Needs, Capacity Thresholds, and Monitoring:

Sergio Capozzi and Chuck Everett provided more detail on recreation needs, capacity thresholds, and monitoring based on past requests for more information regarding these issues.

No significant concerns were voiced, though the need to state in Exhibit E that all recreation facilities (PG&E, Forest Service, other) will be considered in terms of capacity thresholds was identified.

Additional comments/issues identified:

The following comments were also discussed:

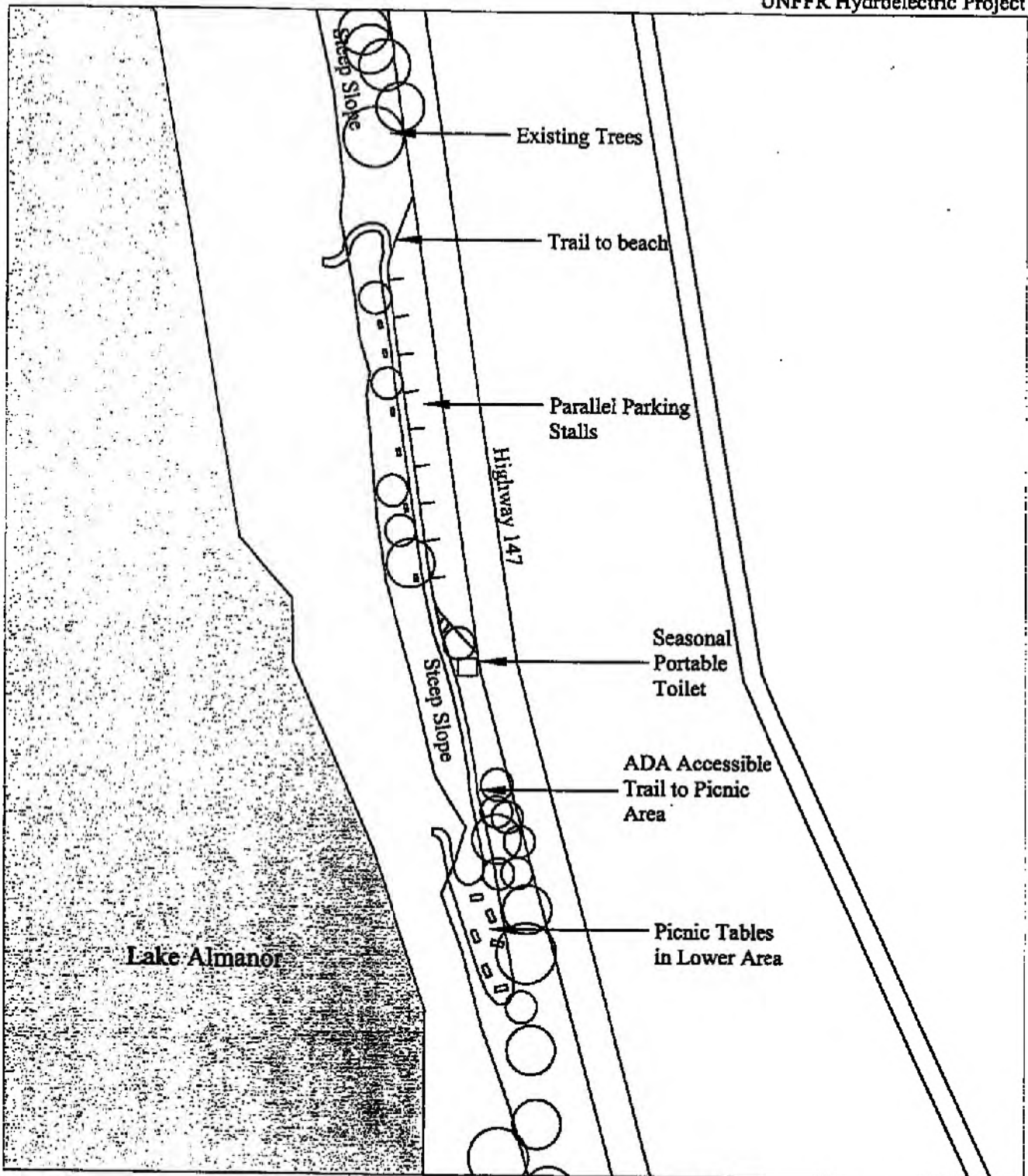
- *Survey Methodology Questions*—concern regarding the recreation survey methodology included: (1) potential disparities between the described survey sampling methodology and the actual survey sampling plan, (2) the survey schedule—potential lack of weekday survey dates, (3) unknown response rates for the various surveys used in the recreation studies, and (4) concerns about adequately capturing local sentiments/opinions.

EDAW will prepare a response to these issues and will provide it to the USFS and NPS (done 7/22/02). David Rolloff and/or John Baas will potentially attend a future meeting to discuss the survey methodology as needed.

- *Abnormal Year to Conduct a Survey?*—concern was raised regarding recreation proposals in the DLA being based on surveys/counts conducted during a low water year.

Recreation site utilization trends were explored as part of the recreation studies. Additionally, all proposed recreation development is based on a utilization threshold (part of the monitoring program) being reached/exceeded for multiple years in a row. Based on the results of the planned RRMP monitoring program, some proposed recreation developments may be implemented sooner rather than later based on actual campground or day use site utilization and established thresholds. EDAW will prepare further responses to these issues and will provide

it to the USFS and NPS (done 7/22/02). David Rolloff and/or John Baas will potentially attend a future meeting to discuss this issue as needed.



July 2002

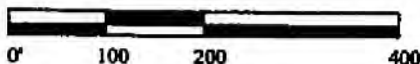
SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unfr_rec-1.dwg

Site Modifications:

- Develop parking stalls parallel to the highway at existing pullout area along highway
- Provide signage, ADA accessible seasonal, portable toilet, and picnic tables
- Provide benches at the parking level with views of the lake and mountains
- Provide erosion control at the shoreline
- Provide trails at north and south portions of site, south trail to be ADA-accessible to the lower picnic area

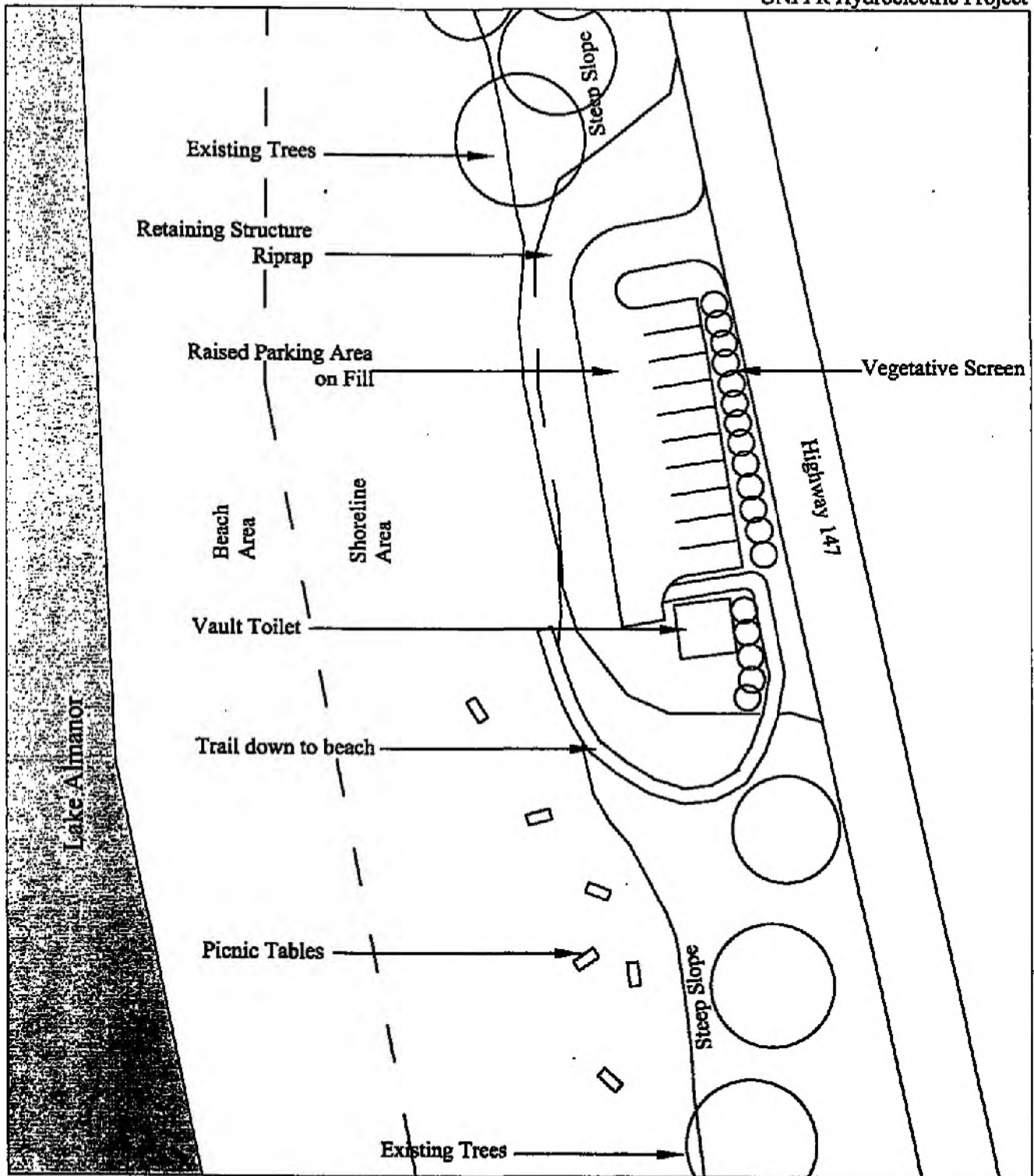


North



Stumpy Beach Scenic Overlook

Site Modifications Map 1



July 2002

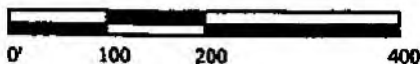
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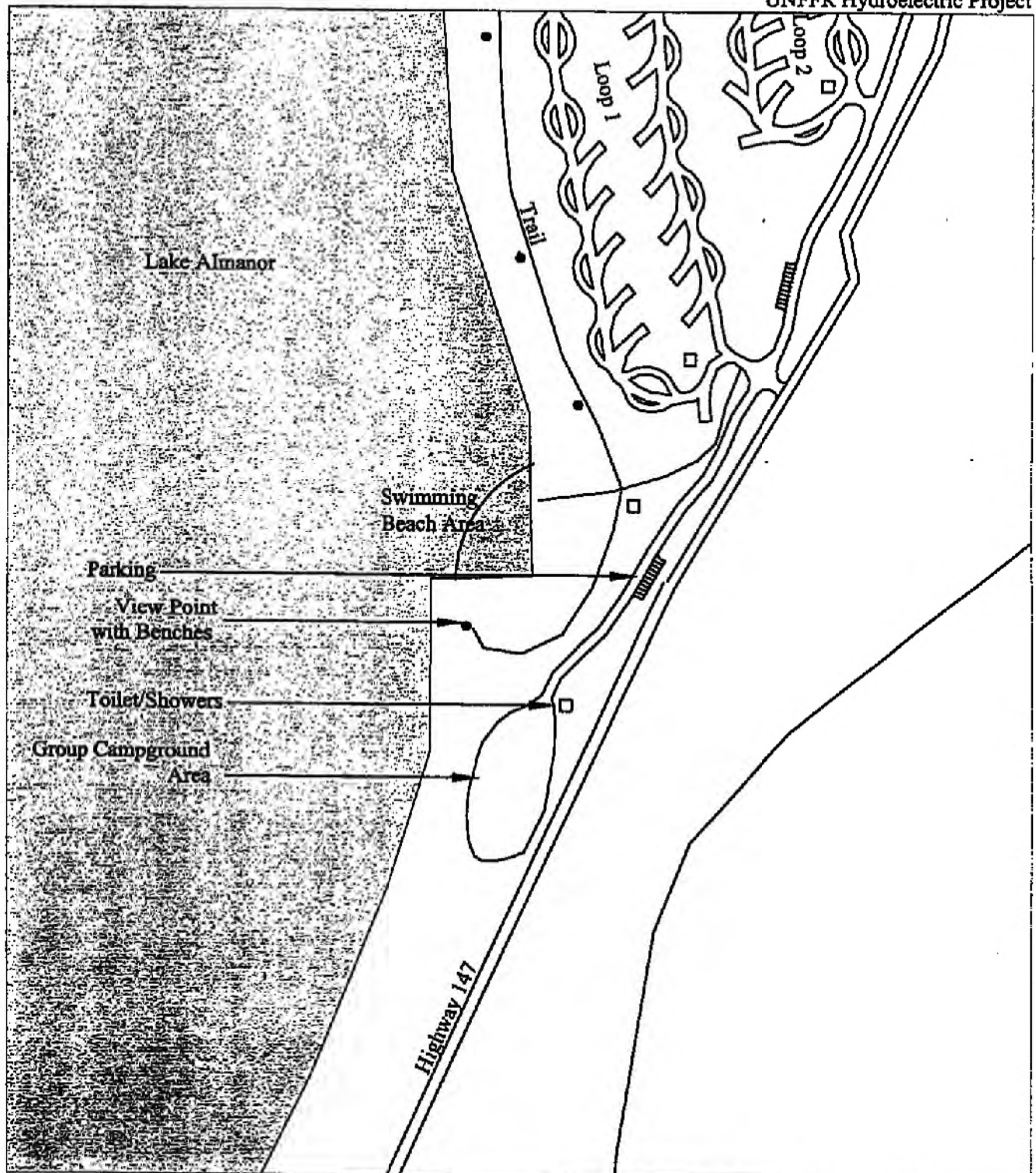
Site Modifications:

- Provide new raised parking area on fill for 6-8 cars, 1 ingress/egress at north end for best visibility
- Provide ADA accessible portable (or single vault) toilet and 6 picnic tables
- Provide erosion control at shoreline
- Provide trail down to shoreline



North





July 2002

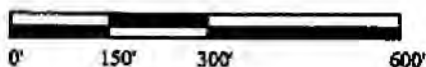
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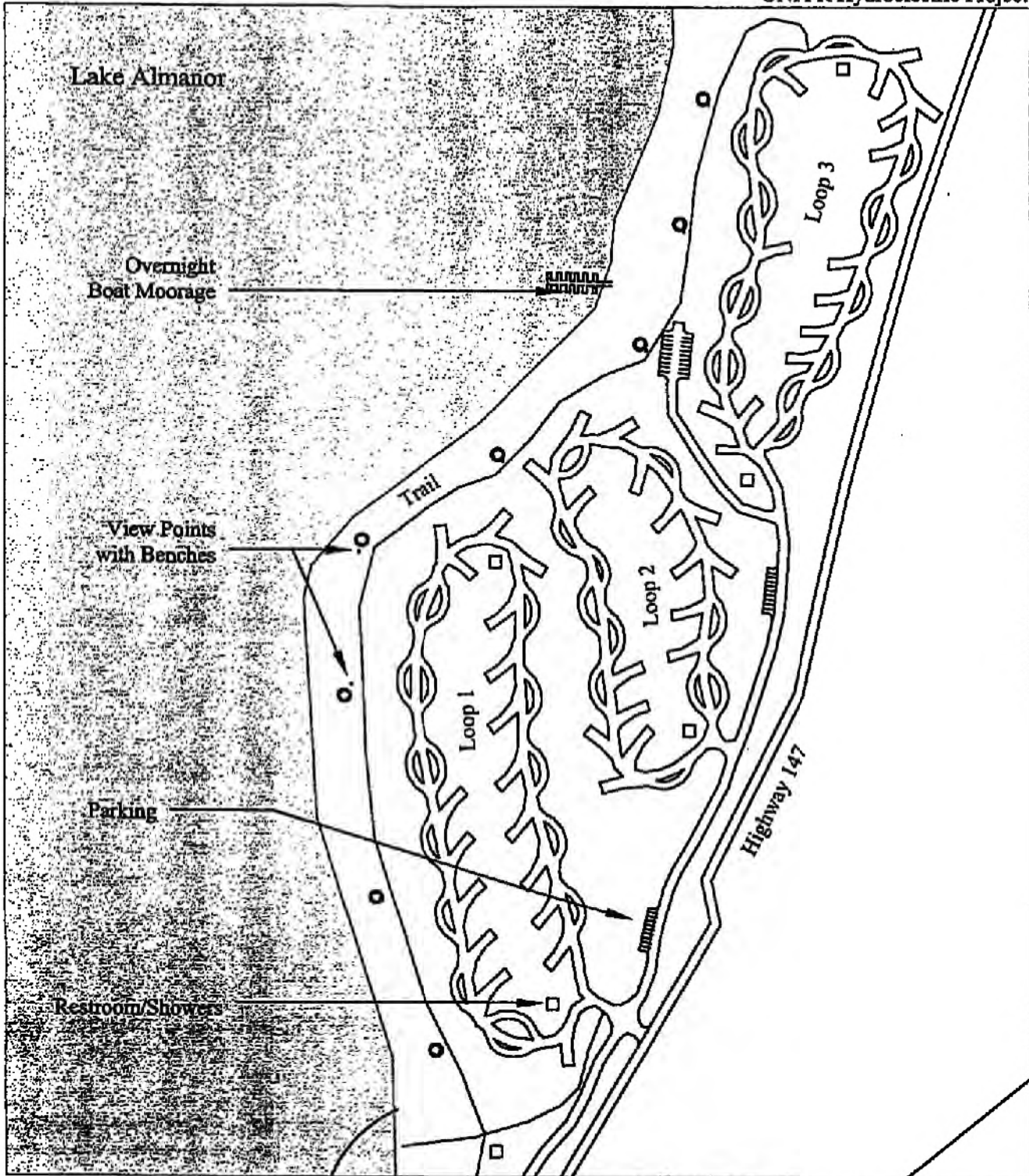
Site Modifications:

- Provide 50 to 90 campsites in area along eastern shore of Lake Almanor
- Create swimming beach
- Provide view areas with benches, connected by interior trails along the lake
- Provide Group campsite separate from main campground
- Provide boat moorage area



North





July 2002

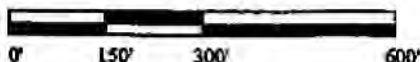
SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\De20006\Cad\unfr_rec-1.dwg

Site Modifications:

- Provide 50 to 90 RV and tent campsites and restroom/showers
- Provide a day use swim beach
- Provide view areas with benches, connected by interior trails along the shoreline
- Provide Group campsite separate from main campground
- Provide overnight boat moorage for campers

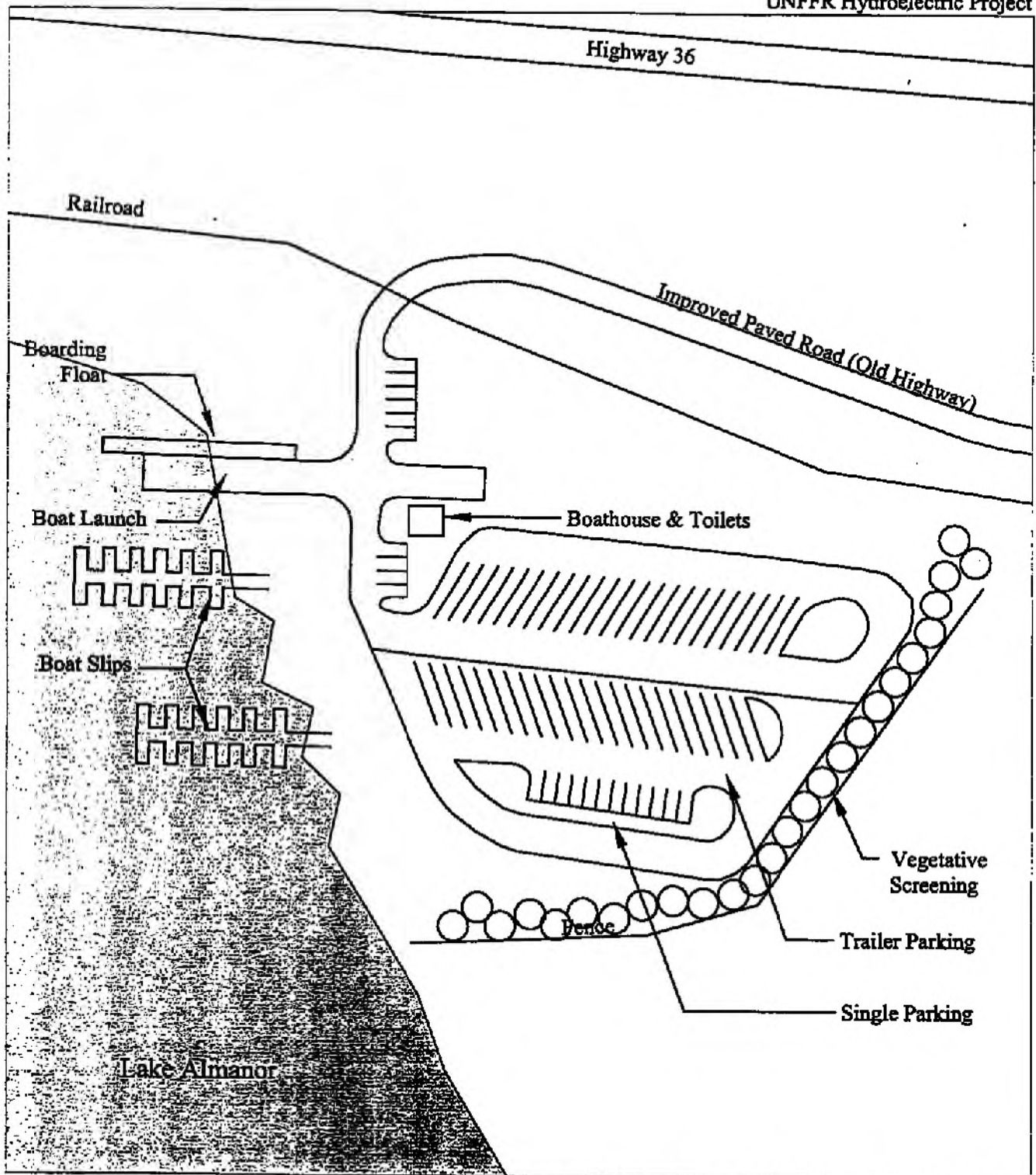


North



East Shore Campground

Site Modifications Plan 4



July 2002

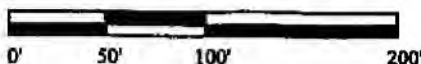
SOURCE: PG&E GIS, EDAAW, Inc., 2000. p:\0e20006\Cad\unfr_rec-1.dwg

Site Modifications:

- Provide new boat launch and boarding float
- Provide toilets and boathouse facility
- Provide parking for 40 boat trailers plus 12 single spaces, in two phases
- Relocate lost campsites(20) at existing campground to the east
- Boat slips relocated by site operator
- Provide new separate access road (old highway)

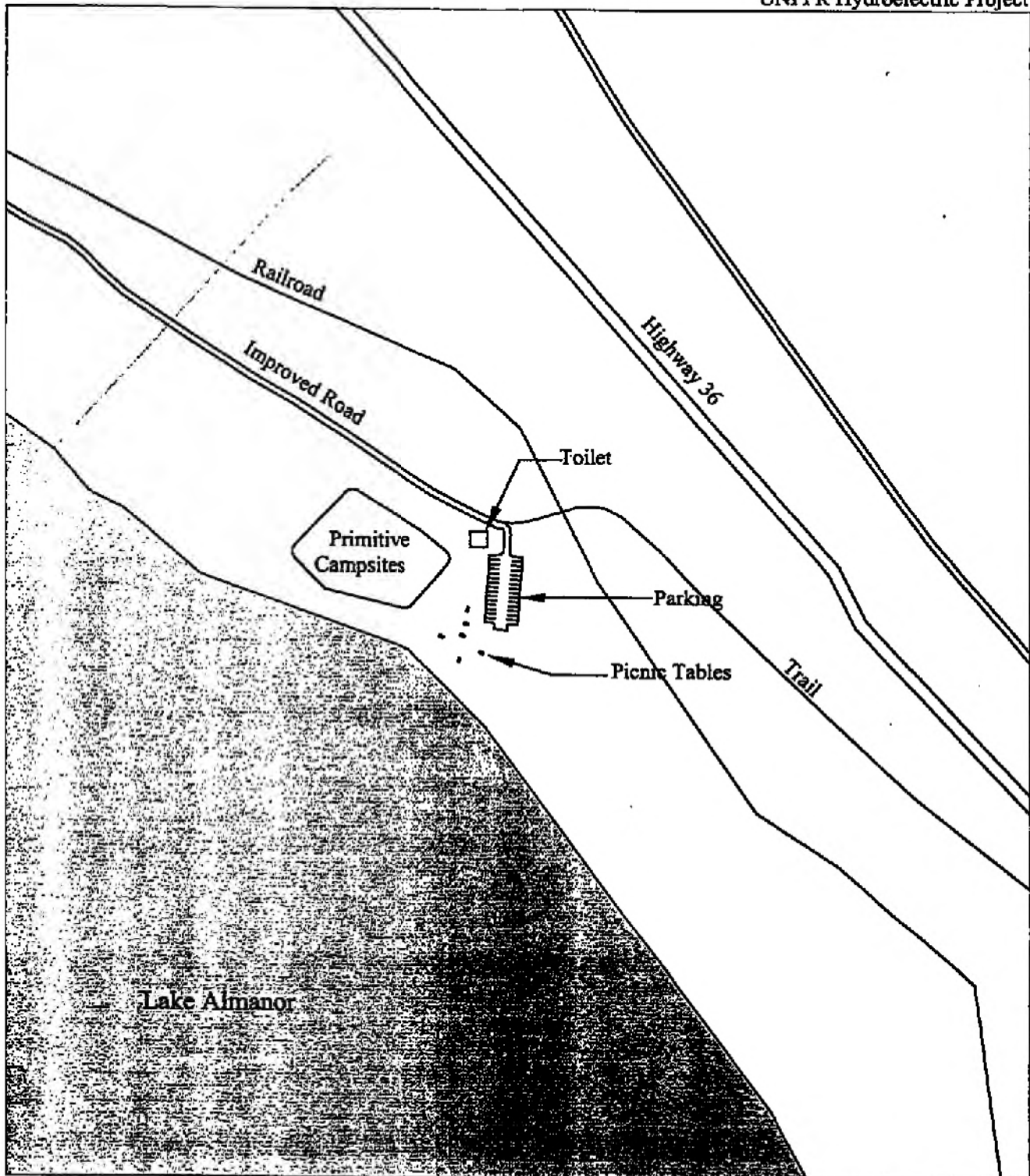


North



North Shore Campground Public Boat Launch

Site Modifications Plan 5



July 2002

SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0a20006\Cat\unfr_rnc-1.dwg

Site Modifications:

- Provide gravel road, parking, and gate
- Provide primitive picnic sites (5) and primitive camp sites (5)
- Provide single vault toilet

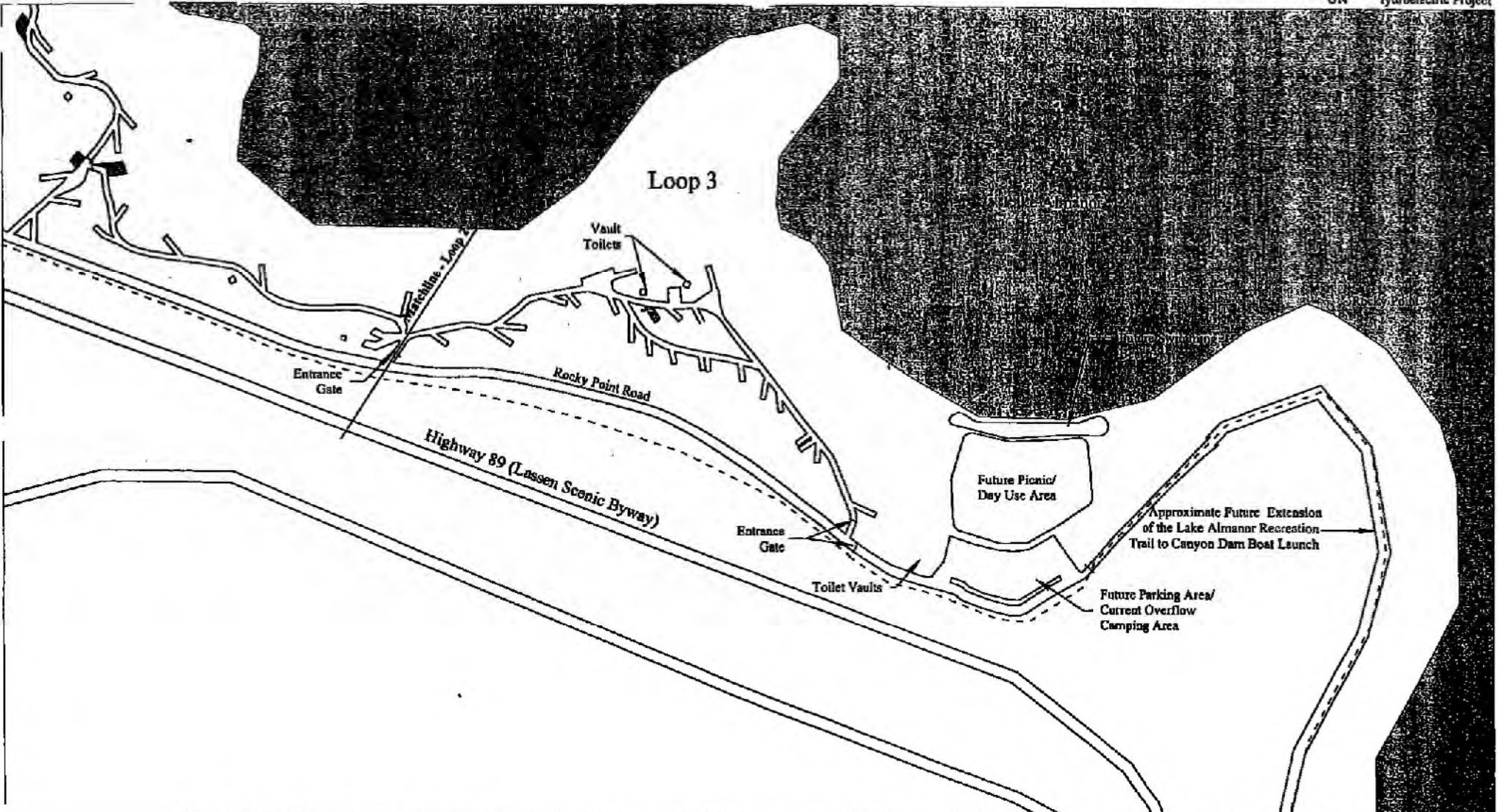


North



Catfish Beach Day Use and Camping Area

Site Modifications Map 6



July 2002



Site Modifications:

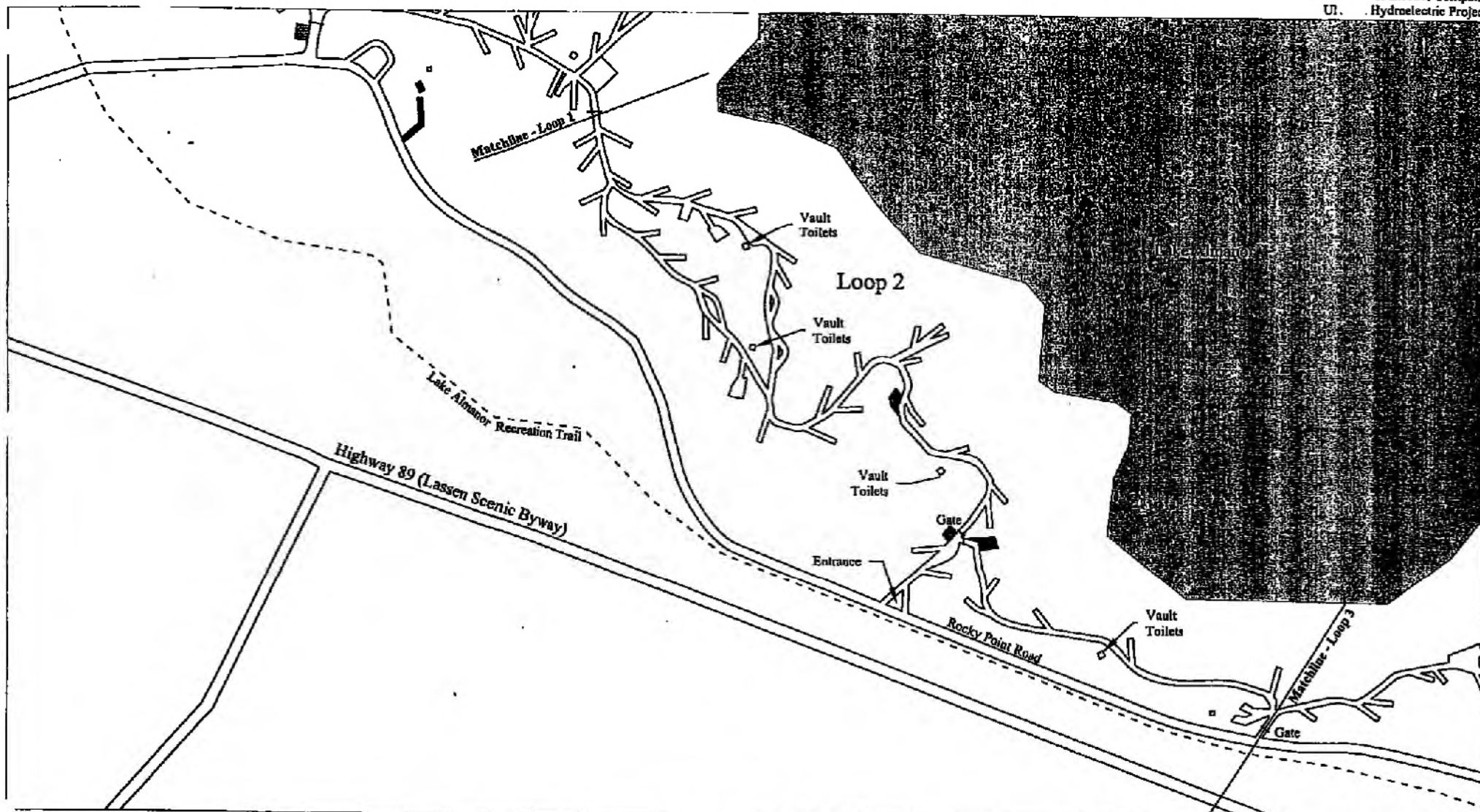
- Modify 3 campsites to be ADA accessible
- Retrofit 2 existing designated accessible campsites to meet ADAAG
- Provide 1 additional ADA accessible site
- Provide a new entrance kiosk that serves all three campground loops

- Replace old Klamath stoves (low-style camp stove with a stovepipe)
- Retrofit existing water faucets near accessible elements (toilets, campsites, etc) to meet ADAAG height standards, provide ADA accessible routes

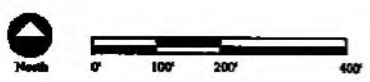
- Convert group site/overflow area into expanded day use area/swim beach
- Revegetate areas disturbed by pedestrian or vehicular traffic
- Provide 1 new indoor shower routes

SOURCE: PG&E GIS, EBAW, Inc., 2000. p:\0620006\Cad\unit_rec-1.dwg

Lake Almanor Campground Loop 3
 Site Modification Map 9



July 2002



Site Modifications:

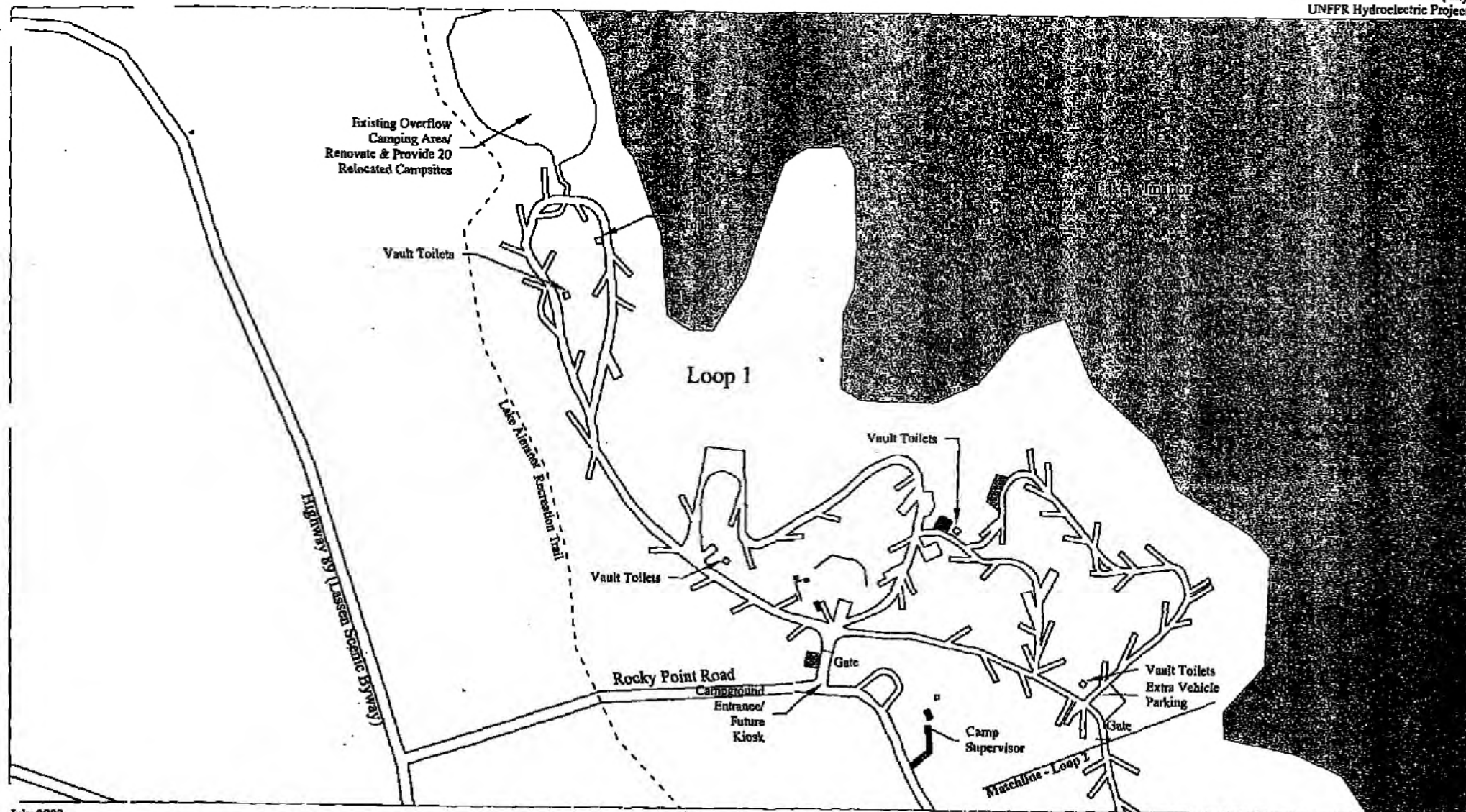
- Modify 3 campsites to be ADA accessible
- Retrofit 2 existing designated accessible campsites to meet ADAAG
- Provide 1 additional ADA accessible campsites

- Modify surface & slope of the access routes to the toilets near entry and near site #100 to meet ADAAG
- Relocate interior pay station directly to a point directly
- Replace old Klamath stoves (low-style camp stove with a stovepipe) across the road on a level, firm, and stable surface

- Revegetate areas disturbed by pedestrian or vehicular traffic
- Provide 1 new indoor shower
- Provide a new entrance kiosk that serves all three campground loops

SOURCE: PG&E GIS, ED&AW, Inc., 2000. p:\062006\Cad\unit_rec-1.dwg

Lake Almanor Campground Loop 2
 Site Modification Map 8



July 2002

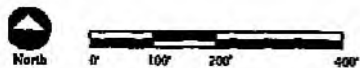
Site Modifications:

- Revegetate areas disturbed by pedestrian or vehicular traffic
- Provide 1 new indoor shower
- Provide a new entrance kiosk that serves all three campground loops

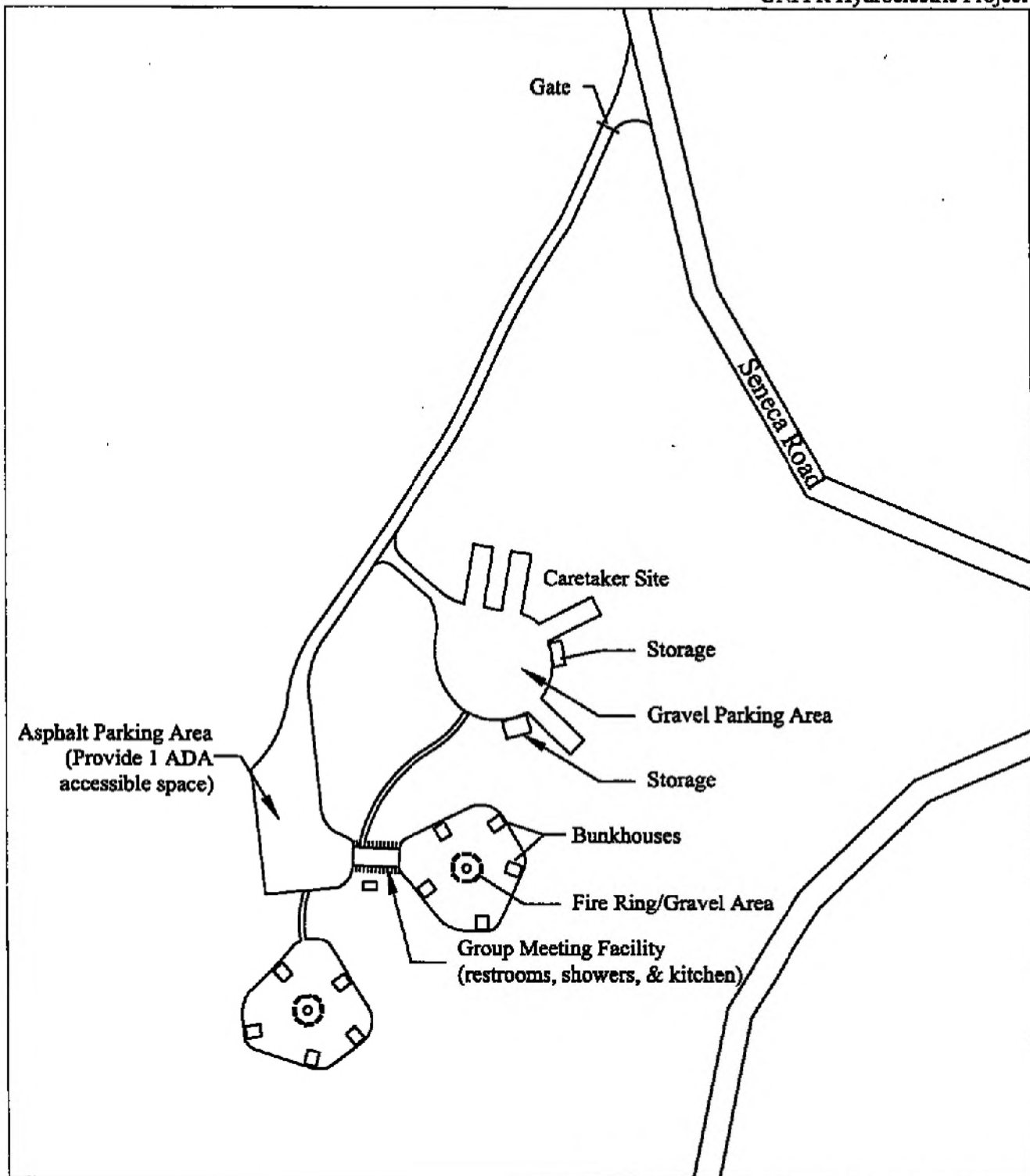
- Replace old Klamath stoves (low-style camp stove with a slopepipe) across the road on a level, firm, and stable surface
- Retrofit existing water faucets near accessible elements such as toilets and campsites to meet ADAAG height standards, provide ADA accessible routes
- Modify 4 campsites to be ADA accessible

- Provide 20 new sites in the north overflow area to replace those lost for day use in lower overflow area
- Retrofit 4 existing designated accessible campsites to meet ADAAG

SOURCE: PG&E GIS, ED&W, Inc. 2000. p:\022000\Ca\h\m\l\1_rsc-1.dwg



Lake Almanor Campground Loop 1
 Site Modifications Map 7



February 2001

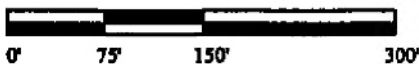
SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unfr_rec-1.dwg

Site Modifications:

- Provide 1 ADAAG accessible parking space
- Provide 1 new ADAAG accessible cabin with accessible restroom
- Reposition telephone in group meeting facility to meet ADAAG
- Provide additional group reservation area adjacent to existing group facilities
- Repair and resurface access road
- Provide 2 showers
- Retrofit water faucets near accessible elements to meet ADAAG

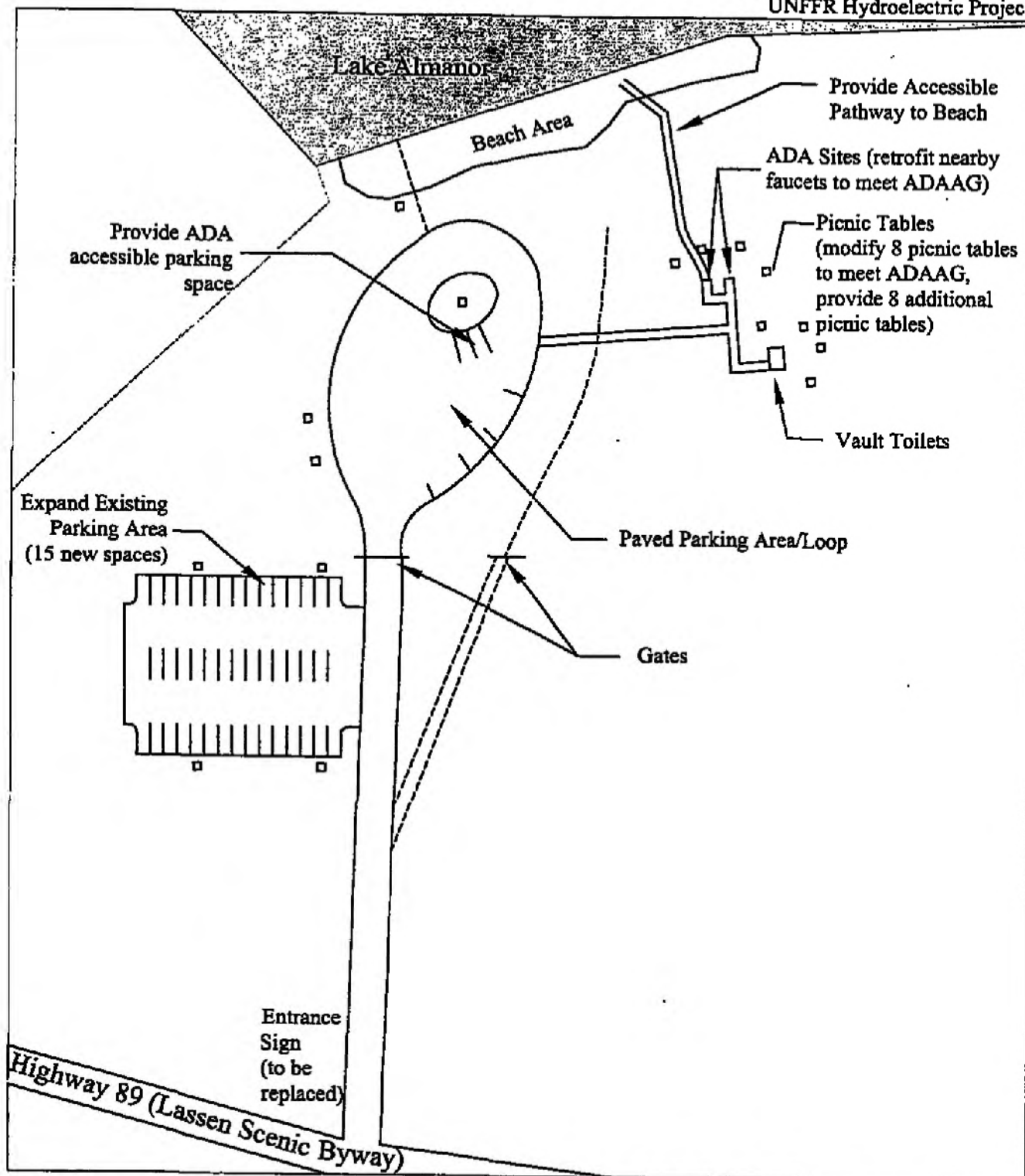


North



Camp Conery Group Camp

Site Inventory Plan 10



July 2002

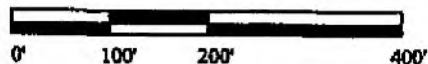
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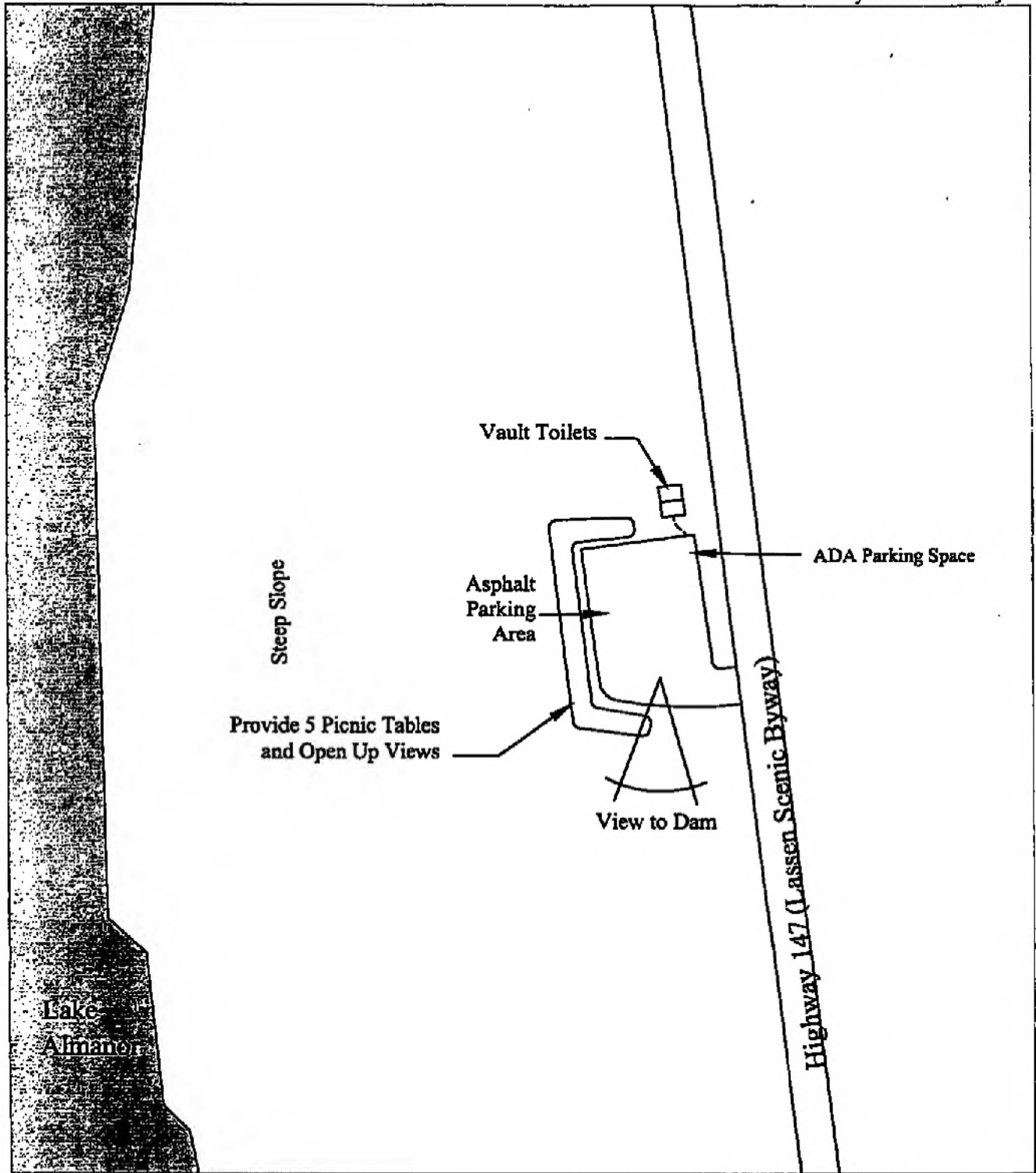
Site Modifications:

- Provide 1 ADA-accessible parking space adjacent to center island in parking area
- Modify 8 picnic tables to meet ADAAG
- Provide 8 new picnic tables
- Provide 15 additional parking spaces (future)
- Replace entrance sign
- Retrofit faucets near accessible elements to meet ADAAG
- Reconnect the water system with water supply across highway
- Make beach accessible by improving route
- Provide a sandy beach
- Provide 1 outdoor shower



North





July 2002

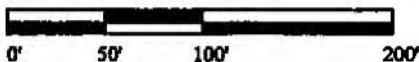
SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unfr_rec-1.dwg

Site Modifications:

- Provide ADA-accessible route to toilets
- Provide 1 ADA-accessible parking space near toilet
- Provide 5 additional picnic tables linked by a trail and restore views to Lake Almanor and the Dam

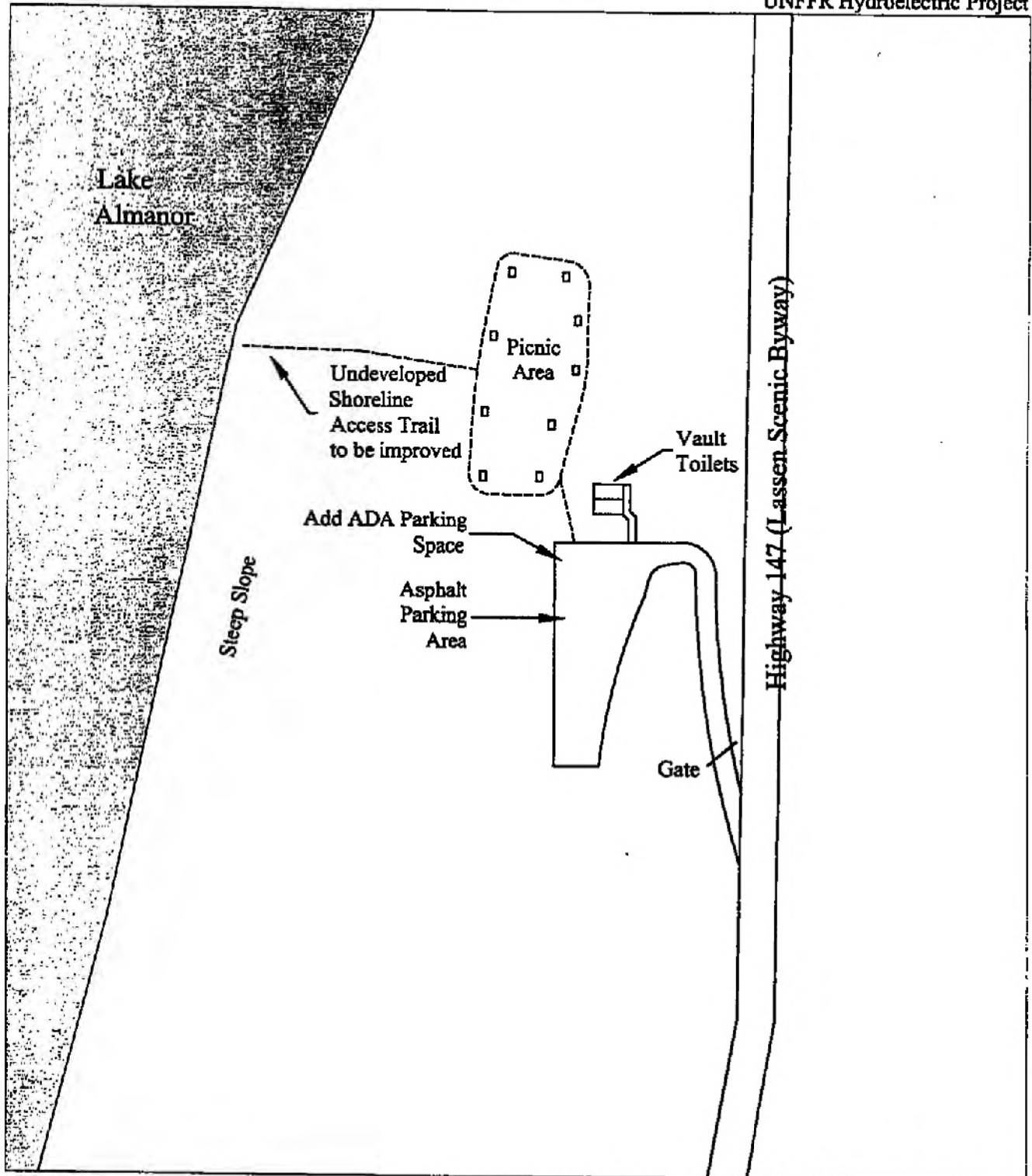


North



Almanor Scenic Overlook

Site Inventory Map 12



July 2002

SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unfr_rec-1.dwg

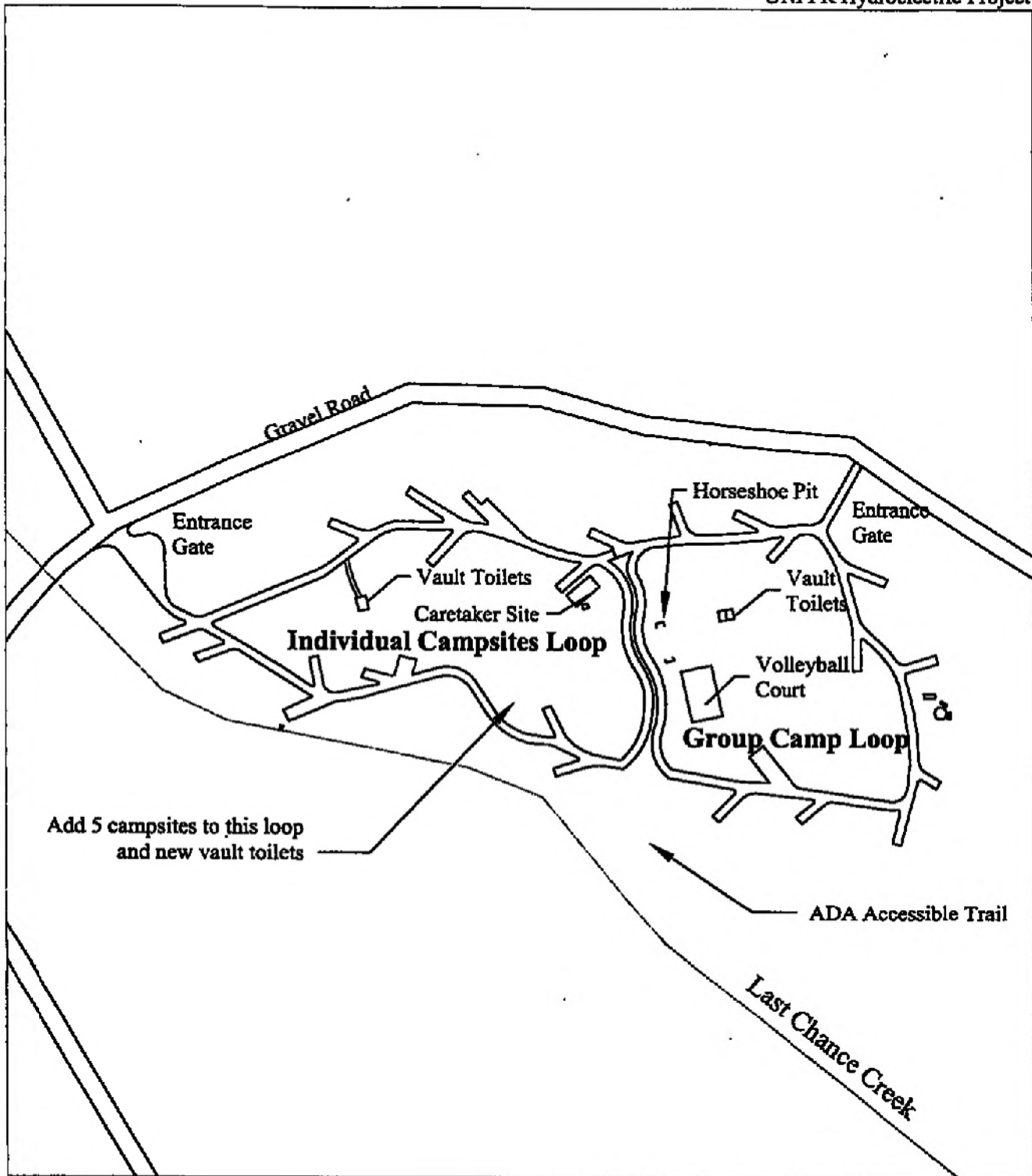
Site Modifications:

- Provide 5 ADA-accessible picnic tables
- Provide 1 ADA accessible parking space near toilets
- Provide ADA accessible routes to trash receptacles
- Provide improved trail to shoreline with erosion control on hillside



North





July 2002

SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unffr_rec-1.dwg

Site Modifications:

- Modify 2 campsites to be Americans with Disabilities Act (ADA)-accessible.
- Modify existing toilets to be ADA-accessible
- Provide an ADA-accessible route to the nearby creek
- Provide 5 additional campsites and new double vault toilet by 2010

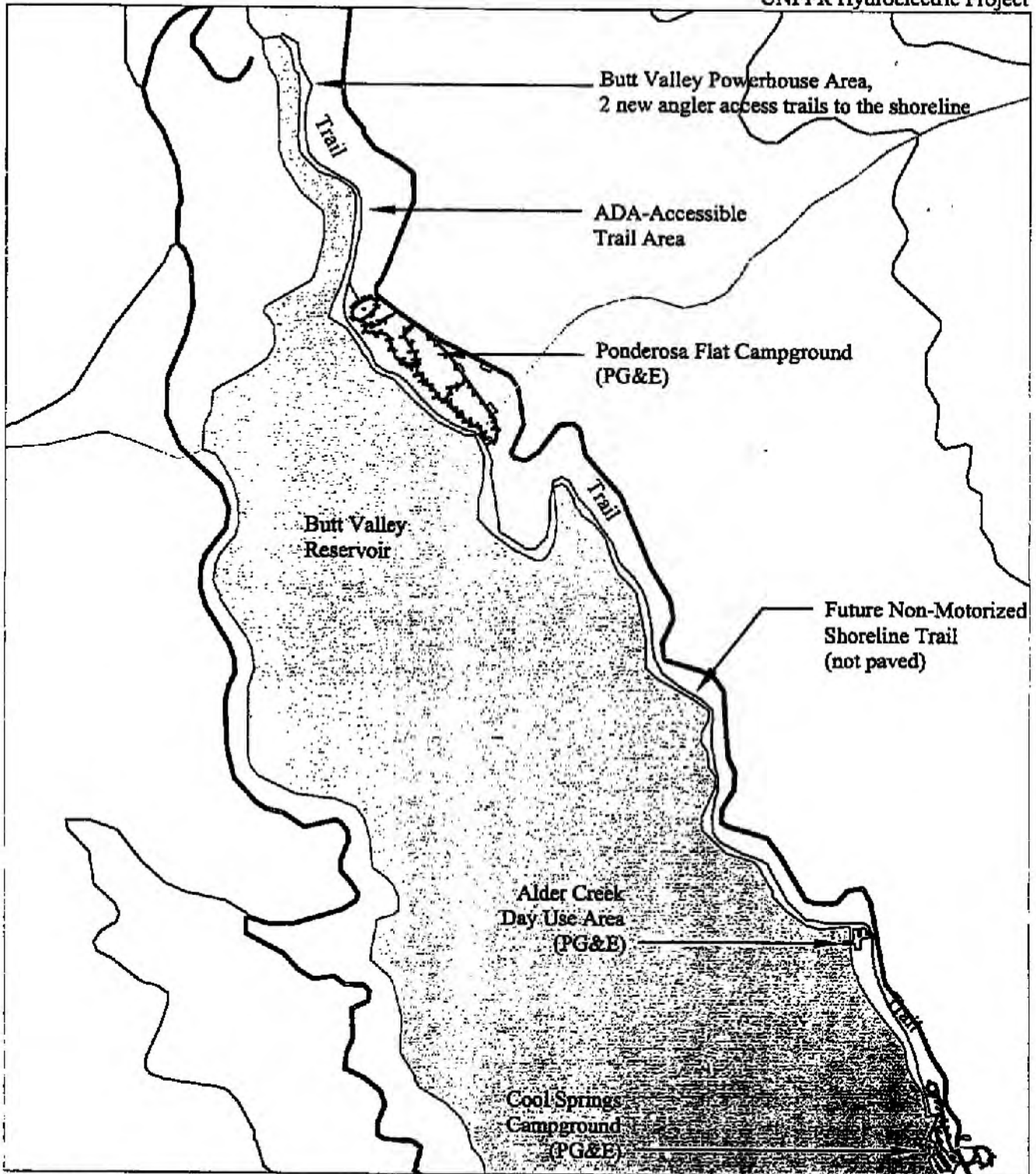


North



**Last Chance Creek Campground/
Group Camp**

Site Modifications Plan 14



July 2002

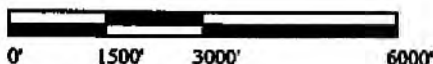
SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\De20006\Cad\unfir_rec-1.dwg

Site Modifications:

- Provide a non-motorized shoreline recreation trail (not paved) between Butt Valley Powerhouse fishing area and Cool Springs Campground, with a portion of the trail being ADA-accessible between Ponderosa Flat Campground and the inlet near the powerhouse, terminating at an ADA-accessible fishing platform
- Provide a non-paved trail from existing gravel parking area next to powerhouse down to the levee below
- Provide an ADA accessible trail with parking at the trailhead from an existing pullout to the eastern shoreline of the inlet near the levee

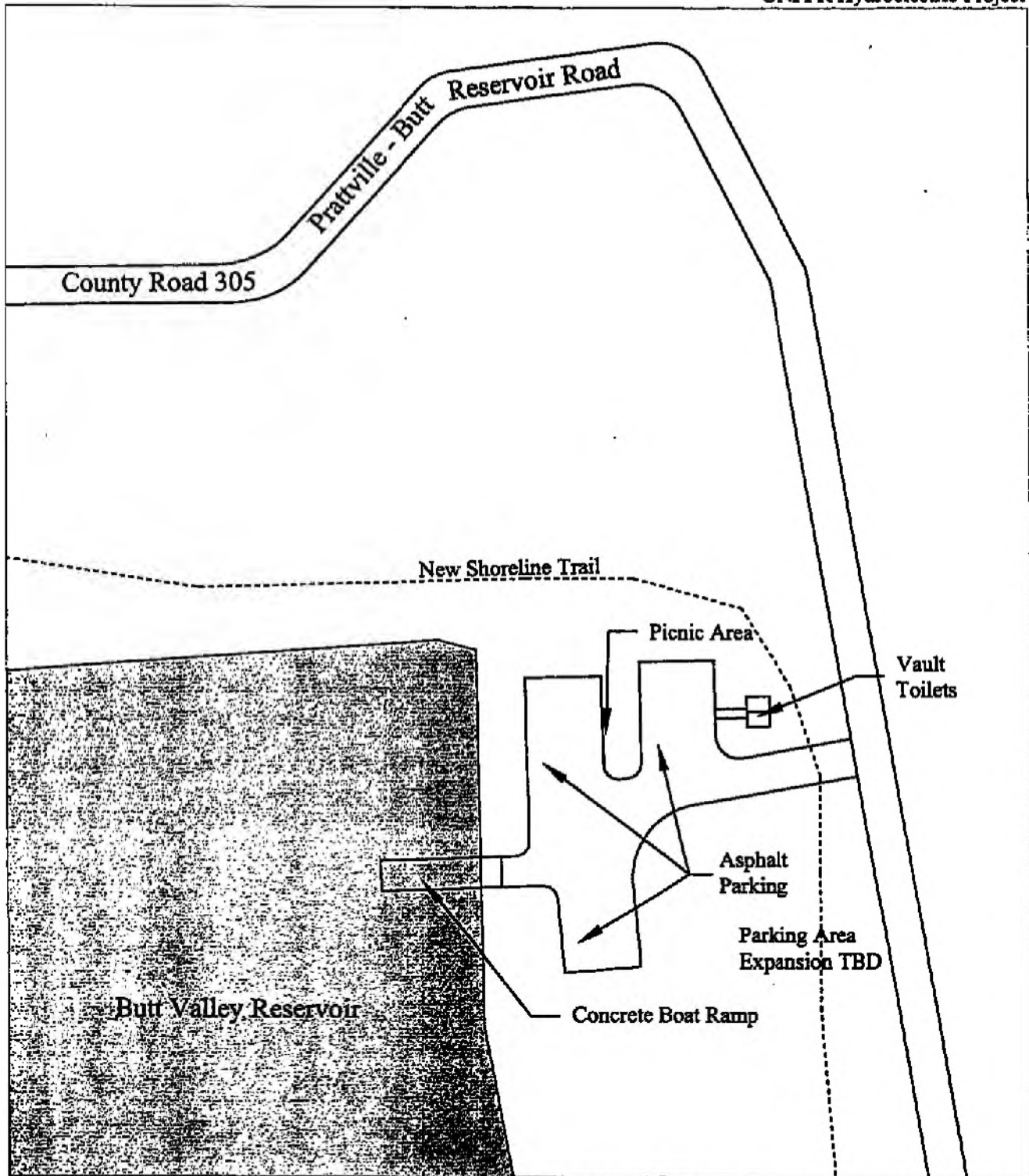


North



**Butt Valley Reservoir Shoreline Trails
 and Angler Access**

Site Modifications Plan 15



July 2002

SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unifr_rec-2.dwg

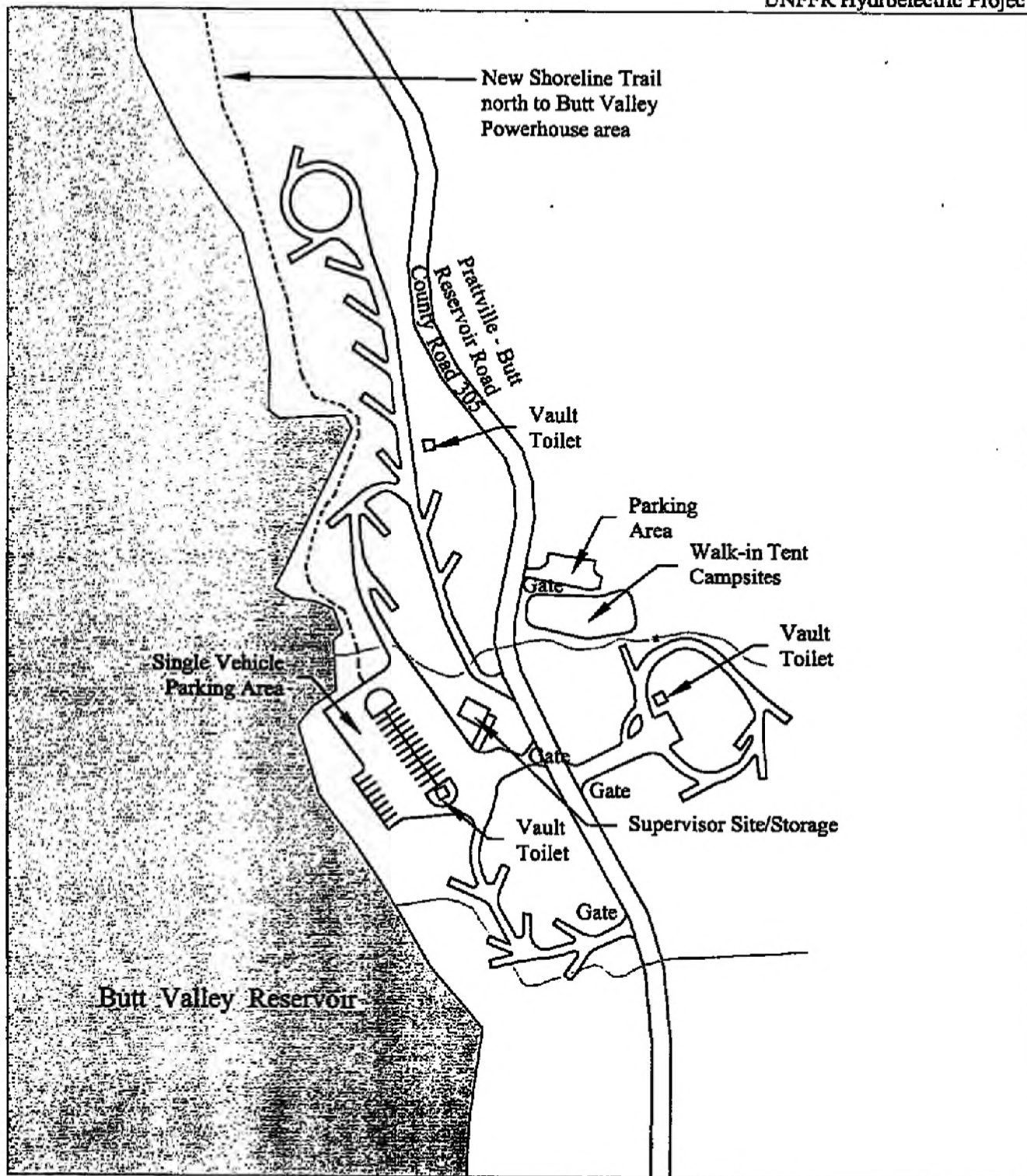
Site Modifications:

- Modify boat launch to meet ADAAG
- Provide 1 ADA accessible parking space near the toilet
- Expand parking area to accommodate approximately 14 additional vehicles with trailers



North





June 2002

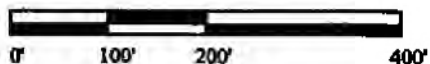
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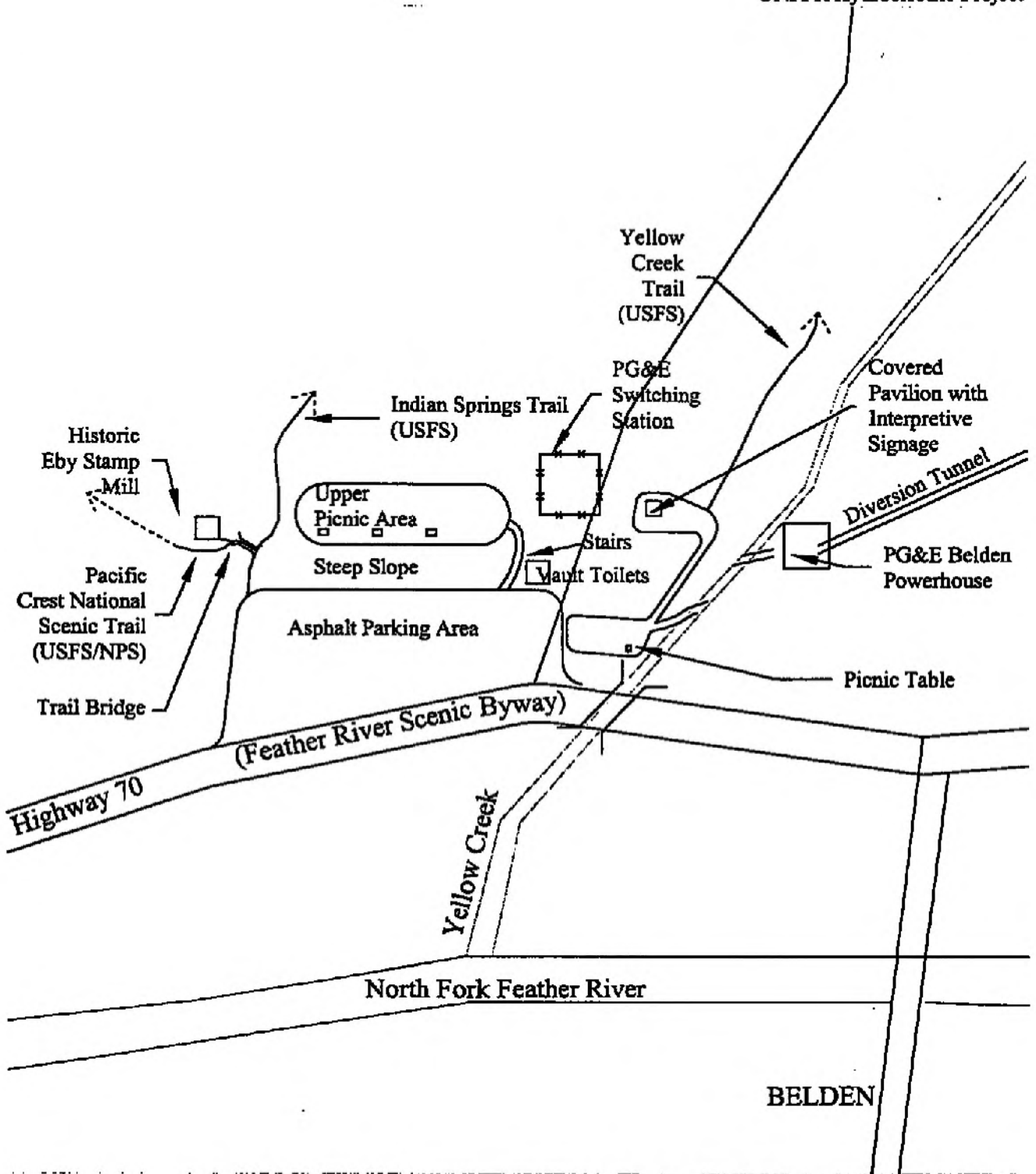
Site Modifications:

- Provide 1 new campsite to be ADA accessible
- Retrofit water faucets near accessible elements to be ADA accessible
- Provide 1 outdoor shower area to accommodate 2 people
- New non-motorized trail along the shoreline



North





July 2002

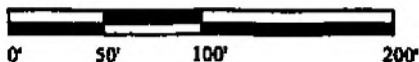
SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unfr_rec-2.dwg

Site Modifications:

- Provide 2 ADA accessible picnic tables with access
- Provide accessible routes to the gazebo and overlook area next to the creek and to the Eby Stamp Mill historical features
- Provide erosion control on the slope between the parking lot and the picnic area
- Disperse the existing picnic area throughout the lower level between the Eby Stamp Mill and the creek

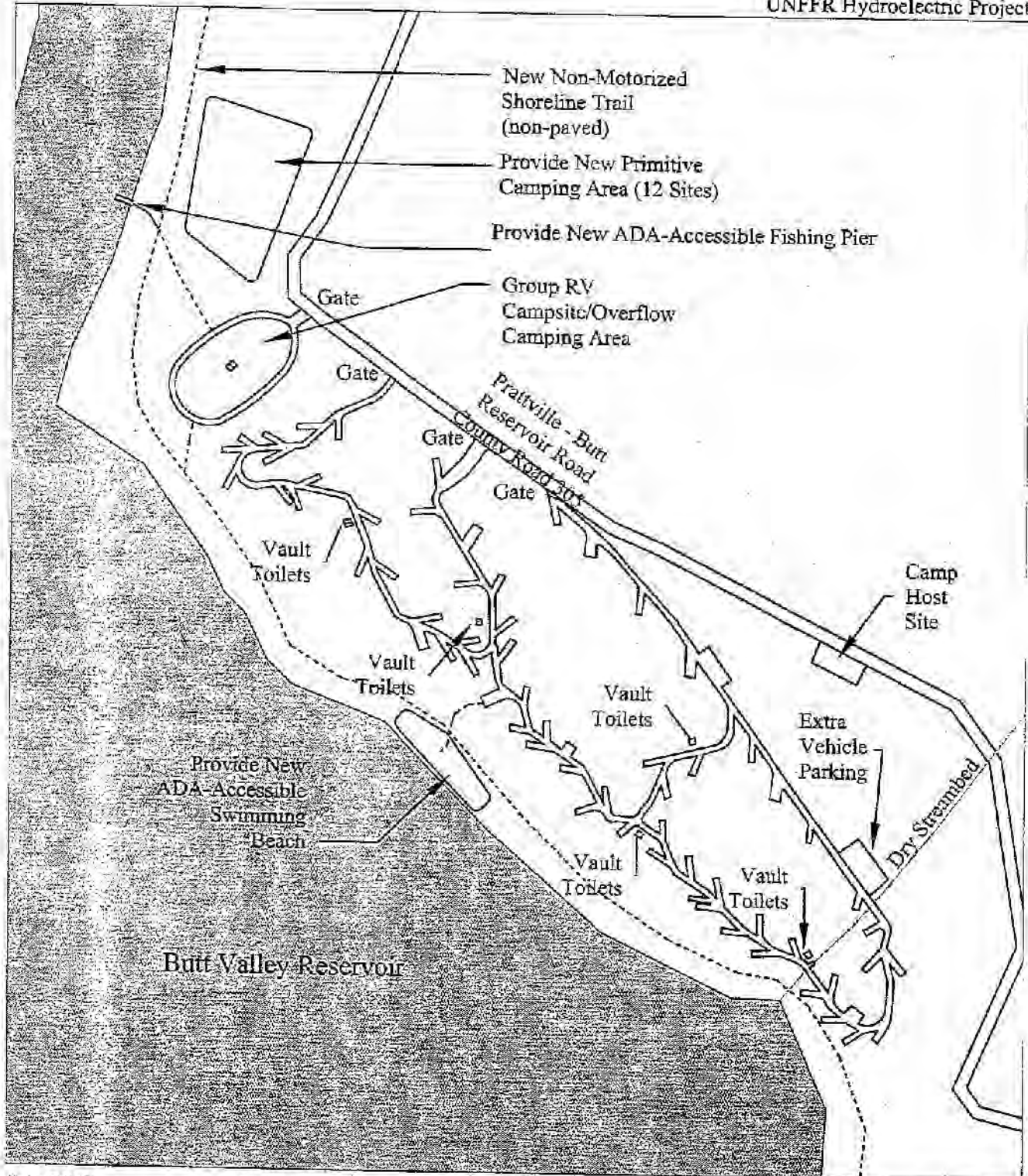


North



**Belden Rest Stop
 (Highway 70)**

Site Inventory Map 18



July 2002

SOURCE: PG&E GIS, EDAAW, Inc., 2000. p:\0e20006\Cad\unfr_rec-2.dwg

Site Modifications:

- Modify 4 sites to be ADA accessible, retrofit existing accessible sites to meet ADAAG
- Provide ADA accessible route for restroom near site #145
- Replace vault toilets in overflow area with new accessible toilets
- Provide 1 ADA accessible parking space near toilets
- Provide 1 ADA accessible swimming area at the campground shoreline
- Provide 1 ADA accessible fishing access trail and pier or platform near the overflow area
- Provide approximately 12 new primitive tent sites near the current overflow area
- Provide 1 outdoor shower area



North



Ponderosa Flat Campground

Site Inventory Map 19

UNFFR RELICENSING
FERC No. 2105
Recreation, Land Use, and Aesthetics Work Group Meeting
July 18, 2002
9 A.M. to 12:30 P.M.
County Court House, Chester, CA

Attendees:

Marian Liddell	(530) 258-3115	chesterprogressive@hotmail.com
Bill Cheek	(530) 596-4601	voyagers@psln.com
Janie Ackley	(530) 258-2141	jacklev@fs.fed.us
Jane Goodwin	(530) 258-2141	jmgoodwin@fs.fed.us
John Mintz	(415) 973-5779	JSM9@pge.com
Chuck Everett	(206) 622-1176	everettca@edaw.com
Sergio Capozzi	(206) 622-1176	capozzis@edaw.com
Kirby Gilbert	(425) 482-7701	Kgilbert@fwenc.com

John Mintz called the meeting to order and provided a general overview of the planned topics for the meetings. Chuck Everett began the meeting by providing a brief overview of issues/topics discussed at the meeting the previous day (July 17th, 2002). The intended focus of the remainder of the meeting was on previously identified 2105 committee concerns. John provided copies of the 2105 Committee's goals and objectives and a handout on lake level considerations. The following summarizes the discussion and points under each of the 2105 Committee goals and objectives:

Manage Water Level for Optimum Recreation:

PG&E intends to continue meeting at least annually with the Water Level Committee. This is referenced in the draft license application (DLA).

The draft license application describes reservoir operations. John believed that proposed reservoir operating levels in the DLA are consistent with current operating guidelines.

Bill Cheek indicated that the 2105 Committee is looking for revised operating guidelines that require the reservoir level (Lake Almanor) to be maintained at or above 4485' during the recreation season.

In regard to boat ramp satisfaction findings, Janie Ackley was concerned that late season visitors were not captured in the survey effort. Lake Almanor was much lower later in the year, making many of the boat launches unusable, which may have potentially created more dissatisfaction with reservoir level. Also, Janie Ackley noted that campground occupancy was probably affected more by high temperatures in the valley than by lower reservoir pool levels. Higher temperatures in the valley draw more visitors to Lake Almanor, where temperature are more moderate.

Janie Ackley also raised concern about the findings of Marvin Feldman's economic study that discounted the benefits of local expenditures, since the study report indicated that local expenditures (i.e. for food and gas) would occur with or without the project present. John Mintz explained that FERC takes a national perspective in regard to economic benefits and does not evaluate these benefits at the county level, although both local and national benefit perspectives of recreation expenditures are presented in the economic study. After further discussion, it was agreed to have Marvin revisit this issue, because it appeared that some Project induced recreation related expenditures do provide local benefit and are not represented in his report.

Improve the Management of Shoreline Erosion:

With regard to shoreline erosion, PG&E currently owns the land, has deeds (permissible erosion agreements in perpetuity) on other lands, and provides rip-rap in other areas to prevent or control shoreline erosion. While other erosion control methods (i.e., logs, ultra-blocks, geo-textile fabrics) are considered, rip-rap is the current method of choice because it is easier to install, better for fish habitat, and requires little to no maintenance. Foster Wheeler is looking into alternative shoreline protection measures for private property owners to use that are alternatives to rip-rap. These will be presented to PG&E for consideration to use under the permitting program.

Pont of clarification - CEQA is a state process for analyzing potential environmental impacts of projects and disclosing those impacts to decision makers, it is not a set of standards. Based on results of the erosion study, erosion is a natural process and does not appear to be creating significant environmental impacts.

John was of the understanding that the issue of Canyon Dam spillway height and the potential for flooding of Chester is discussed in Exhibit F of the DLA and that it was determined that the potential of flooding was not a significant problem.

Develop a Comprehensive Safety Plan:

Many of the issues identified for a potential comprehensive safety plan by the 2105 Committee were addressed over the last several months and/or in the DLA.

In 2002, PG&E did a fly-over to identify hazards. PG&E then removed floating hazards, removed many stumps and snags, and developed a hazard marking approach with the Plumas County Sheriff's Department. A draft Memoranda of Understanding (MOU) between the Plumas County Sheriff's Department and PG&E is now being reviewed by both parties. Bill Cheek of the 2105 Committee indicated that hazard marking on an annual basis is a priority and should be addressed in the final license application.

A bathymetry map of underwater contour elevations is proposed in the DLA, so boaters will have improved knowledge of lake bottom conditions. Hazards at various reservoir levels will likely not be shown on the map based on the assistance of the Sheriff's Department under the MOU in identifying known hazards as the lake fluctuates and

PG&E subsequently marking of these hazards. The MOU does not include the use of electronic strobe lights.

As the DLA indicates, PG&E has historically worked with the USFS/CDF to maintain its forestlands for fires safety. PG&E will continue to work with USFS and CDF to maintain project lands in a fires safe manner.

In the Prattville area, the existing water tank at the PSEA camp has enough fire protection capacity for PG&E and PSEA facilities and property. Last year in cooperation with the local fire district, PSEA installed a fire hydrant along Lake Almanor West Drive for the use by the fire district to protect other buildings/property in the area.

Improve Shoreline Access:

PG&E recognizes the "Red River Deed" and addresses the deed in the license application and shoreline management plan. The deed restriction has been found to consistent with the FERC license, since the FERC license essentially gives the general public the same rights with regard to recreation use and public access.

Efforts are underway to find a suitable public access site(s) in the vicinity of Chester. However, a new combined shoreline swimming, picnicking, and boat launch facility in or adjacent to Chester is not feasible due to pool elevation constraints. Other potential sites (including North Shore Campground and the southwest shoreline of Lake Almanor) are being explored.

Per FERC requirements, PG&E must provide informational materials to the public regarding public access and recreation areas, as well as the rules/regulations associated with these areas. When the Forest Service updates its trail maps/signs, PG&E may consider a partnership with them to incorporate their public access and recreation information on the new trail maps/signs.

PG&E will also consider developing general access plans across PG&E lands around lake Almanor.

An inventory of all boat launch ramps on Lake Almanor was conducted and will be included in the final license application. This inventory including a recent sounding of all ramp toes (private and public) and initial results indicate that the majority of ramps are usable, even at end of summer typical lower pool elevations. PG&E feels the lengthening public boat ramps on Lake Almanor would further benefit the public by offering boating opportunities to even lower pool elevations. PG&E does not finance private boat ramp extensions.

Tree trimming and modifications to the shoreline are addressed in the Shoreline Management Plan (SMP). The shoreline permitting procedures outlined in the SMP are intended to be applied equally to all applicants, reducing the potential for some landowners to develop their shoreline more than others. The improved publicity of the

SMP guidelines as proposed in the DLA should help ensure that homeowners are receiving equal treatment. Included in this publicity should be public education that permit conditions change over time and some shoreline owners have different permit conditions than their neighbors. Furthermore, in the past some land owners built/modified their shoreline, knowingly or unknowingly, without first obtaining a permit.

Improve Recreation Facilities:

PG&E intends on developing or expanding several recreation facilities around Lake Almanor and Butt Valley Reservoir and the Belden Forebay. Potential new and/or improved sites include North Shore Campground (boat launch), Stumpy Beach (day use area), Westwood Beach (day use area), southeast zone of Lake Almanor (campground), southwest shoreline of Lake Almanor and 1st Avenue in Chester (studies are underway), Butt Valley Powerhouse area (improved fishing access including trails and parking areas), eastern shoreline of Butt Valley Reservoir (several roadside pull-outs with angler access trails to the reservoir), the western shoreline of Butt Valley Reservoir (several boat-in and walk-in campsites), and a Belden Forebay hand launch boat site and trailhead. All other existing PG&E campgrounds and day use areas will also see improvements and some will be expanded.

Current recreation development proposals would improve ADA access at all PG&E public recreation sites.

Various potential recreation site plans include the creation of designated swimming areas, including various options to accommodate residents of Chester.

PG&E does not have the authority to regulate/enforce on-water boating restrictions at shoreline fishing access sites (1,000 ft. of no-wake). This is something that the County must regulate. PG&E could potentially support new County regulations with regard to on-water boating around fishing and swimming areas.

Currently, there are no plans for fish cleaning stations. Survey results indicate a desire for a new fish cleaning station at Butt Valley Reservoir. However, fish cleaning stations require extensive leech fields and create water quality concerns when next to reservoirs or streams. As a result, none were proposed by PG&E in the DLA.

Camp Conery Group Camp is currently open to the public by reservation. Expansion of the site is being considered in the final license application. The trailer park adjacent to Camp Conery is a private facility and PG&E does not plan to be open it for public use because public access and recreational opportunities are being provided in the DLA at a sufficient number of other sites in the Project area.

PG&E also does not plan to rehabilitate Caribou Clubhouse due to extremely high costs and its inconvenient location. Additionally, the road corridor to Caribou Clubhouse is not appropriate for heavier traffic that would be associated with a conference

center/lodging operation. This rationale will be further documented in the final license application.

PG&E will provide easements across their lands, where necessary, to accommodate the extension of the Lake Almanor Recreation Trail (LART) (from Canyon Dam to Highway 89 on the West Shore of Lake Almanor and potentially elsewhere at Lake Almanor).

Implement the Recreation Plan and Shoreline Plan actions incrementally if the new license is delayed beyond 2004:

As was explained at the June 14 meeting, PG&E cannot implement proposed recreation developments until it first receives FERC approval, as FERC may make changes to the proposed recreation developments in the final license order.

FERC generally avoids long, drawn-out application decisions, but could potentially delay the issuance of the new license. Many potential delays could be mitigated if issues/comments on the draft application are received and resolved relatively quickly.

Maintain Water Quality:

PG&E will potentially assist with funding of a Lake Almanor water quality monitoring program. PG&E is also willing, outside the FERC license, to offer the County land for purchase, so the County can address sewage treatment needs of its residents along Lake Alamannor's east shore.

Additional Comments/Issues Identified:

A question was raised concerning existing MOUs/MOAs between PG&E and other parties and if it would be beneficial to include or at least refer to these agreements as part of the FERC license. In addition, the question was posed on if these agreements would be applicable if a new utility (not PG&E) potentially took over the Project. According to John and Kirby, if the agreement was part of the license application, then a new utility would have to abide by these agreements as part of the FERC license.

However, any MOUs/MOAs included in the license would require FERC approval (for the existing agreement and any potential future changes). This could potentially delay and introduce FERC influence to changes in these agreements.

Transferability from PG&E to a new owner of MOU/MOAs that are not part of the FERC are likely dependent what the transferability arrangements contained in each MOU/MOA (Kirby and John's believe).

Concern was again raised about the addition of the Hamilton Branch Development delaying the FERC Project No. 2105 license. PG&E anticipates a potential delay of several months with the addition of Hamilton Branch; however, it is important to note that there are many other factors (FERC decisions, 401 certifications, agency delays, additional study requests, etc.) that could delay the issuance of the new license.

Written responses to written DLA comments will indicate if the final draft application text has been updated and the location (i.e. page #) of such updates.

The group agreed to cancel the July 24 and 25, 2002 meetings because of low attendance at this meeting and the previous days meeting and because the agencies and the 2105 committee were busy working on their comments due by July 29th.

LAKE ALMANOR LAKE LEVEL CONSIDERATIONS

- **Current Operating Guidelines and Draw Downs**
- **Lake Almanor Surface Areas**
- **Other California Reservoirs Surface Areas**
- **Other California Reservoirs Draw Downs**
- **Historical Monthly Elevations**
- **Boat Ramp Information**
- **Boating Accident Information**
- **Boating Capacity**
- **User Perceptions of 2001 Low Water Levels**
- **Recreation Use**
- **Aesthetics**
- **Property Values**
- **Shoreline Erosion**
- **Water Quality**
- **Cultural Resources**
- **Proposed Base Flow Release**
- **Generation**

Note: 7/18 version of this handout was updated for typos and corrections on 8/6

**LAKE ALMANOR
CURRENT (1986) OPERATING GUIDELINES**

Maximum Possible Draw Down

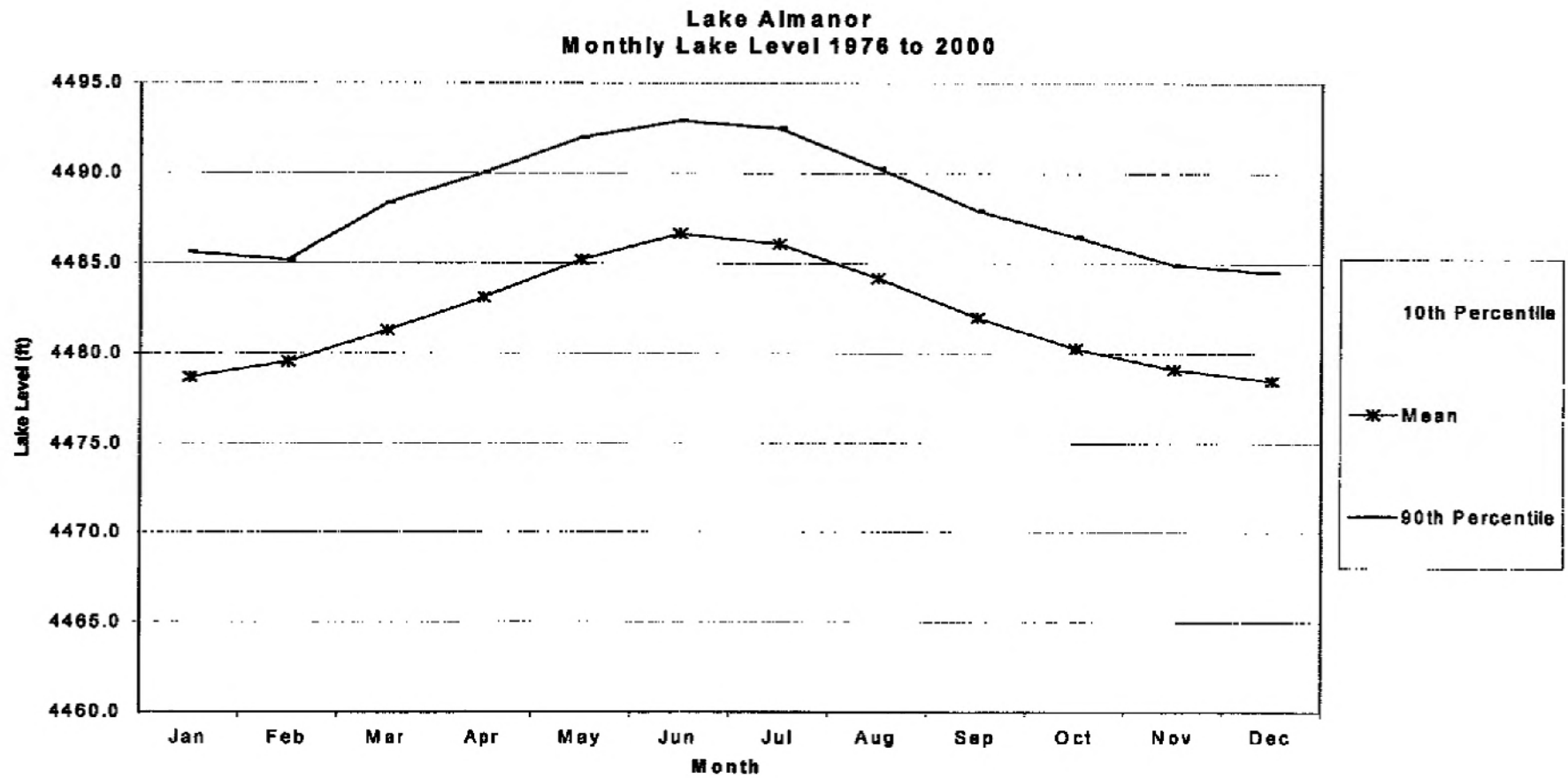
(Assumes Lake Reaches Capacity – 4494 ft Elevation)

- By September 15 = 20 feet (4474 ft elevation)
- Yearly = 27.3 Feet (4666.7 ft elevation)

Average Historical 1976 to 2000 Draw Downs

- By End of Summer = Low 4480 ft elevations
- Yearly = High 4470 ft elevations

LAKE ALMANOR 1976 TO 2000 LAKE LEVELS

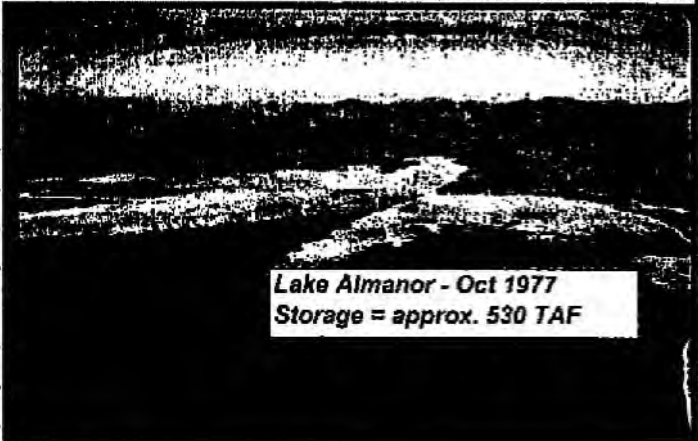
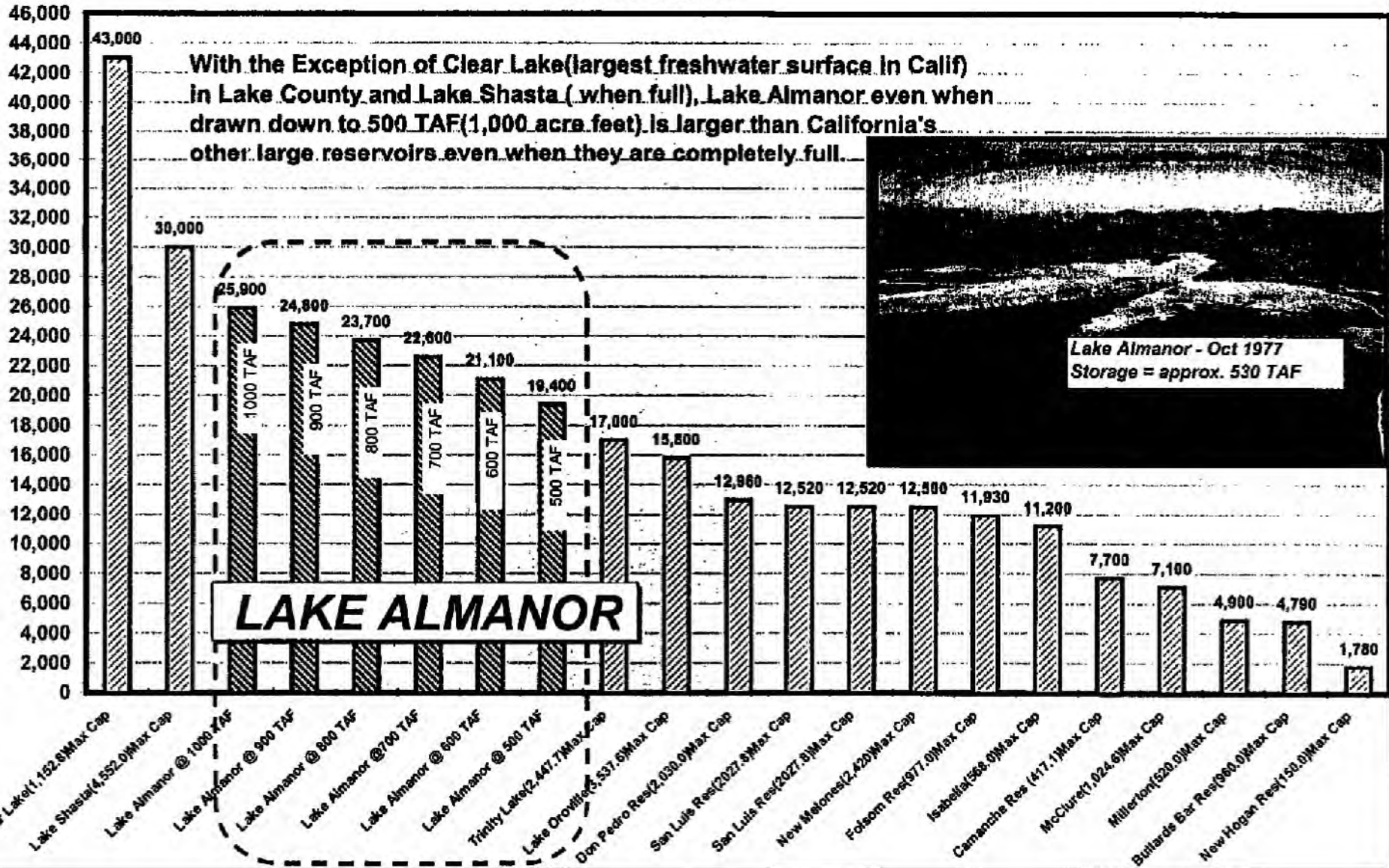


**AVERAGE ANNUAL DRAWDOWN AT
OTHER LARGE CALIFORNIA RESERVOIRS**

Reservoir	Surface Area Change	Drawdown (ft)
Oroville	30% reduction	80'
Folsom	18% reduction	35'
Don Pedro	15% reduction	40'
Shasta	15% reduction	50'
Trinity	13% reduction	45'
Almanor	9% reduction	10'

Surface Area In Acres at Maximum Storage Capacity for Some of California's Largest Reservoirs Compared With Lake Almanor at Various Stages of Drawdown

Surface Area of Lakes in acres



Lake Almanor - Oct 1977
Storage = approx. 530 TAF

LAKE ALMANOR

Seaman, Water Management, GPM 2/13/2001

LAKE ALMANOR: BOAT RAMP LOCATIONS

ELEVATION AT END OF RAMP

Shore Area	Map Ramp #	Ramp	Rounded Upward to Nearest Foot	Launchable Elevation
West	2	Plumas Pines Resort	4,459	4,462
West	1	USFS Canyon Dam North	4,475	4,478
West	1	USFS Canyon Dam South	4,475	4,478
West	5	Lake Almanor West Ramp	4,474	4,477
West	4	USFS Almanor Camp Ground	4,478	4,481
West	3	South Jetty Ramp	4,478	4,481
North	6	North Shore Camp Ground	4,479	4,482
Peninsular	8	LACC Rec Area 1 Ramp 3	4,462	4,465
Peninsular	7	LACC Rec. Area 2 Ramp	4,472	4,475
Peninsular	8	LACC Rec Area 1 Ramp 1	4,473	4,476
Peninsular	9	Big Cove Resort Ramp #2	4,474	4,477
Peninsular	8	LACC Rec Area 1 Ramp 2	4,476	4,479
Peninsular	9	Big Cove Resort Ramp #1	4,475	4,478
Peninsular	11	Knotty Pine Resort	4,476	4,479
Peninsular	16	Almanor Lake Side Resort	4,477	4,480
Peninsular	17	Lake Almanor Resort	4,476	4,479
Peninsular	10	Little Norway Resort	4,477	4,480
Peninsular	15	Novotny's	4,478	4,481
Peninsular	13	Moonspinners Resort	4,480	4,483
Peninsular	12	Country Club Resort	4,481	4,484
Peninsular	14	High Sierra Resort	4,485	4,488
East	21	Lake Haven Resort	4,471	4,474
East	20	Vagabond Resort	4,476	4,479
East	23	Miller's Resort	4,476	4,479
East	18	Hamilton Branch Homeowners	4,478	4,481
East	22	Drado Inn	4,479	4,482
East	19	Lassen View Resort	4,480	4,483
East	24	Lake Cove Resort	4,480	4,483

Note: All ramps were surveyed 11 June 2002.
 Lake surface elevation at time of survey was 4484.6'.

SUMMARY OF LAKE ALMANOR'S BOAT RAMP LAUNCHABLE ELEVATIONS

Elevation Category	Shore Area	Ownership Type	# of Ramps	Ramp Name
4465 or Less	West Peninsula	Commercial	1	Plumas Pines
		Private	1	LACC 1
			<hr/> 2	
4666 to 4470	All Areas	All Types	0	
4471 to 4475	Peninsula East	Private	1	LACC 1
		Commercial	1	Lake Haven
			<hr/> 2	
4476 to 4480	West Peninsula	Public	2	USFS Canyon Dam Ramps
		Private	1	LAW
	East Peninsula	Commercial	6	Big Cove, Knotty Pine, Almanor Lakeside, Lake Almanor Resort, Little Norway
		Private	2	LACC 1
		Commercial	2	Vagabond, Miller's
		Private	1	Hamilton Branch Homeowners
			<hr/> 14	
4480 to 4485	West Peninsula	Public	1	USFS Almanor Ramp
		Commercial	1	South Jetty Ramp
	North Peninsula	Commercial	1	North Shore Campground
		Commercial	2	Novotny's, Moonspinners
	East Peninsula	Private	1	Country Club Resort
		Commercial	3	El Dorado, Lassen View, Lake Cove
			<hr/> 8	
>4485	Peninsula	Commercial	1	High Sierra

BOAT RAMP FINDINGS

- One west shore commercial ramp provides boating launching opportunities to the lake's lowest yearly minimal operating guideline level
- One east shore commercial ramp provides boat-launching opportunities to the lowest summer end (September 15) operating guideline level (4474 ft).
- Nearly all boat ramps reach the low 4480 elevations, which has been the average low summer operating range under PG&E current operating guidelines.
- Only about 10% of Lake Almanor boaters considered there to be more than a slight problem with their ability to launch a boat during the relatively low 2001 water level year.
- In 2001, public launching capacity was exceeded during limited peak use times, particularly when low pool levels eliminated the use of some public launch facilities.

1990-2001 LAKE ALMANOR BOATING ACCIDENT DATA

Year	Average Summer Elevation	Accidents	Injuries	Deaths	Property Damage (\$)
1990	4483	3	2	0	7,900
1991	4481	5	1	2	7,000
1992	4482	0	0	0	0
1993	4489	7	8	2	9,400
1994	4483	6	3	0	10,100
1995	4492	4	2	0	0
1996	4491	2	1	0	5,000
1997	4486	4	8	0	2,000
1998	4492	2	0	0	5,000
1999	4491	1	0	0	4,000
2000	4489	3	3	0	0
2001	4479	1	0	0	Not Available
Total		38	28	4	50,400

Accident Data Source: Cal Boating 2001

- Appears to be no correlation between lake level and boating accidents

WATER SURFACE BOATING CAPACITY

- Based on boating density guidelines, the available water surface area during 2001 greatly exceed any density guideline.
- Boaters as a whole did not feel the lake was crowded during 2001 water surface levels.

**Lake Almanor User Perceptions of Effect of
the Relatively Low 2001 Water Levels on Enjoyment**

SURVEY QUESTION: How would you rate the lake water level today in terms of how it affected your ability to enjoy lake-related recreation activities?	
Level of Acceptability	(percent)
Totally Acceptable	15
Moderately Acceptable	14
Neutral	18
Moderately Unacceptable	29
Totally Unacceptable	13
Doesn't Apply to Me	6

Source: EDAW, Inc.

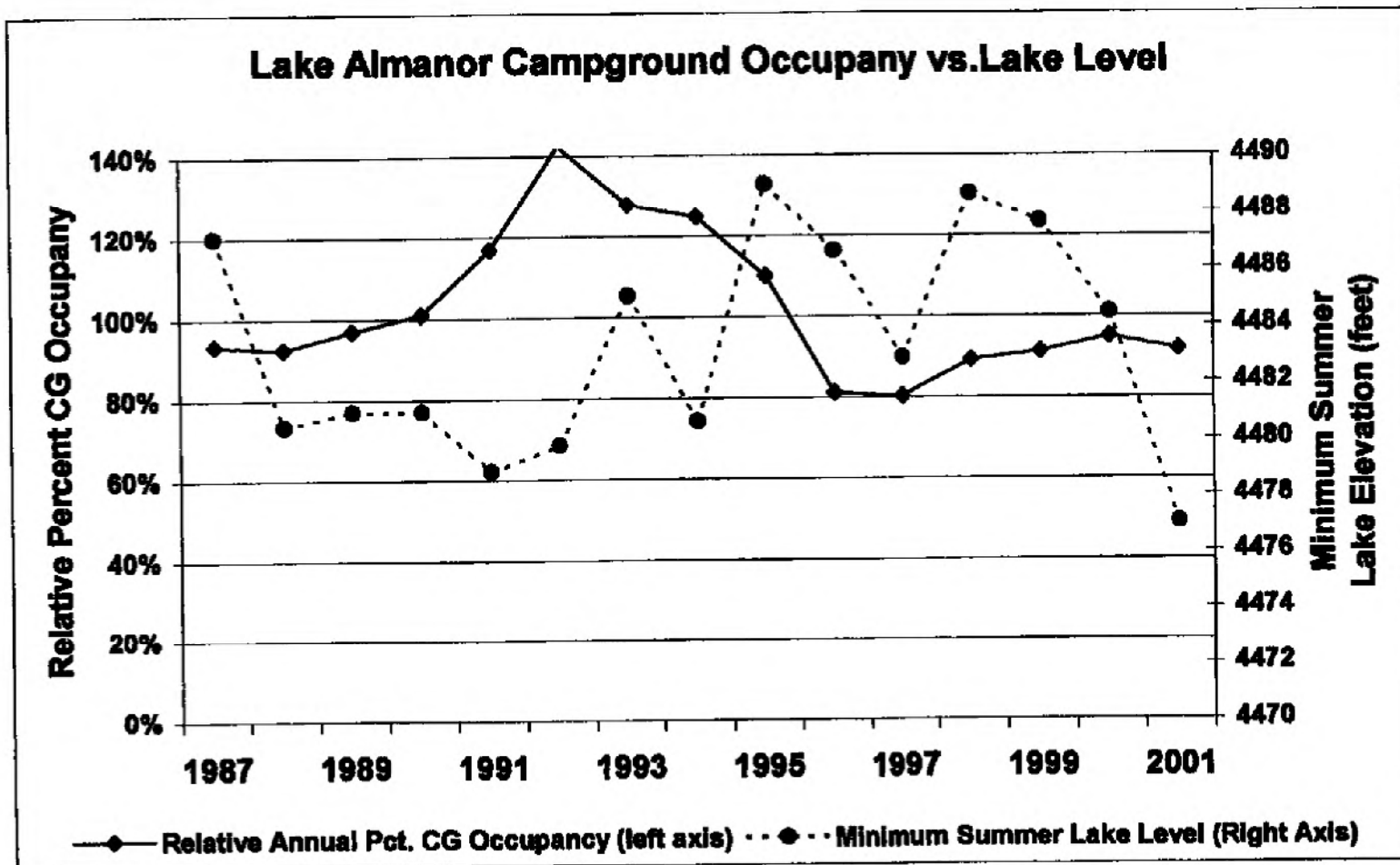
- Approximately 40% to 45 % of users felt the 2001 water level was unacceptable for enjoyment and safety.

**Lake Almanor User Perceptions of Effect of the
Relatively Low 2001 Water Level on Safety**

SURVEY QUESTION: How would you rate the lake or river water level today in terms of how safe it is to use for recreation?	
Level of Acceptability	(percent)
Totally Acceptable	17
Moderately Acceptable	17
Neutral	20
Moderately Unacceptable	23
Totally Unacceptable	10
Doesn't Apply to Me	8

Source: EDAW, Inc.

- Approximately 30% to 35% of user felt the 2001 water level was acceptable for enjoyment and safety.



Note: Relative Annual Percent CG Occupancy – Yearly Occupancy / Average CG from 1987 to 2001

- No statistical correlation between lake level and PG&E's Lake Almanor Campground Occupancy

2001 COMMERCIAL RESORTS OVERNIGHT OCCUPANCIES

(During the 2001 extreme low lake level year, resorts appear to have relatively high overnight occupancies during the summer and season as a whole.)

Private Commercial Resorts	Capacity #	Type	Seasonal Occupancy ¹ (percent)	Memorial Day to Labor Day Occupancy (percent)
Big Cove Resort	43	35 RV, 8 cabins	96.7	100
Caribou Corners ²	—		—	—
Cashman's Paul Bunyan Resort	—		—	—
Dorado Inn	27	7 cabins, 20 rooms	66.7	95.0
High Sierra Resort	10	10 RV	—	—
Knotty Pine Resort	10	6 cabins, 4 RV	70.7	92.0
Lake Almanor Resort	17	14 rooms, 3 cabins	—	—
Lake Cove Resort	97	51 tent, 46 RV	—	—
Lake Haven Resort	10	10 cabins	83.3	95.0
Lassen View Resort	64	13 tent, 51 RV	62.0	96.0
Little Norway Resort	12	11 cabins, 1 RV	46.7	60.0
Miller's Resort	2	2 RV	—	—
Moonspinners Resort	8	4 RV, 4 rooms	—	—
North Shore Campground	120	120 tent/RV	—	—
Novotny's	3	3 rooms	—	—
Plumas Pines Resort	80	8 cabins, 9 rooms, 63 RV	80.0	100
Swim Inn	—		—	—
Vagabond Resort	2	2 cabins	—	—
Wilson's Camp Prattville	39	5 cabins, 34 RV	—	—
Total	632	Average	72.3	91.1

¹Season defined as days when sites were open to the public.²Capacity information could not be determined for three private resorts including Caribou Corners, Cashman's Paul Bunyan Inn, and Swim Inn. Additionally, occupancy data was not obtained from 12 private resorts. Source: EDAW, Inc.

2001 MARINA OCCUPANCIES

(During the 2001 extreme low lake level year, it appears that marinas in east shore coves experienced 15 % less in business than the previous year. Some of this business appears to have been transfer to the west shore. Other marinas did not show a change in business.)

Name of Marina or Resort with Boating Facilities	Number of Dock Slips/ Use Comments	2001 Percent Occupancy		
		Early Season ¹	Peak Season ²	Late Season ³
Big Cove Resort	180 (15% less than in 2000)	95	100	95
Lake Haven Resort	12 (Same use as in 2000)	80	95	75
Lassen View Resort	96 (15% less than in 2000)	40	96	50
Dorado Inn	8 (First season in 2001)	60	95	45
Little Norway Resort	110 (Same as years past)	60	60	60
Knotty Pine Resort	74 (Same as years past)	92	92	92
Plumas Pines Resort	94 (30% more than usual)	100	100	100
Almanor Lakefront Village	12	No occupancy data available.		
Lake Almanor Lakeside Lodge	6			
Almanor Lakeside Resort	10			
Lake Almanor Resort	20			
Almanor Lakeside Villas	30			
Lake Cove Resort	40			
Country Club Resorts	12			
High Sierra Resort	10			
Vagabond Resort	16			
Villager Resort	8			
North Shore Campground	42			
Wilson's Camp Prattville	39			
Novotny's	8			
Moonspinners Resort	6 (Now private residences)			
Miller's Resort	5 (Now private residences)			

¹Before Memorial Day; ²Memorial Day to Labor Day; ³After Labor Day Source: EDAW, Inc.

VISUAL QUALITY

- Scenic value of Lake Almanor Basin is high
- Broad sweeping views available on most shorelines
- Because Lake Almanor is generally a fairly shallow reservoir in a wide basin, a drop of a few feet in lake elevation can expose wide areas of shoreline
- Below about 4,482 the exposed shoreline progressively becomes more undesirable to many users and viewers from a visual standpoint, although this effect is generally localized in low lying areas.

ECONOMIC CONSIDERATIONS

The presence of Lake Almanor:

- **Increases the 3,949 Lake Almanor residential property values by at least \$135 million dollars.**
 - **\$13.6 million per year if capitalized over 50 years, 10% discounted.**
 - **Adds at least 1.4 million per year in Plumas County property tax revenues.**

- **From recreation visitation, annually adds to Plumas County:**
 - **90 jobs**
 - **\$ 8.2 million in gross sales**
 - **\$ 280,000 in tax revenues**

ECONOMIC CONSIDERATIONS

Lake Almanor Lake Level Changes Under Current Operations

- **FERC considers economic changes from a societal (National) perspective.**
- **A one-foot change in minimum summer lake level changes the average selling price by about \$5,335 (2.7 percent).**
- **Since a seller's loss is a buyer's benefit (and vice versa), as whole, under current operations, there is no economic benefit or loss to homeowners as a group from year to year changes in lake level.**
- **No effect to County Tax revenues, since low and high lake level years average out.**

ECONOMIC CONSIDERATIONS

A systematic, long-term per one-foot of elevation change would:

- Change the average selling price of a Lake Almanor house by about \$5,335 (2.7 percent) per foot.
- Effects homeowners as a group by approximately \$587,000 per year basis based on 110 house sales per year.
- Change annual Plumas County tax revenues by \$218,000 annually.

EROSION

- **Wind and boat generated waves are the predominant force eroding reservoir bank sediments. The elevation of the reservoir controls where these waves erode the shoreline.**
- **Static lake levels concentrate wave erosion at a given elevation on slopes along the reservoir.**
- **Increasing lake levels increase the area exposed to surface and wave erosion.**
- **Rapid draw down may increase erosion as a result of groundwater and mass movement processes.**
- **Shoreline orientation, geology, climate, and protection measures are independent variables affecting shoreline erosion.**
- **Lake Almanor shoreline erosion is most likely to be most severe at lake elevations above 4,490 during spring storms.**

WATER QUALITY

- While high erosion rates can lead to some sedimentation in the reservoir, the Lake Almanor Erosion Study found that areas of high lake turbidity were not associated with areas of high erosion.
- Nutrient loading of the reservoir is more affected by direct run-off from urbanized areas than from shoreline erosion.
- Shoreline erosion was not found to be a source of nutrient loading on the reservoir at Lake Almanor.
- Varying lake levels at Lake Almanor have limited effect on water quality, although short-term water temperature is effected in many shallow near shore areas as pool levels change.

CULTURAL RESOURCES

Drawdown Elevation	Number of New Exposed Sites
4485'	17
4474'	36
4467'	3

INSTREAM FLOW RELEASES

- **Whitewater boating releases are not proposed in the draft license application because of relatively low projected boating use levels and conflicts with anglers and resources.**
 - o **If whitewater boating releases were made, though, this would result in less than a half-inch change in Lake Almanor's lake elevation per release.**

- **To improve the health of Project down stream river biological resources the draft license application proposes to release an additional 40 cfs to the Seneca Reach, providing 75 cfs continuously and provide a continuous year round flow of 140 cfs in the Belden Reach.**

LAKE ALMANOR LAKE LEVEL SUMMARY

Other California Reservoirs Surface Areas

- At low pool, one of the largest water surface reservoirs in the state

Other California Reservoirs Draw Downs

- Draw down significantly less than other major California Reservoirs

Boat Ramps

- Majority of boat ramps are usable at typical end of summer lake level

Boating Accident Information

- Appears to be no correlation between lake level and accidents

Boating Capacity

- At low pool still, ample water surface area for boaters

User Perceptions of 2001 Low Water Levels

- Affected some, but not majority, users' recreation experience and feelings of safety.

Recreation Use

- No correlation between use and lake level

Aesthetics

- Progressively gets worse below low 4480 ft elevations

Residential Property Values

- Current operation – no effect
- Systematic, long term change about 2.7% change in value per foot of end of summer elevation change

Shoreline Erosion

- Occurs at elevations where lake is held most frequently. Higher elevations increases total amount of area exposed to erosion.

Water Quality

- Relatively small effect. More effect on temperature as lake is drawn down.

Cultural Resources

- Progressively more sites are exposed as lake is lowered. Most sites exposed between 4485 ft and 4477' elevations.

Proposed Base Flow Release

- Amount of year round Seneca base flow release equivalent to about a foot of elevation

**Plumas County's 2105 Committee's Upper North Fork Feather River (UNFFR)
Project Relicensing Goals and Objectives and Licensee's Responses and UNFFR
Draft License Application Informational References
7/26/02**

2105 Committee's Goals and Objectives	Licensee's Responses and Draft License Application (DLA) information references
<p>Goal 1 Implement Recreation Resource Management and Shoreline Management Elements incrementally, if the license is delayed beyond the 2004 renewal date.</p> <p><u>Objective</u> To avoid the long delays in implementing needed improvements to 2105 that other relicensing projects, like Rock Creek-Cresta, have experienced</p>	<p>Lon Crow of FERC informed the 2105 committee during the January 8, 2002 meeting that FERC would be avoiding long delays in license issuance. According to Lon, FERC intends to issue an UNFFR license from 3 and 5 years after the license application is submitted, so implementing application proposals on a quicker timeline is not necessary.</p> <p>From a Licensee perspective, early implementation of application proposals is not prudent, since FERC may not approve or may modify any particular proposal when it issues the license conditions.</p>
<p>Goal 2 Manage Water Level for Optimum Recreation Opportunities</p>	<p>The water in the lake is managed and balanced among various beneficial uses (i.e. in stream flows, generation, recreation, agriculture....) and not generally optimized for any particular resource.</p> <p>Information relevant to lake level issues can be found in the following areas of the Draft License Application (DLA):</p> <p>Volume 1 – Pages PRS 43 through PRS 45 (summary) – Pages Exhibit B-9 through B-16 (operation)</p> <p>Volume 3 – pages E5 588 through E5 606 (boating capacity) - Page E5- 524 (boating accidents) - Pages E5-565 through E5-566 (boating use) - Pages E5-574 through E5-576 (user perceptions) - Pages E5-560 through E5-561 (Marina Occupancies) - Pages E5- 685 through E5-687 (Resort Occupancies) - Pages E5-1219 through E5-1256 (Economics) - Pages 1241 through 1242 (campground visitation)</p> <p>Volume 4 – pages E6-86 through E6-92 (Visual quality) Volume 5 – Attachment E2-B (Erosion) Volume 8, Appendix E6-E - pages 1-7 through 1-9 (SMP)</p> <p>Relevant lake level information is also summarized in the recreation, land-use and aesthetic (RL&A) July 18, 2002 Work Group meeting handout.</p> <p>The basic operational proposal in the DLA is to maintain Lake Almanor's operational flexibility and ability to respond to hydrologic and electricity system changes, while considering recreation and other resource needs.</p>
<p>Objectives</p>	
<p>Maintain a minimum water level of 4485'</p>	<p>As mentioned during previous RL& Work Group meetings,</p>

2105 Committee's Goals and Objectives	Licensee's Responses and Draft License Application (DLA) information references
<p>elevation during the recreation season – Memorial Day through Labor Day – when precipitation conditions allow</p>	<p>Licensee's primary goal is to develop recreation (RRMP) and shoreline management (SMP) plans that accommodate recreation and shoreline uses over a range of lake levels, with a focus during the primary summer recreation season.</p> <p>Study results have shown lower lake levels appear to affect recreation use in shallow and some cove areas, but lower lake levels do not affect the amount or type of recreation use that occurs at the lake as a whole. In particular, a minimal amount of use appears to be transferred from the affected recreation sites of the lake to other portions of the lake.</p> <p>Study results also indicated that some, but not a majority of recreation users felt that the relatively low 2001 water levels affected their recreation experience and feelings of safety. Some of these negative ratings are likely influenced from the fact recreation users have not recently experienced many low lake level conditions, since Licensee has been able to maintain relatively high lake levels in most all the previous recent years due to good hydrologic and power demand conditions.</p> <p>To address users safety issues, several safety proposals, many proposed by the 2105 committee, have been included in the draft license application (DLA). These proposals include marking of islands and fixed hazards with buoys (# of buoys increases with draw down), removing floating hazards, and providing publicly available maps of the lake's bathymetry in brochures and on signs posted at public boat ramps, to assist boaters in identifying lake bottom conditions at all lake levels.</p> <p>All public and private boat launch ramps at Lake Almanor (elevations of the ramp toes) were also surveyed in 2002. The results of this new inventory relative to pool level and boating access are further discussed below. Handouts were provided at the July 18, 2002 RL&A Work Group Meeting.</p>
<p>Continued the practice of the past 15 years, during which the Water Level Committee and Licensee met at least annually to discuss the manageable conditions of the water level for the coming season</p>	<p>This proposal is included in the DLA on page PRS-45 of the license application.</p>

2105 Committee's Goals and Objectives	Licensee's Responses and Draft License Application (DLA) information references
<p>Goal 3 Improve access to Lake Almanor</p>	<p>The DLA contains several new public shoreline access opportunities at Lake Almanor, including: Westwood Beach, Stumpy/Bird Rock Beach, North Shore Campground public boat ramp, Catfish Beach, Lake Almanor Campground Day Use Area (DUA), a new southeast shore campground/group site, and an expanded Camp Conery group site and expanded Canyon Dam DUA. Appropriate options for day use facility to serve Chester are also being considered now and have been the topic of several RL&A Work Group meetings. In addition, new enhancements for improved/better managed shoreline access along the lake's southwestern shoreline are now being studied in consultation with the RL&A Work Group.</p> <p>Improved Lake Almanor proposals are contained in Section E5.4 of Volume 3 (pages E5-1161 through 1211) and summarized on pages PRS 32 through PRS 41 of Volume 1.</p>
<p>Objectives</p>	
<p>Embody the agreement points of the "Red River Deed" into the license and all management plans</p>	<p>The Red River Deed provides certain property owners who hold this deed the right to recreate and have access to Project reservoirs. As discussed on pages 1-10 to 1-12 in Appendix E6-6 of the DLA Volume 8, a FERC license, in essence, provides not only deed holders, but also all members of the public the same opportunity to recreate and have access to the Project's reservoirs. Thus the Red River Deed agreement is consistent with the Project and its resource use principles.</p>
<p>Construct a lake access point in close proximity to Chester</p>	<p>As discussed on page PRS-35 of Volume 1 and page E5-1165 of DLA Volume 3, a boat ramp and day use area to serve Chester is proposed in the draft application. Based on community input during RL&A Work Group meetings and during the shoreline management workshop, PG&E is developing a proposal for a new public boat launch at North Shore Campground and is also considering alternative sites for shoreline swimming between Lake Almanor West CC and the north Prattville area or providing co-funding to the Chester Rec. and Parks District/Forest Service for a new shoreline access site/trailhead along the route of the planned trail extension of the LART along 1st Avenue in Chester.</p>
<p>Allow public agencies to utilize environmentally acceptable corridors for public use on Licensee lands including between 4494' and 4500' public recreation use</p>	<p>As state in page E5-745 of DLA Volume 3, currently nearly all land between the 4,500-foot and 4,494-foot elevations are accessible to the public for recreational use primarily by foot and boat.</p> <p>In addition, as stated in item 8 of Licensee's 1992 Lake Almanor permitting policies, Licensee will permit when appropriate vehicles below 4,500-foot elevation in public campgrounds, public and private boat ramps, parking areas, commercial resorts and launch facilities. In summary, on a case-by-case basis, Licensee under its current policies will consider public agencies proposals to use of Licensee lands between the 4494' and 4500' elevations for public recreation use.</p> <p>Licensee has also allowed the Forest Service to construct a trail and a trailhead on Licensee property, some of which is below the 4500-</p>

2105 Committee's Goals and Objectives	Licensee's Responses and Draft License Application (DLA) information references
	foot elevation. In addition, the DLA contains a proposal to allow Plumas County or the Forest Service to construct additional non-motorized trails on Licensee property (see page E5-1173 of Volume 3 and page PRS-34 of Volume 1).
Inventory and recommend and finance improvements to ramps (including private ramps) in order to make all ramps usable during increased variations in the lake brought about by drought and generation supply problems	<p>During June of 2002 Licensee inventoried all public and commercial ramps that are available for public use on Lake Almanor. This information was presented during the July 18, 2002 RL&A meeting. As a policy, Licensee does not use its own finances or ratepayers' money to finance private or for-profit commercial ventures.</p> <p>Plumas Pines and Lake Haven resorts currently provide the public boat launching opportunities to lower water levels (4462' and 4474' elevations, respectively) and most other public and commercial ramps provide boat-launching opportunities during typical end of summer lake levels.</p> <p>California boaters currently pay annual fees to support the construction and improvement to public boat launching facilities throughout the State. These funds are available to public agencies in the form of grants. Licensee proposes that the Forest Service use these Cal Boating funds to extend one or both of its public boat ramps at the lake to better accommodate lowered pool levels associated with drought conditions as were evident in 2001.</p>
Improve cooperation with property owners for permitting for such needs as tree trimming and modifications to shoreline and establish procedures for the same which will be clear, fair and applied equally to all applicants	<p>This issue is discussed in the Shoreline Management Plan (SMP) on page 1-13 in DLA Volume 8. With the development of the SMP and its proposals for improved public outreach, Licensee believes that there will be better communication leading to better cooperation and adjacent property owners (APOs) will better know the shoreline regulations. This should lead to less chance of APOs unintentionally violating them, as well as helping to ensure they all receive equal treatment.</p> <p>However, as noted in the SMP, permit requirements can change and new permits may not have the same requirements as previous permits because of new policies. This is typical of most public permitting authorities as judged over time because conditions and policies constantly change.</p>
Goal 4 Improve Recreation Facilities	Recreation facility proposals are contained in Section E5.4 of Volume 3 (pages E5-1161 through 1211) and are summarized on pages PRS 32 through PRS 41 of Volume 1.
<u>Objectives</u>	
Construct three additional recreation facilities of approximately 40 acres each; one providing Chester access to Lake Almanor, one the East Shore and one at Butt Lake.	<p>These proposals contain many new recreation facility enhancements including:</p> <ul style="list-style-type: none"> - Several sites at Lake Almanor (Westwood Beach DUA, Stumpy Beach DUA, Catfish Beach DUA/Primitive Campground, a new Lake Almanor Campground DUA, North Shore Campground public boat launch (closest available

2105 Committee's Goals and Objectives	Licensee's Responses and Draft License Application (DLA) information references
	<p>launch site to Chester), Camp Conery group site expansion, Canyon Dam DUA expansion, a new southeast shoreline campground and group site, and campground expansion at 2 existing PG&E campgrounds). Additional study is underway regarding improved shoreline access along the southwestern shoreline, public use of the shoreline at the PSEA Camp, and a new shoreline access opportunity targeted for the residents of Chester.</p> <ul style="list-style-type: none"> - At Butt Valley Reservoir (several walk-in and boat-in campsites/picnic sites on the western shoreline, roadside pullouts and trails along the eastern shoreline, improvements to the Alder Creek Boat Launch, campground expansion at Ponderosa Flat Campground, and two fishing access sites near the powerhouse area including ADA access). - At Belden Forebay (a new hand-launch boating access site/trailhead) <p>Except for the new southeastern shoreline campground/group site, which will be constructed when triggers are reached based on the monitoring of use levels during the license term, Most all recreation facility enhancements are proposed as initial license issuance developments. Recreation facilities are located and sized based on a site development suitability analysis and long-term needs. Other recreation providers in the area, including the Forest Service, County, and private resorts, also play an important role in helping meet the long-term recreation needs of visitors and residents. As such, Licensee is one of several recreation providers and has proposed a group of enhancements within its niche to help fulfill the overall recreation needs in the project area.</p>
<p>Recreation facilities would include:</p> <ul style="list-style-type: none"> - ADA accessibility at one site on Lake Almanor and at Butt Lake site 	<p>The DLA proposes several ADA improvements at all six of Licensee's Lake Almanor recreation sites and all three of Licensee's Butt Valley Reservoir recreation sites. ADA accessibility is also incorporated into appropriate new facilities proposals identified above.</p> <p>ADA proposals are contained in Section E5.4 of DLA Volume 3 (pages E5-1161 through 1211) and are summarized on pages PRS 40 of DLA Volume 1.</p>
<ul style="list-style-type: none"> - Parking and public launch ramps with low water capabilities 	<p>As previously noted, Plumas Pines and Lake Haven resorts currently offer the public boat launching opportunities to lower water levels (4462' and 4474' elevations, respectively).</p> <p>In addition, Licensee recommends the Forest Service with Plumas County assistance, as appropriate, utilize Cal Boating funds to extend one or both of their ramps to lower lake levels.</p>
<ul style="list-style-type: none"> - Convert Canyon Dam trailer park to public recreational vehicle facility 	<p>At the Canyon Dam Area, Camp Conery Group Camp and a private trailer park exist. Camp Conery is currently open to the public by reservation. The DLA proposes to expand the campground by adding space for approximately 15 RVs either adjacent to the</p>

2105 Committee's Goals and Objectives	Licensee's Responses and Draft License Application (DLA) information references
	<p>existing camp or adjacent to the Canyon Dam DUA (see page E5-1177 of DLA Volume 3).</p> <p>The trailer park adjacent to Camp Conery is a private facility and is not proposed to be converted to public use because similar additional public opportunities are being proposed for Lake Almanor in the DLA.</p>
<p>- Rehabilitate Caribou Clubhouse for operation as a conference center/lodging operation for the economic benefit of Plumas County.</p>	<p>Conversion of the currently closed Caribou Clubhouse to a conference/lodging operation would be a conversion to a non-Project related use, primarily with the purpose of benefiting Plumas County. In addition, to rehabilitate the clubhouse to make it acceptable for public use, including ADA and Caribou Road access improvements would be extremely expensive; especially considering the clubhouse would likely receive very little use because of its inconvenient location.</p> <p>Licensee plans for the Clubhouse are to paint the exterior of the house and provide an interpretive sign at the site to explain the historic nature of the structure. In addition, Licensee intends to fill in the pool, because of the safety reason, and remove the tennis courts. This will be clearly stated in the final license application.</p>
<p>- Participate, using PG&E land where needed, in the multi-agency project to complete a bicycle trail around Lake Almanor (From Canyon Dam to Highway 89 on the West Shore of Lake Almanor)</p>	<p>Licensee has been working to provide the Forest Service an easement across Licensee lands for a trail extension in this area. In addition, the DLA indicates that Licensee will cooperate with the Forest Service and Almanor Recreation and Park District to allow, where appropriate, non-motorized trail across other Licensee-owned Project lands surrounding Lake Almanor (page E5-1173 of DLA Volume 3).</p>
<p>- Designated Swim Area</p>	<p>Sites that could be considered for such designations include the shoreline areas adjacent to the existing Almanor and Canyon Dam DUAs and the proposed Lake Almanor Campground DUA, Westwood Beach and Stumpy Beach DUAs, the new Southeast Shoreline Campground swim area, and, depending on site location, a new swim beach to serve Chester area residents (if feasible).</p>
<p>- Shoreline fishing access with 1000' of "no wake" boating restrictions</p>	<p>The authority to designate "no wake" boating restrictions for shoreline fishing resides with Plumas County. PG&E will work the County to help identify appropriate No Wake zone changes (if desired) and can support such changes if appropriate. However, Licensee does not have the authority to impose a change.</p>
<p>- ADA accessible fish cleaning stations</p>	<p>The fish cleaning station need is discussed on pages E5-1084 through E5-1085 on Volume 3 and page PRS-31 in Volume 3.</p> <p>As discussed during the RL&A Work Group meetings on June 14 and July 18, 2002, fish cleaning stations are not included as DLA proposals due to potential water quality problems (requires large leech fields and septic tanks that would be near the shoreline) and high costs in designing and maintaining a water system, septic tanks and leech fields to prevent these problems.</p>
<p>Establish a cultural interpretive center including local Native American role in the area</p>	<p>Education of the public on local Native American history is not a Project responsibility, but a broader societal responsibility. Currently, local museums in this area provide this public service, as described below.</p>

2105 Committee's Goals and Objectives	Licensee's Responses and Draft License Application (DLA) information references
	<p>Plumas County Museum in Quincy – According to museum personnel, this museum has "a beautiful collection of Maidu basketry, bows and arrows, grinding stones, and a reconstructed cedar hut." See their website: http://www.countyofplumas.com/museum/</p> <p>Chester-Lake Almanor Museum in Chester– This museum has another basketry collection, "jewelry", beads, and other materials from the Maidu and other Native American tribes. According to the Plumas County Visitors Bureau website, the museum "...Features a photographic history of the Lake Almanor Basin, including dairy farming, logging and tourism. Also includes Maidu Indian basketry and artifacts...."</p> <p>Indian Valley Museum in Taylorsville - Plumas Museum personnel indicated that the museum has a "wonderful collection" open to the public by appointment and on the weekends. According to the Plumas County Visitors Bureau website, the museum "Features displays and data relating to the rich traditions of mining, ranching and logging in Indian Valley. One room, dedicated to the native Maidu Indian culture, features a fine collection of Maidu baskets. Other artifacts represent the early settlers of the Indian and Genesee Valleys from 1850s to the present..."</p> <p>Lassen Historical Museum, Susanville. According to a Northern California travel and tourism website (http://www.shastacascade.org), "Artifacts native to Lassen County and old time lumbering equipment and tools are on display at the museum. Adjacent to the museum is Roop's Fort, built in 1854. Pictures of Susanville dating back to the mid 1850's and Native American artifacts are displayed."</p> <p>Butte County Pioneer Museum, Oroville. According to a Butte County website (http://www.experiencebuttecounty.com), the Butte County Pioneer Museum "was built in 1932 by the Native Sons & Daughters of the Golden West as a replica of a 49er cabin. The museum has been enlarged to hold 6,000 square feet of historic treasures. A large Native American arrowhead and basket collection, a needle made from a gold nugget, pioneer furniture and clothing (including an extensive hat and fan collection) a doll from the Donner Party, and an invitation to an 1884 hanging are among the museum's rare and valuable holdings".</p> <p>The Project, though, proposes to contribute to the general education of the public on local cultural resource information, by including appropriate cultural resource historical information in the Project's Interpretive and Education Program (see page E5-1192 of Volume 3 and page 14 of Appendix T in Volume 8).</p>
Consult with Maidu interest groups	Maidu interest groups have been consulted with during the relicensing process. Please refer to pages E4-172 through E4-173 of Volume 3 and Appendix E4-C in Volume 8. On June 6, 2002, Maidu interest groups were also sent the schedule of UNFFR

2105 Committee's Goals and Objectives	Licensee's Responses and Draft License Application (DLA) information references
	<p>recreation, land use, and aesthetic work group meeting dates, times, and locations at the request of the 2015 Committee.</p> <p>In addition, a recent meeting took place on July 23, and two additional meetings with the Maidu are being scheduled for August and September.</p>
Native plants and harvesting areas	Maidu interest groups and individuals have been interviewed regarding traditional plant gathering and other important areas. A report addressing this study is pending, but non-confidential information will be available in the Final License Application.
Cultural learning center/museum	See "cultural interpretive center" above.
Repatriation of artifacts to families	The Licensee has been investigating the status of artifacts previously recovered from the Project area and currently housed at CSU Chico and will continue to do so. However, repatriation of these materials is the responsibility of CSU Chico and not the Licensee. It is our understanding that CSU Chico has been consulting with the Maidu on this matter.
Withhold from disposing any Licensee land in the project area until the license renewal is complete.	<p>Under Licensee's plan for reorganization (POR), lands necessary for Project operations (Project lands) will be kept with the generation company that will own and operate the Project and watershed lands (not necessary for Project operations) will stay with utility (PG&E).</p> <p>Lands necessary to implement proposed Project mitigation and enhancement measures (including recreation and land use measures) are being kept with the Project.</p>
Goal 5 Develop, implement and effectively manage a comprehensive recreation safety plan	
Objectives	
<p>Conduct annual helicopter fly-over to locate and map floating and submerged hazards.</p> <p>Regular removal of floating and anchored hazards.</p> <p>Provide <u>highly visible</u> marker buoys for identifying hazards that cannot be removed.</p>	<p>Licensee conducted a fly over of Lake Almanor in 2002 to locate floating and submerged hazards. Floating hazards and tree stumps identified as anchored hazards (except for one) were removed in 2002.</p> <p>During the January 8, 2002, 2105 Committee's meeting with FERC and PG&E, Lon Crow clearly stated that floating debris on Almanor's water surface that comes from rivers that flow into the lake is not an impact of the Project. Accordingly, annual helicopter flyover to locate and remove floating debris is not included in the DLA.</p> <p>Anchored hazards and their markings, is being addressed in Memoranda of Understanding (MOU) that Licensee and the Sheriff Department are working on. In the current draft MOU, Licensee's role is to provide and place buoys on the lake to mark anchored hazards identified by the Sheriff's department. Marking of goose island and the point off the Peninsula is included in this MOU.</p>

2105 Committee's Goals and Objectives	Licensee's Responses and Draft License Application (DLA) information references
	Licensee's and the Sheriff's cooperative effort is identified on page E5-1172 of Volume 3 and page 1-12 of Appendix E6-E (SMP) of Volume 8.
<p>Develop complete underwater charts for the lake, showing hazards that will emerge at various lake levels.</p> <p>Provide supplies of the "variable-water-level" charts at primary locations throughout the project boundary.</p>	<p>The draft application proposes a Lake Almanor bathymetry map for interpretation of the lake's bottom profile. This proposal includes making the map publicly available in pamphlet form as well as posted at public boat ramps. (see page E5-1172 of Volume 3)</p>
<p>Install and maintain strobe lights at islands and tip of the Peninsula and other hazardous locations.</p>	<p>Based on past experience not all residents readily accept permanent lighting facilities on the reservoir from a visual nuisance perspective. The County reservoir speed limits for nighttime boating controls use and the inherent hazards of nighttime boating on a reservoir. Licensee believes the methods and level of hazard marking contained in the Sheriff Departments and Licensee's MOU are appropriate and adequate.</p>
<p>Maintain all Licensee Forest lands within one mile of the shoreline to USFS/CDF fuel break standards.</p>	<p>Licensee has been working with the USFS and CDF to reduce fuel loads and Licensee plans to continue this practice in the future. Issued discussed on page E6-97 in Volume 4.</p>
<p>Provide increased fires protection capacity (additional emergency water tank, well and hydrants) at the hill above Prattville hydro facilities to protect Licensee buildings and property and adjacent structures and property.</p>	<p>The water tank and hydrants at the PSEA Camp in Prattville are of sufficient capacity to protect Licensee and PSEA Camp buildings and property in the area. In addition, the PSEA Camp has installed a fire hydrant along Almanor Drive West for the use of by the local community fire department.</p>
<p>Goal 6 Improve Erosion Management</p>	<p>See Volume 1, pages E2-283 through E2-291 Volume 5, Appendix E2-b Volume 8, Appendix E6-E, pages 1-14 through 1-15</p>
<p>Licensee to justify under CEQA, the continuing erosion of private and public property under "permissible erosion agreements"</p>	<p>The "permissible erosion agreements" between Licensee and some adjacent Lake Almanor property parcels are private property deed rights that Licensee holds as a purchased real property agreement (referred to as the Clifford Deed). Exercising these continuing rights does not involve approval or a decision by a local or state agency and therefore does not invoke CEQA. Furthermore, relicensing studies have shown that shoreline erosion is a natural process resulting in minimal environmental affects.</p>
<p>Licensee to assist NRCS to publish soil survey</p>	<p>Publication of the NRCS soil survey is not related to a project use or mitigation or enhancement related to continued operation of the Project. Using Licensee funds for this purpose is an inappropriate use of Licensee or ratepayers' money.</p>
<p>Reduce the spillway height at Canyon Dam to the maximum allowable water level – 4494' elevation.</p>	<p>Licensee has been able to operate the Project since inception without ever having to raise the lake elevation over the 4494-foot elevation, even during the worst to date flood events.</p> <p>In addition, Licensee, as described in Exhibit F of the DLA,</p>

2105 Committee's Goals and Objectives	Licensee's Responses and Draft License Application (DLA) Information references
	determined that the spillway and Canyon Dam could handle the probable maximum flood (PMF) for the lake. The PMF is a hypothetical extreme event intended for the evaluation of spillway capacity and dam safety.
Implement the use of environmental erosion controls, suggested by FERC in 1997, in place of riprap.	Licensee's consultant, Foster Wheeler, is currently developing shoreline protection options, for Licensee's consideration, that potentially shoreline homeowners could implement and use as alternatives to riprap.
Goal 7 Manage Water Quality	See Volume 1, Exhibit Report E2 Volume 8, Appendix E6-E, pages 3-12 through 3-23
<p>Maintain the water quality-monitoring program for Lake Almanor.</p> <p>Be a lead participant in exploring sewage treatment for the communities of the Lake Basin.</p> <p>Provide Licensee land on the East Shore for a sewage treatment plant.</p> <p>Provide the funding and leadership for instituting a Lake Almanor watershed management program which equals the management the Licensee has historically demonstrated for the dam and downstream water conveyance facilities.</p>	<p>The water quality of Lake Almanor is very good and the Project minimally affects its water quality.</p> <p>Potential primary sources of watershed pollutants flowing into Lake Almanor are likely to come from the private uses that Plumas and Lassen Counties regulate or from other public uses that the Forest Service regulates or manages as part of its land and water management stewardship. It is inappropriate for Licensee to use its funds or ratepayer funding to provide funding and assume leadership for watershed program that involves lands generally outside its area of impact or effect.</p> <p>Licensee however is concerned about the need to maintain good water quality and has offered the County to co-fund Lake Almanor water quality monitoring and to participate in a Lake Almanor watershed program commensurate with the Project's affect to the lake's water quality.</p> <p>Licensee, outside of relicensing, will consider a proposal from Plumas County to purchase land on the East Shore to address sewage treatment needs originating from Plumas County residents.</p>

AUGUST 8, 2002

UPPER NORTH FORK FEATHER RIVER PROJECT
Recreation, Land Use, and Aesthetics Working Group Meeting
Memorial Hall, Chester California
August 8 and 9, 2002, 9 am to 4 pm
Agenda

Thursday, August 8, 2002

1. Recreation Sampling
 - a. Overview
 - b. Low Lake Level Significance
 - c. Use Levels
2. Expansion to One Mile Study Area Request
3. Response to Plumas County's Goals and Objectives

Friday, August 9, 2002

1. Protection, Mitigation, and Enhancement Measures (PM&E's)
 1. Proposed in Draft License Application
 2. Proposed by Commenting Parties
2. Recreation Resource Management Plan (RRMP)

UPDATED MEETING NOTES

**UNFFR PROJECT RELICENSING (FERC No. 2105)
Recreation, Land Use, and Aesthetics Work Group Meeting
August 8, 2002
9 A.M. to 4:00 P.M.
Chester Memorial Hall, Chester, CA**

Attendees:

Kirby Gilbert	kgilbert@fwenc.com
Fred Muller	fredmull@thegrid.net
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Gerry Stratford	gs@sdaone.com
John Mintz	jsm9@pge.com

John Mintz called the meeting to order and provided a general overview of the intended focus of the remainder of the meeting. The minutes from the previous July meeting were approved without changes. The agenda included presenting PG&E's responses to Plumas County's goals and objectives, addressing the request for an expansion to a one-mile study area, and for John Baas to discuss the results of the recreation sampling. Throughout the meeting there was a series of comments and discussions on previously

identified concerns. A number of handouts were provided by John Mintz, John Baas and Chuck Everett. The comments, issues, resolutions, and/or clarifications are summarized as follows:

Hybrid vs. Collaborative Relicensing Process:

Concern was expressed about the hybrid relicensing process and that many comments on to the draft license application were to utilize the collaborative relicensing process. Additional concern was expressed about having separate meetings on resource issues in Sacramento and on recreation, land, and aesthetic issues in Chester when many issues are of concern to both groups. The Forest Service also expressed some uncertainty with respect to the hybrid process on the UNFFR Project.

In response, John Mintz explained that the hybrid process is being used in half of FERC relicenses. On the UNFFR Project, the hybrid process has involved holding many stakeholder meetings and inviting all interested parties (i.e. Sacramento based resource agencies and the local community) to all the meetings at both locations and that in fact some resource agencies personnel have attended the local community meetings and Plumas County and Forest local representatives have attended the Sacramento meetings. John also explained that even in the collaborative process it is common to have separate work group meetings for specific interest (i.e. recreation, ecology) and then to have plenary work groups to discuss resource issues that are common among the interest group (i.e. river flow and lake level). It is PG&E intent to hold local inter-issues meetings at the upcoming meetings. In addition, Tom Jereb will be scheduling additional Sacramento meetings for September to address resource agency comments as well as to discuss inter-resource issues.

Bear Complaints:

Bob Orange of the California Department of Fish & Game explained that recently the number of complaints about bear in the area has increased and expressed a need for bear-proof food lockers at all campgrounds around the project area, both at Butt Valley and Lake Almanor, and at Licensee's Buck's Lake Project. He also mentioned that there had recently been one incident of bear attack, though it has been determined that it was a "non-aggressive attack" and the victim was not seriously harmed.

2105 Committee Goals and Objectives:

John Mintz then handed out a summary of the goals and objectives of the 2105 Committee along with the responses to the goals and objectives from PG&E (Plumas County's 2105 Committee's UNFFR Project Relicensing Goals and Objectives and Licensee's Responses and UNFFR Draft License Application Informational References. 7/26/02), and went over each item on the summary. Comments regarding the goals, objectives and PG&E's responses follow.

Goal 1 Incremental Implementation:

- *Incremental Implementation of Recreation and Shoreline Management Elements*
Bill Dennison expressed concern that PG&E was delaying implementation to avoid investing in the area and that the public is not being served by this delay.

John Mintz pointed out that FERC may modify or deny particular proposals, making it imprudent to proceed with early implementation, and also that the vast majority (i.e. around 80%) of the proposals are to occur at the beginning of the new license, thus minimizing any delay in action on the part of PG&E. In addition, during the January 2002 meeting with FERC, and set-up by the 2015 Committee, the FERC representative indicated that FERC intends to issue licenses to Projects within three to five years from final license application submittal, so long delays in license issuances (and proposal implementation) will hopefully not occur.

Goal 2: Water Level Management:

- *Maintain lake level at 4485 during recreation season*
Bill Dennison stated that the study results regarding lake level on tourism activity differ from other studies that have found that there is a definite decrease in tourist activity, as well as property value when the lake level is low.

John Mintz responded that the very presence of the lake has increased property values around the lake by at least \$135 million compared to homes elsewhere in Plumas County as well as created jobs and significant annual tax revenue to Plumas County. Also, lake levels are managed with consideration for multiple resource uses and generally not maximized to accommodate the needs of just one resource.

It was agreed that this issue could not be resolved today, and that it would be tabled for a later meeting.

Goal 3 Improve Access to Lake Almanor:

- *Improve Access to Lake Almanor*
Members of the 2105 Committee and others expressed concern that many of the recreation opportunities around Lake Almanor are already at capacity, and that the proposed recreation measures are insufficient to meet the expected demand. There was also concern about the impacts that new developments will have on the area.

Chuck Everett responded that the additional capacity provided by the proposed recreation measures would exceed the numbers proposed by the 2105 Committee and that it is a practice of private developers to provide for their own recreational needs.

Others from the public stated that they preferred not to see too much more recreation development on the lake, particular along the Prattville corridor, as more development would have a detrimental effect on the lake and decrease its appeal as a place to get away from the crowds. In particular, they felt providing several smaller beach access points along the east shore, as currently proposed, as the best approach.

There was also some concern expressed that Catfish Beach had been closed in the past for "heritage reasons" and that this could be a recurring issue with the proposed recreation site at that location. Chuck Everett stated that the cultural site is small and avoidable, and that PG&E's cultural resources specialist has already reviewed this proposal.

- *Red River Deed*

2105 Committee members expressed concern that although the license grants the same rights as the Red River Deed and PG&E response indicates that PG&E acknowledges the Red River Deed, these acknowledgments are not consistent with past discussion, where PG&E lawyers and local community representatives agreed to disagree about the Red River Deed. During 1990 discussion on Red River Deeds and shoreline permits, the Red River Deed was an important rally point for the local community in that it provides some property owners the right to recreate on the lake outside of any rights provided by the FERC license or granted by PG&E. The difficulties from the past discussions, including the financial burdens from hiring a lawyer, have resulted in many landowners' distrust of the licensee.

A Forest Service representative indicated that Red River Deed appears to be a property right, and not a relicensing issue.

Based on further relicensing discussion there appears to be current agreement over the Red River Deed. John Mintz volunteered to develop a draft document for review by PG&E and the 2105 committee that acknowledges current points of agreement. Specifically, the document would state that PG&E acknowledges the Red River Deed and the 2105 committee acknowledges that the FERC license provides similar rights and that the Red River Lumber Deed does not grant the right to construct structures within the FERC boundary or on PG&E property without first obtaining a permit from PG&E. The 2105 committee's current concern appeared to be more focused on permitting issues.

- *Lake Access for Chester Residents*

Based on past Recreation, Land, and Aesthetics Work Group (RLA Work Group) discussion, there is general agreement on improving the boat ramp at North Shore to better serve Chester residents. Based on EDAW's alternative site analysis, there is no good beach site near the town of Chester, but there are opportunities for an access trail to the lake. Jane Goodwin proposed that the Stover Ranch area might provide a good location for an access point. It was agreed that this location would be investigated as an opportunity (Site visited by John Mintz and Chuck Everett with Jane Goodwin on 8/8).

Janie Ackley also pointed out that the Forest Service was interested in having PG&E be a partner in applying for an easement and funding for extending the Lake Almanor Recreation Trail.

- *Improvements to Boat Ramps*

Bill Dennison stated that the primary concern regarding boat ramps is that people want to extend them but are having difficulty with the permitting process.

John Mintz indicated that the CPUC request to review PG&E permits has caused a delay in PG&E issuing permits in general. After this issue has been resolved, there should not be delays. As a general PG&E policy, though, under the current permit program, requests for boat ramp extensions are granted with proper permitting procedures.

The Forest Service also inquired if PG&E would participate in the extension of the public boat ramps. John Mintz indicated PG&E preference is for the Forest Service to first try to obtain Cal Boating Funding designated for this purpose, but PG&E participation could potentially be part of the solution.

- *Improve cooperation with property owners to get permits for shoreline modifications*

Concern was raised that PG&E has cut hazardous trees and left the debris for neighboring landowners to remove.

John Mintz stated that a draft PG&E policy to appropriately address this issue is currently being developed and will be sent to the County.

There was also concern about perceived unfair treatment of applicants for shoreline modification permits by PG&E, and a lack of a PG&E decision maker in the area to monitor and assist the ongoing management of the Lake Almanor Reservoir.

John Mintz responded by saying that draft Lake Almanor Shoreline Management Plan (SMP) contains several proposals to address this issue. These proposals include sending periodic mailers to shoreline property owners and developing a WEB site on the Lake Almanor shoreline permitting program. The basic strategy is that the more the public is aware the permit requirements, the more likely the permit requirements will be followed by shoreline owners and equitably enforced by PG&E.

Also, one citizen raised the topic of beetles causing damage to trees along the shoreline. This has increased the incidence of dying trees.

Goal 4 Improve Recreation Facilities

- *Construct three additional recreation facilities of 40 acres+*

Bill Dennison mentioned that the 2105 Committee had also asked that the PSEA Camp be opened up to the Public, to which John Mintz responded that it is a private resort just like other private resorts in the Project Area and would only be considered for opening to the public if sufficient public recreation opportunities were not already provided. Since the draft license application contains recreation proposals to address the public recreation need over the license period, there is no need to convert this

private facility to a public use. Currently, the beach at the PSEA Camp is open for public use and public improvements to this beach are being considered.

- *Provide ADA-accessibility at one site on Lake Almanor and Butt Valley Reservoir*
Bill Dennison also expressed concern that ADA improvements would have to be made anyway, whether for relicensing or not, and that the costs for ADA improvements should be separated from the costs for general improvements. Kirby Gilbert responded to this by saying that ADA improvements are only required during a rehab – which this is not – and that an ADA improvement is still an improvement (a new ADA dock is a new dock for everyone) and therefore costs should not be separated. Bill agreed that the ADA DLA proposals would be good for the community and public at large. Agreement was reached on this issue.

- *Convert Canyon Dam trailer park to a public RV facility*
Chuck Everett explained that a new public group facility, a RV or cabin facility, would either be added to the existing Camp Conery Group Campground or adjacent to the Canyon Dam Day-use areas, both near Canyon Dam. It was agreed that this new facility should be reserved separately from the Camp Conery facility and that this proposal adequately addressed the issue of providing an additional overnight facility at the Canyon Dam area.

- *Rehabilitate Caribou Clubhouse for operation as conference center*
John Mintz explained that rehabbing the Caribou Clubhouse to be publicly accessible, including ADA improvements would be very costly and converting it to a conference center does not serve a Project purpose. In the DLA, PG&E instead proposes to improve the exterior of the structure and provide interpretive signage. The Forest Service inquired about taking over the clubhouse and potentially converting its operation over to a private interest. The Forest Service, though, was not sure that this was a viable or desirable option and was going to internally discuss this option further. In addition, John Mintz planned to discuss this option with the Hydro Department. This issue will be discussed again at a future meeting.

- *Participate in completing bicycle trail around Lake Almanor*
Bill Dennison stated that the committee is looking for PG&E to construct a trail along the southeast shoreline in addition to providing a trail easement in this area, as recently agreed to in Plumas County's water rights agreement with PG&E. John Mintz responded by saying that providing facilities for public recreation is a multi-organization responsibility. As stated in the DLA, PG&E is proposing to provide trail easements, where appropriate, across all PG&E Project lands around the reservoir, not just those along the southeast shore. Providing the land base for the trail is an essential element in fulfilling the community desire for a trail around Lake Almanor. Since the public agencies (i.e. the County and the Forest Service) have access to public grant funds for trail development. John indicated that to his knowledge PG&E has not historically constructed trails around Project reservoirs, although it has—outside of relicensing—granted easements. It was pointed out that PG&E is proposing in the DLA to construct several trails at Butt Valley Reservoir.

- *Designated Swim Area*

It was agreed that designated swim areas proposed in the DLA (i.e. at lake Almanor Campground, Canyon Dam DUA, Stumpy Beach, and Westwood Beach) address this issue.

- *Shoreline fishing access with 1000' "no wake" zone*

Mike Willhoit pointed out that the 1,000' no wake zone was intended to be included as part of the ADA fishing proposal near Canyon Dam, and not to be enforced around the entire lake where a 200' "no wake" zone already exists.

- *ADA-accessible fish cleaning station*

It was generally agreed that fishing cleaning stations are not a high priority, especially when one considers limited user demand, potential water quality issues, and development costs and space limitations. Some felt it was reasonable for anglers to either catch and release their fish or bring their catch to their home (or camp) to clean. It was decided that John would consult with SRWCB on the potential water quality issues.

- *Establish Native American interpretive center*

It was widely agreed that this issue should be discussed with the tribe during a cultural resource meetings coordinated by Alison MacDougal, PG&E's cultural resource specialist.

Following a break for lunch, John Mintz called the meeting to order and introduced John Baas to discuss the surveys. Dr. John Baas provided a handout with a summary of the survey findings and some of the concerns of the citizens.

Survey Results:

Concern was raised that the mailback response rate of 32% was beneath the goal of 40% and could have been improved with a little publicity beforehand to raise understanding of the survey and its purpose. John Baas stated that he feels that this response rate is adequate for relicensing purposes and he cited other surveys with similar response rates. The UNFFR mail surveys were followed up with standard postcard mailings per the survey protocol to encourage responses. Jane Goodwin and others expressed the sentiment that the interests of area residents may not be represented by the survey results.

Also, they felt that local recreation users have different qualitative judgments of recreation use at the lake which are not represented by the survey, because locals are less likely to use the lake when conditions are not optimal, such as when the lake levels are low or facilities are crowded, and therefore their feelings on these issues are not being heard. As an example, there was concern that the survey did not reflect the actual decrease in recreation at the lake based on lower lake levels. John Baas indicated that over the years there is generally a small variance in Lake Almanor Campground attendance and campground attendance does not appear to closely correlate with lake

level. This finding appears to be consistent with results of other studies that he is aware of.

There was concern that there will be a delay in construction of the proposed new campground on the southeast shore of the lake based on the survey results, despite the perception of the locals that the campgrounds in the area are already at capacity. There was a desire on the part of the local citizens to establish a confidence level for the survey data. A peer review of the methodologies of the study was requested to affirm confidence in the results. John said he would discuss the possibility of this with Tom Jereb.

Chuck Everett indicated that since the Forest Service is not planning to expand its Almanor campground (comments received from Janie Ackley), as assumed in the DLA, these new sites may be considered for inclusion within the Licensee's new proposed southeast shore campground. This new campground would be constructed in two phases and the first phase would likely be constructed sooner than is indicated in the DLA. The timing of the actual construction will be based on triggers indicating when the other public campgrounds at the lake have reached capacity. EDAW will re-evaluate the existing capacity of Lake Almanor public campgrounds based on 5 years of data.

In addition, John Baas will analyze questionnaire results from Chester and other local communities such as Canyon Dam and Greenville to assess if they significantly differ from other residential survey respondents (i.e. Lake Almanor shoreline and backlot owners).

John Mintz felt the amount of recreation study and information (over 1200 pages in the DLA) was generally sufficient for PG&E and the work group to develop and finalize recreation proposals for the final license application. He felt additional analysis would only be beneficial if it helped resolve outstanding issues.

Hamilton Branch:

The question of what type of residential survey would be done at Mountain Meadows for the Hamilton Branch Development was raised. John Mintz responded that the plans are to conduct a recreation questionnaire survey of recreation visitors to the development, but not an additional residential survey. The Hamilton Branch Development receives relatively low amounts of recreation use and many of the users are from nearby communities. Input from local community members will be received from completion of recreation surveys as well as public meetings held, probably in the town of Westwood. There was concern that the Dyer Mountain Resort would impact Lake Almanor and Mountain Meadows. John Mintz also had this concern and indicated that these impacts need to be addressed by the Dyer Mountain Project. During a previous PG&E meeting with Dyer Mountain representatives, the Dyer Mountain representatives acknowledged their potential Lake Almanor impact and responsibility. Chuck Everett stated that Lassen County has been developing a plan for dealing with the resort proposals, but the resort is not a definite plan yet, since no proposal has been forthcoming. It is believed that the resort has been at least temporarily put off because of the current slow economy.

A request was also made to involve Chester area residents in Hamilton Branch/Mountain Meadow public meetings. John Mintz indicated since the Hamilton Project is an addition to the UNFFR Project, the UNFFR recreation, land, and aesthetics work group e-mail list would be expanded to include Hamilton Branch stakeholders (i.e. Lassen County, Westwood Community representatives...) and the Lake Almanor stakeholders will be part of the Hamilton Branch Development process.

2105 Committee Goals and Objectives (continued):

The topic of survey results was concluded at this point, and John Mintz returned to reviewing the summary of goals and objectives.

Goal 5 Develop a safety program

- *Conduct helicopter flyover and map hazards in lake*

John Mintz indicated that during the January 2002 FERC/2105 Committee/FERC meeting, the FERC staff representative indicated that floating hazards generally come onto Project reservoirs from non-Project tributaries and are generally not impacts of the Project and thus not a Licensee responsibility to remove. Mike Willhoit felt that since PG&E has a helicopter, a once a year lake flyer over would be a good public service and not too much of a burden on PG&E to help improve the safety at the lake. Also, the sheriff does not have a boat available for marking and clearing hazards until May first. It would be nice to have some way to identify hazards before then. John suggested the work group could think of other alternatives to identify and to remove floating hazards that did not involve PG&E.

- *Develop underwater map of lake*

The work group appeared to be in agreement with the DLA proposal to develop a bathymetric map of Lake Almanor, which was originally suggested by the 2105 Committee.

- *Install strobe lights at hazardous locations*

John indicated that PG&E and the Sheriff Department had developed a draft agreement to mark fixed hazards at the lake that did not involve strobe lights. PG&E has concerns that the strobe lights could potentially be visual nuisances to shoreline residents and perhaps are not needed during the night when boats are supposed to be traveling at low speeds. Comments from the 2105 Committee included putting a shield on the backside of lights to eliminate the complaints from the neighbors and that strobe lights would aid greatly in nighttime navigation for rescue crews and that the strobe lights would be cheaper than paying lawyers and potential court settlement costs in the case of a night time accident, as occurred in the 1990s. The 2105 Committee was going to review the draft PG&E/Sheriff Department MOU and discuss this issue with the Sheriff Department and local shoreline residents who may be disturbed by night time lights. It was agreed that further discussion is necessary on this topic.

- *Maintain forestlands to USFS/CDF fuel load standards*

PG&E has a current policy, as stated in the draft SMP, to work with the USFS/CDF to reduce fuel loads around the Project reservoir shorelines. USFS representatives asked that since PG&E is doing this anyway, it would be beneficial to put it into the License in order to keep potential future operating personnel in line with this policy. 2105 Committee members further added that they had requested that the boundary be expanded to include watershed lands as well. John Mintz responded that only Project lands could be obligated in the License.

- *Increase Prattville fire protection capacity*

John indicated that PSEA representatives and Mark Sanford had indicated that the fire protection capacity at the PSEA Camp was sufficient to handle PSEA and PG&E facilities in the area. 2105 Committee members requested that it be established that the Prattville Fire Department has determined whether existing fire protection capacity is sufficient. John Mintz said he would check with Mark Sanford, and if need be, the Prattville Fire Department to confirm this.

Goal 6 Improve Erosion Management:

- *Justify erosion of private and public property*

2105 Committee expressed confusion about why PG&E provides shoreline protection for some homeowners and not other homeowners and that PG&E should be a better steward of the lake by providing shoreline protection around all areas of the lake where it is needed. John Mintz and Kirby Gilbert explained that PG&E has erosion rights from the Clifford Deed on many parcels around the lake. On these parcels PG&E has the right to erode above the 4500-foot elevation. On the parcels PG&E does not have this right, PG&E has provided rip-rap on an as-needed basis. On parcels containing the Clifford Deed, shoreline property owners are responsible for protecting their shoreline if need be. Because the lake only reaches the 4494-foot elevation and PG&E's ownership goes to the 4500 ft elevation, most shoreline erosion occurs on PG&E property. In a very few instances, primarily in steep bank areas, erosion occurs above the 4500 ft elevation. Importantly, PG&E relicensing studies (conducted by WRECO) do not identify that shoreline erosion is leading to environmental impacts on water quality. Because the erosion is not leading to adverse environmental effects, PG&E feels, this is primarily a property rights issue, not a resource impact issue.

At the next work group meeting, Kirby Gilbert will be presenting more information on where erosion is occurring at or above the 4500-foot elevation and where PG&E does not have erosion rights. Kirby will also present some erosion control alternatives other than riprap for PG&E consideration to be used in its shoreline permitting program.

Aaron Seandel of the 2105 Committee agreed to read the DLA's shoreline erosion information contained in the WRECO report and shoreline management plan. This issue will be further discussed at the next work group meeting.

- *Soil Survey*

2105 Committee members felt that a soil survey is essential to erosion control. John Mintz responded that there is a good erosion map available in the WRECO erosion report in Appendix 8 of the DLA. Kirby Gilbert also pointed out that a soil survey was done for the area in 1967 and is available at the Chico State University Library. John also indicated that soil surveys are generally developed by State and/or Federal soil management agencies for general public benefit and are not a Project responsibility.

- *Reduce spillway height to 4,494 ft'*

It was agreed that the licensee has always managed to keep lake levels from exceeding 4,494' and that no further action is required at this time.

Goal 7 Manage Water Quality

- *Maintain water quality monitoring program*

It was agreed that water quality at the lake is generally good, and that the committee was satisfied with the Licensee's role in managing water quality, as long as PG&E continues to be involved in watershed planning, and to provide funding for monitoring water quality. It was also suggested that water quality also be made an agenda item for the annual lake level meeting.

Plumas County, though, had some concern that there may be leach fields under water that could be affecting water quality. It was agreed that this issue needs further investigation.

John Mintz then reviewed the agenda for the next day's meeting. The meeting was adjourned.

UNFFFR Visitor Surveys

**Presentation given to
2105 Committee
August 8, 2002**

UNFFFR Visitor Surveys-Response rates for other recreation studies in California

Concern: representative of survey results

- 1992 statewide survey for DPR, mailback response rate was 40%
- 1997 statewide survey conducted for DPR, mail back response rate was 53% (with incentive)
- 2000 statewide survey of visitors to federal lands (telephone response rates 35-40%, depending on subgroup)
- UNFFFR (all survey groups) mailback response rate was 32%

UNFFFR Visitor Surveys-Low lake levels and displacement

Concern: 2001 was an abnormal year

- Some visitor impacts did occur as a result of lake levels in 2001 (Section 5.2.1 and 5.2.2)
- However, attendance data from 1997-2001 suggest relatively constant occupancy levels
- Some data were collected at sites (overflow area) beyond the ¼ mile project boundary
- Area resident data best available re. displacement

UNFFFR Visitor Surveys-Area Resident Sample sizes and response rates

- **Shoreline residents 188 (37%)**
- **Back lot residents 153 (31%)**
- **Town and Environs 117 (19%)**

UNFFFR Visitor Surveys-Reasons for low response rates

- Part of national trend of declining survey participation
- Lower educated individuals less likely to respond (Kubota, 2002, pers. comm)
- If level of interest is low, response rate likely to be low (Baas et al., 1984; Baas 1986)
- Lowest responding group (Towns and Environs) lives furthest from Lake Almanor

UNFFFR Visitor Surveys-adequacy of sample size for Area Resident survey

- 100 - adequate
- 200 - good, recommended by Walsh and Loomis (1986)
- 300 - very good, meets academic research standards

Response rates for Area Resident Survey

Group	Number Mailed	Number Returned	Response rate
Shoreline	502	188	37%
Backlot	499	153	31%
Towns and Environs	626	117	19%

UNFFFR Visitor Surveys-Response rates

Resource Area	Number Mailed	Number Returned	Response rate
Lake Almanor	828	250	30%
Butt Valley	235	133	57%
Belden	162	75	46%

Representative of weekday users

- Met study plan requirements for midweek sampling (June 5-Tues, July 24-Tues, August 9-Thursday, August 23-Thursday)
- Additionally 40% of those contacted on-site spent **at least one weekday** in the Project Area during their trip, and about 50% of mailback survey respondents spent at least one weekday in the Project Area.
- Mailback Survey questions asked for respondents to rate their **entire trip**, not just the day they were contacted by EDAW staff.

MEETING NOTES

**UNFFR PROJECT RELICENSING (FERC No. 2105)
Recreation, Land Use, and Aesthetics Work Group Meeting
August 9, 2002
9 A.M. to 12:00 P.M.
Chester Memorial Hall, Chester, CA**

Attendees:

Marian Liddell	chesterprogressive@hotmail.com
Marvin Alexander	plumas10@psln.com
Gerry Stratford	gs@sdaone.com
Aaron Seandel	aseandel@psln.com
Janie Ackley	jackley@fs.fed.us
Michael Condon	mcondon@fs.fed.us
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Bob Gans	rgans@onemain.com
Linda Kluge	n/a
Mike Willhoit	mcwill@psln.com
Tim Schreiber	schreibert@edaw.com
Chuck Everett	everettca@edaw.com
John Mintz	jsm9@pge.com

John Mintz called the meeting to order and went over the agenda of the meeting. Agenda topics included extension of the study area to include all area within one mile of the Project, discussion of Protection, Mitigation and Enhancements (PM&Es), and the Recreation Resource Management Plan (RRMP). Handouts were provided including a summary of PM&Es, copies of the site plans, and an annotated outline of the RRMP.

Extension of Study Area to 1 Mile:

Janie Ackley expressed a desire that the study area be expanded for reasons of watershed management and fuel loads. She also read a statement from Jane Goodwin expressing her concern that the ¼ mile study area fails to address many of the recreation opportunities that have an impact on the lake. Specifically regarding the Land Use Survey, Shoreline management, and Existing Uses study plans, she felt that the Study Area should be expanded to one mile.

John Mintz indicated that the land use study—to his recollection—did extend out to a mile; shoreline management studies are located along the shoreline which is right adjacent to the reservoir, and there needs to be a distinction between day and overnight

(camping) use. During the relicensing survey, day use sites generally did not reach capacity. There was plenty of dispersed shoreline area available for users who wanted to recreate at the lake if existing day use facilities were at capacity. In addition, campgrounds generally did not reach capacity except during peak weekends, at which times the Forest Service overflow was used. This area was also surveyed as part of the relicensing study.

It was agreed that the Forest Service would specifically identify which issues, studies, and sites/areas they felt demanded a need to expand the study area to one mile.

Mark Sanford addressed the forest management practices, stating that forestlands in the Project area are managed by foresters regarding timber and fuel reduction, and that thinning operations have recently been performed in the Prattville area. According to Mike Condon, from a recent visit, there still appeared to be fuel load issue in this area. The Forest Service was also interested in PG&E cooperation in fuel-load management on non-Project lands in the surrounding areas.

Marian Liddell pointed out that Dale Knutzen was very knowledgeable about the forests in the area and would be of great assistance to PG&E in determining areas in need of attention by PG&E's foresters.

John Mintz said he would contact Dale Knutzen and also review information already received from the Forest Service on the topic.

Goals and Objectives:

John Mintz reviewed the goals and objectives discussed during the meeting on August 8th and reviewed the action items that were agreed upon.

Lake Level

Marvin Alexander expressed concern that the wording regarding lake level in the DLA "closed the door" on the issue, allowing PG&E complete flexibility to manage the water level as they see fit to meet energy needs, and felt that the issue needed to be reexamined. John Mintz responded that there will be future meetings to discuss lake level.

Red River Deed

John Mintz will draft a written statement for PG&E Hydro/Law and 2105 Committee signature indicating that there is current agreement on the Red River Deed.

Water Quality

PG&E will investigate the issue of leach fields around the lake and their effect on water quality.

Erosion

Kirby Gilbert will discuss erosion issues in greater detail at the next meeting (in late August).

Recreation Plan

Chuck Everett will discuss the recreation plan later in the meeting.

Safety Plan

The 2105 Committee will contact the Sheriff Department regarding the MOU, which is currently awaiting its comments. Again it was advised that contact be made with Dale Knutzen for assistance in devising an overall safety plan.

Implementation of Recreation Plans

At this point John Mintz turned the meeting over to Chuck Everett who presented the agenda for the remainder of the meeting. Three recreation items were discussed, the PM&Es, site plans, and annotated outline of the RRMP.

PM&Es:

Campgrounds

Janie Ackley offered that the USFS has use data for their recreation sites at the lake available for the years 1999-2001, as well as year-to-date information for 2002 (provided to Chuck later that afternoon). Chuck Everett stated that this information could be used to determine when and how many campsites will be built at the new campground to be built on the southeast shore, and that monitoring the conditions would guide when the "trigger" occurs to build the campground.

It was agreed that the triggers and the five-year trend analysis would be discussed at the next meeting.

Chuck Everett presented a new proposal that the Eastshore Day Use Area might be converted to a group campsite. Mark Sanford agreed that this would be a good option to consider. The area currently receives almost no use, and is better suited than the proposed southeast shore group campground site. Access to the shoreline would also be improved at the site, as some felt that this was the reason that the site is currently unused.

Chuck Everett agreed to provide a list of all campsites around the lake, as well as a map indicating where the sites are located.

Day Use Areas

Chuck Everett discussed the site at Stover Ranch as a good opportunity for shoreline access for the town of Chester, as it offers good trail opportunities and views, and has excellent proximity to the town. Reservoir pool level and ownership issues need to be investigated for this site. Mark Sanford was to look into the site further as some of the land was sold to the Chester PUC and the area below 4494 ft needed to be determined.

Chuck also discussed the potential expansion of the USFS Almanor Campground area public swim beach. While distant, this site may help satisfy some of the public shoreline access/swim beach needs of Chester residents. Options that are being considered on USFS lands require further discussion with the Forest Service District Ranger (planned for Aug 28).

Marvin Alexander responded that he would like to see North Shore Campground reconsidered as a possible option for the swim beach, despite numerous constraints at the location including costly dredging, dislocation of much of the existing campground and safety concerns regarding children crossing the causeway. John Mintz requested that the 2105 Committee find a consensus on the issue.

Boat Launches

There was concern that improvements at the Butt Valley Reservoir Boat Launch might encourage larger, faster boats on that lake. Mark Sanford responded that there is a speed limit on the lake discouraging such watercraft.

Chuck Everett asked Forest Service representatives what the plans were for their boat launch on Lake Almanor. Janie Ackley responded that there was a grant for repairs of the existing boat launch, not for expansion.

There was no comment on the Belden Forebay Boat Launch.

Trails

Land would be provided for a trail around Lake Almanor, though Mike Willhoit stated that the easements were already in place, and that construction is now the issue. John Mintz reiterated that PG&E's participation would be offering land.

Marvin Alexander expressed concern that there is insufficient fishing access at Lake Almanor, considering its size. Chuck Everett expressed that there are ample opportunities for fishing access at the lake (confirmed with Department of Fish & Game Warden Bob Orange on 8/9) and agreed to provide a map including fishing access points at the next meeting.

Southwest Shore Access Plan

Chuck Everett said that he is currently investigating opportunities for dispersed day use access areas on the southwest shore of Lake Almanor. Findings would be discussed at the next meeting. He also expressed desire to hear some input from the Forest Service. Michael Condon expressed a need for a car-top boat launch near the fly fishing area, as it was a long distance to travel by row boat from the Canyon Dam Boat Launch.

Monitoring Plan

There was no comment on this item.

Interpretation and Education Plan

There was a sentiment expressed that the tribes would probably have an interest in providing input on this plan.

North Shore Campground

Ryan Beck addressed some issues regarding the proposed boat launch at North Shore Campground. He was concerned that massive dredging would be necessary to make the

boat launch useful at even moderately low lake levels, and that there is some type of "seaweed" which is currently growing rampantly all around the lake and is making boating at North Shore Campground very difficult.

Ryan also inquired about the hours that the boat launch would be made available to which Mark Sanford replied that it would typically be from sunrise to sunset. Ryan also inquired who would pay for items such as relocating the existing slips and re-vegetating the campsites that would be displaced by construction of the boat launch. Chuck Everett responded that the Campground would not have to pay for these items. There was also some concern about the number of stumps in the water near North Shore Campground. Chuck Everett responded that stumps provide good fish habitat, and would remain.

Draft Recreation Site Plans:

Chuck Everett then went over the site plans for the proposed developments, improvements and expansions of PG&E recreation sites. Comments to plans included a concern that the area around PSEA Camp needs thinning for fuel load, to which Mark Sanford replied that the area had just been thinned this winter, and also a concern that dust abatement measures were necessary around Butt Valley Reservoir.

Regarding cultural resource surveys completed by PG&E to date, lands within the FERC boundary have been surveyed only. The proposed new Southeast Shoreline Campground extends beyond the surveyed area and would require additional survey work if this site were to be developed in the future. A cultural site is located nearby, but not on the property being considered. Other cultural resource considerations are that any modifications to the North Shore Campground (proposed boat launch) will likely need cultural resource mitigation. Westwood Beach, Stump Beach, Catfish Beach, and 1st Avenue shoreline access site/trailhead may also require some cultural mitigation (subsequent input by Alison Macdougall at PG&E).

Chuck Everett then asked that people look over the site plans and send in any comments they might have.

Recreation Resource Management Plan (RRMP):

Chuck Everett proceeded to go over the RRMP document, asking for comments along the way. Comments included:

- consider a trail along the east shore of the lake
- provide map of fishing access points
- consider boat-in and walk-in access
- PG&E contribute its voice to the Dyer Mountain Resort issue

Future Meetings:

September meetings were scheduled for the following dates:

Wednesday, September 11, 2002

Thursday, September 12, 2002

Tuesday, September 24, 2002
Wednesday, September 25, 2002

At the early September meetings, the RRMP would be further fleshed out. Also, monitoring, resource coordination and how the plan will be reviewed and revised over time would be discussed at that time.

At the mid-September meetings, facility developments would be discussed, language would be provided as to what PG&E will do, and costs and agreements (with other agencies such as USFS) would be flushed out.

John Mintz indicated that he will maintain a summary status sheet of the 2105 goal items. In addition, a list of action items will be sent out with future meeting minutes.

It was agreed that lake level issues were beyond the current group and that lake level would be discussed next meeting with Tom Jereb present. John Mintz also agreed to provide additional handouts of lake level considerations to the 2105 Committee.

The meeting was adjourned.

Summary of UNFFR Project Proposed Recreation Measures (8/8/02)

Proposed recreation resource measures (or PMEs) for the UNFFR Project have been determined based on identified existing and projected needs for expansion or improvement of Project developed recreation facilities and use areas in the Project Area. PMEs generally address upgrading existing site features to meet current ADA accessibility standards, and expanding or improving sites to meet current or projected use levels. Recreation PMEs also include new sites to be developed over the term of the license to help meet existing and future needs.

Improved Campgrounds:

- All of the campgrounds were found to be in need of modifying or expanding sites to meet current accessibility guidelines (ADAAG, as amended).
- Throughout all 4 of the Project campgrounds (Lake Almanor Campground and Last Chance Creek Campground on Lake Almanor, Cool Springs Campground and Ponderosa Flat Campground on Butt Valley Reservoir), 17 additional ADA-accessible campsites are required to meet accessibility guidelines, and one accessible cabin is also required at the Camp Conery Group Camp.
- Other issues that need addressing at the campgrounds include providing accessible toilets, and access routes to site features and pay stations.
- Modification of existing water faucets, telephones, and parking spaces to meet ADA guidelines are also a priority.
- Additional toilets, showers, swim beaches, boat in camping, and fishing access trails are also necessary to meet existing need.
- Projected future campground visitation is expected to result in the need for providing new campsites at Last Chance Campground, Catfish Beach, and the southeast shoreline of Lake Almanor.
- In the proposals, Catfish Beach would provide a primitive experience with 10 primitive campsites, picnic sites, and a vault toilet.
- The southeast shoreline site could provide 40-90 RV and tent sites (if needed), a swim beach, group site, and overnight boat moorage. Currently, this site is a lower priority, but is expected to be needed during the term of the new license.
- At Butt Valley Reservoir, 12 additional primitive campsites will be added at Ponderosa Flat Campground.
- New showers will be added to various sites.
- New group reservation sites will be provided at Camp Conery, Ponderosa Flat Campground, and the new campground at the southeastern shoreline of Lake Almanor.

Improved Shoreline Access/Day Use Areas (DUAs):

- Shoreline access/DUAs in the Project Area include East Shore DUA, Almanor Scenic Overlook, and Canyon Dam on Lake Almanor; and Belden Rest Stop along Highway 70.
- Additional ADA-accessible picnic tables and toilets represent existing needs, as do modifications to parking spaces, water faucets, and access routes to site features.
- New or expanded shoreline access/day use facilities have been proposed at Stumpy Beach and Westwood Beach along the eastern shoreline, a new swim beach/picnic area at Lake Almanor Campground, new shoreline access/trailhead along First Avenue in Chester, a new public swim beach at the PSEA Camp shoreline, and potential expansion to the existing USFS day use picnic/swim beach in the northern Prattville area on Lake Almanor.

- Proposed measures at these sites vary but generally include providing parking areas, signs, trails to the shoreline, sandy beaches, picnic tables, and toilets.
- New showers will be added at various sites.

Improved Boat Launches:

- While the 2 existing USFS-managed boat launches on Lake Almanor are getting improved with recent Cal Boating grant money, the Alder Creek Boat Launch on Butt Valley Reservoir is in need of improvement.
- The Alder Creek boat launch is in need of additional vehicle/trailer parking space, as well as improved vehicle circulation. In addition, modifications to the boat ramp are needed to meet ADAAG, as amended.
- To help meet the needs of northern Lake Almanor visitors and residents including Chester, the old boat launch at North Shore Campground is proposed to be rebuilt nearby and be available for public use with a separate entrance road. The existing channel will be deepened to provide improved boater access to the new launch site. Also proposed is a new parking area with revised circulation for vehicles with trailers and a new public restroom at the ramp.
- At the Belden Forebay, a new car-top/hand-launch boat launch is proposed north of the Caribou Village at an existing parking area. This site would provide new access for small watercraft at Belden Forebay (5 mph speed limit and 10 hp restriction). This site would also serve as a trailhead for the North Fork Fishing Trail.

Improved Trails:

- The Licensee will make available its lands for public trail access (via easements) as long as project operations and public safety is protected.
- Along the proposed 1st Avenue route of the Lake Almanor Recreation Trail (LART), a shoreline access site/trailhead will be built to provide shoreline access for Chester residents.
- At Butt Valley Reservoir, a new shoreline trail will be constructed that connects the 2 existing Licensee campgrounds and the boat launch along the eastern shoreline. Also ADA-accessible trails with accessible fishing platforms/piers are proposed near the Butt Valley Powerhouse and at Ponderosa Flat Campground. Other shoreline fishing access trails at the powerhouse will be improved using non-ADA guidelines.
- At Belden Forebay, the existing North Fork Fishing Trail would be extended along a 1-lane road to the new car-top launch/trailhead north of Caribou Village.

Improved Dispersed Use Areas:

- At Butt Valley Reservoir, 5 new hardened boat-in shoreline dispersed sites will be provided plus 3 new walk-in/boat-in dispersed sites near the dam with a vault toilet.
- The southwest shoreline at Lake Almanor is currently being looked at. It is expected that at least 4 access routes to the shoreline may be improved and others with resource damage will be closed and the areas rehabilitated with input from the USFS.
- Ongoing monitoring will be used to address dispersed shoreline impacts over time, such as site pioneering and creep and potential resource damage. Some shoreline dispersed sites may be hardened or closed as needed.

Improved Interpretation and Education:

- An I&E Program will be developed in the first 5 years in consultation with the USFS, Plumas County, and others.
- Reservoir bathymetry information will be provided to boaters for enhanced boater safety.
- An I&E sign program will be developed and implemented at Project recreation facilities.

DRAFT RECREATION RESOURCE MANAGEMENT PLAN SCHEDULE

The Draft RRMP is currently in the process of being written. It is anticipated that as sections of the Draft RRMP are completed, they will be made available for public comment. The following schedule describes anticipated completion dates for the remaining sections of the Draft RRMP, as well as potential dates of future meetings at which public comments on the Draft RRMP will be addressed.

Draft RRMP Section	Distribution Date	Open Comment Period	Response Date
Overview of the Plan Goals and Objectives	Aug. 9	Aug. 9 - 27	Aug. 28
Planning Areas Recreation Programs: Recreation Monitoring Resource Integration and Coordination Plan Review and Revision I&E	Aug. 28	Aug. 28 – Sept. 11	Sept. 12
Recreation Programs: Recreation Facility Development Recreation O&M Exhibits	Sept. 12	Sept. 12 - 25	Sept. 26
Recreation PM&Es	On-going		All scheduled meetings

PRELIMINARY DRAFT

RECREATION RESOURCE MANAGEMENT PLAN

UPPER NORTH FORK FEATHER RIVER HYDROELECTRIC PROJECT FERC Project No. 2105

Prepared by:

EDAW, Inc.

**Seattle, Washington and
San Francisco, California**

Prepared for:

**Pacific Gas & Electric Company
San Francisco, California**

August 8, 2002

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ACRONYMS AND ABBREVIATIONS

This section will list all acronyms and abbreviations mentioned in the Recreation Resource Management Plan (RRMP) for the Upper North Fork Feather River Hydroelectric Project (Project). A partial listing is below.

ADA	Americans with Disabilities Act
ADAAG	Americans with Disabilities Act Accessibility Guidelines
FERC	Federal Energy Regulatory Commission
Forest Service	US Department of Agriculture Forest Service
I&E	interpretation and education
LAC	Limits of Acceptable Change
NEPA	National Environmental Policy Act
O&M	operations and maintenance
PG&E	Pacific Gas and Electric Company (Licensee)
PM&E	protection, mitigation and enhancement measures
ROS	Recreation Opportunity Spectrum
RRMP	Recreation Resource Management Plan
RV	recreational vehicle
RWG	Recreation, Land Use, and Aesthetics Work Group
UNFFR	Upper North Fork Feather River

A. INTRODUCTION

Pacific Gas and Electric Company (PG&E or Licensee) is relicensing the Upper North Fork Feather River Hydroelectric Project (Project No. 2105) with the Federal Energy Regulatory Commission (FERC). The Licensee has prepared this Draft Recreation Resource Management Plan (RRMP) as a product of relicensing. Project lands and waters provide a variety of recreation opportunities. The Licensee used a "traditional plus" relicensing process, which included various technical work groups, including the Recreation, Land Use, and Aesthetics Work Group (RWG). RWG stakeholders participated in the development of the technical studies and this Draft RRMP and included representatives from federal, state, and local agencies; adjacent land owners; shoreline homeowner and country club associations; and other stakeholders. A result of this consultation, the Draft RRMP defines a number of proposed recreation enhancement measures.

The Draft RRMP details the Licensee's involvement, role, and responsibilities in managing identified existing and future recreation resources associated with the Project over the term of the new license. Licensee-proposed measures include site-specific and programmatic measures. Programs presented in the Draft RRMP that implement these site-specific and programmatic measures were derived from RWG input, other agency and relicensing consultation, and from the technical studies (see Exhibit E5 of the Final License Application) conducted by the Licensee for relicensing.

The Draft RRMP is being submitted to the FERC as part of the Final License Application. Following issuance of a new license by the FERC, the Draft RRMP will be finalized as directed by the FERC.

B. OVERVIEW OF THE IMPLEMENTATION PLAN

1. Purpose and Intent

The purpose of the Draft RRMP is to guide and facilitate the management of existing and future recreation sources associated with the Upper North Fork Feather River (UNFFR) Project. The Draft RRMP provides a vision of the desired future condition for recreation resources in the Project area, establishes long-term goals and objectives for managing recreation resources in the Project area, and identifies both site-specific and programmatic recreation measures to be implemented over the term of the new license. Six programs are presented in the Draft RRMP that implement these proposed measures. The Draft RRMP also details estimated costs for development and operation, provides conceptual designs, and provides an implementation schedule for these proposed measures.

Taken as a whole, the Draft RRMP represents a single "umbrella" protection, mitigation, and enhancement (PM&E) measure for recreation resources. The Draft RRMP is intended to be specific to the Licensee's recreation resource roles and responsibilities for the term of the new FERC license. The Draft RRMP does not make management or resource commitments for other entities such as the US Department of Agriculture Forest Service (Forest Service), other

agencies, or tribes. However, the continued active involvement of these other recreation providers in the Project area is important in helping to meet the overall recreation needs of visitors and residents during the term of the new license.

2. Plan Vision

The Draft RRMP provides a long-term vision of how Project-related recreation resources should be managed in the Project area for the term of the new license. The Draft RRMP benefits from the cooperative nature of the relicensing process, which included input and advice from the RWG and other stakeholders. The plan vision includes:

- The Licensee and other recreation providers in the area have a shared responsibility to help meet the needs of visitors and residents over the term of the new license;
- The Licensee will be an active recreational provider in the Project area through implementation of the Draft RRMP;
- The Licensee recognizes the need to provide additional shoreline recreation opportunities for area residents surrounding Lake Almanor, particularly Chester;
- The Licensee will closely coordinate recreation resource needs with other recreation providers in the Project area, particularly the Forest Service and private resort operators;
- The Licensee will utilize appropriate coordination efforts aimed at balancing various resource needs to achieve the best outcome possible for the region's resources;
- The Licensee acknowledges that conditions will change over time and monitoring is an appropriate and necessary strategy to manage regional recreation resources in the future;
- The Licensee desires to maintain and/or improve the experience now enjoyed by residents and visitors to the Project area while providing appropriate developed recreation facilities in suitable locations to address visitor needs;
- The Licensee will maintain the unique outdoor experience found in the Project area by focusing more developed recreation uses at Lake Almanor and more primitive recreation uses at Butt Valley Reservoir and the Bypass Reaches; and
- The Licensee will employ Limits of Acceptable Change (LAC) and Recreation Opportunity Spectrum (ROS) recreation planning concepts as guidance for establishing an appropriate and suitable means of monitoring and managing recreation resources in the Project area.

3. Methodologies Used

The methodology used to develop the Draft RRMP involved four tasks: (1) conducting two years of technical studies and reviewing the results with the RWG and others; (2) preparing proposed recreation facility and operations and maintenance enhancements in the Draft License Application; (3) refining proposed enhancements between the Draft and Final License Applications; and (4) integrating the refined proposed enhancements into the Draft RRMP including implementation programs and supporting exhibits. The Draft RRMP's six programs define the Licensee's responsibilities during the term of the new license.

4. Adaptive Management

Over time, the Draft RRMP will be guided by an adaptive management strategy based on a modified Limits of Acceptable Change (LAC) and Recreation Opportunity Spectrum (ROS) planning concepts and monitoring approaches. LAC is an established resource management and recreation planning methodology developed by the Forest Service (USFS 1985). While the methodology was originally developed for wilderness settings, it has been modified and adapted over the years for use in other resource and recreational settings. Therefore, the Draft RRMP will use a modified LAC approach.

Not all recreational experiences are alike and a mix of experiences over a large area such as the project is desirable. As a result, different monitoring variables (resource values, key indicators, management standards, management actions, and monitoring activities) are anticipated for different recreational settings. Specific areas or reaches of the project reservoirs may be defined for different recreational settings. A modified ROS (USFS 1990) approach is used to allow for stratifying and defining classes of outdoor environments, activities, and experience opportunities in the Project area.

No long-term plan can predict exactly what is needed or foresee all events, particularly for a 30 to 50 year license term. Actions taken will have to be adaptive. Adaptive management is an interactive approach to decision-making that incorporates LAC-type concepts and feedback loops to evaluate actions and incorporate new information as it becomes available. Adaptations are necessary as conditions change and more is learned about resource needs or how the resource is responding to planned activities or solutions. In general, the adaptive management strategy has two attributes: (1) it is a response to uncertainty about the resource being managed over time; and (2) future actions are dependent upon information acquired through monitoring the program or resource.

To implement this adaptive management strategy, three types of uncertainty are addressed: (1) ecological uncertainty—the dynamic nature of biological systems, such as changes in viability and distribution of wildlife habitats and wetlands, changes in water quality, and new species listings; (2) social uncertainty—changing social values and visitor attitudes/preferences over time; and (3) measurement of uncertainty—which refers to uncertainty in the estimation and use of parameters such as user densities, occupancy rates, theoretical capacities, and population growth rates and demand. Accordingly, it is important to consider how well the planned

monitoring program can be expected to yield data necessary for informed decision-making. Additionally, there needs to be flexibility to make necessary changes over time, either in the monitoring program or in how these data are interpreted.

To address these types of uncertainty, the following adaptive management strategies will be used:

- The Draft RRMP will be reviewed and updated, if necessary, by the Licensee every 12 years from its implementation to address changing conditions (two FERC Form 80 cycles);
- Implementation plans at new or expanded recreation facilities will be developed by the Licensee based on the results of monitoring and identified recreation needs (see the Recreation Facility Development Program);
- A modified LAC methodology will be used for an overall monitoring framework. The basic concept of LAC is to define the type of visitor experience to be provided and to monitor conditions over time to assess whether acceptable conditions have been maintained. Monitoring is accomplished by collecting various data and then comparing results against performance standards and indicators;
- Draft LAC standards will be field-verified within 6 years of implementation of the Draft RRMP and may need to be modified based on results. The monitoring program will be reassessed periodically to ensure that the data being collected and analyzed are necessary and appropriate to decision-making (see the Recreation Monitoring Program);
- Periodic interaction with other resource groups or specialists will be used to address potential resource management conflicts and to balance competing resource goals and values. This will be accomplished through implementation of the Resource Integration and Coordination Program; and
- Licensee funding for proposed enhancement measures in this Draft RRMP may vary depending upon changing needs, but will not exceed the overall identified maximum budget.

5. Overview of the Six RRMP Programs

The Draft RRMP includes six programs that define the Licensee's roles and responsibilities for recreation resources in the Project area over the term of the new license. The six Draft RRMP programs include:

- **A Recreation Facility Development Program** that defines the Licensee's construction-related responsibilities to address existing and future Project-related recreation needs, identifies proposed recreation development projects, provides estimated costs for recreation measures, identifies locations and provides conceptual layouts of the

development measures, and discusses general facility development standards and criteria to be used.

- **A Recreation Operations and Maintenance (O&M) Program** that defines the Licensee's existing and future O&M responsibilities. The program defines partnerships and agreements that will be entered into between the Licensee and other federal, state, or local agencies and private entities to provide for operation and maintenance at various recreation facilities. The program addresses existing and future Project-related O&M recreation needs, provides estimated costs for O&M, and discusses general facility and use area maintenance standards to be used.
- **A Recreation Monitoring Program** that defines how the Licensee will conduct recreation resource monitoring and how the monitoring information will be used in decision-making. This program discusses the use of LAC standards and indicators, defines monitoring needs, identifies periodic monitoring and reporting responsibilities, and identifies a decision-making framework related to when new facility construction (if any) would be triggered.
- **A Resource Integration and Coordination Program** that defines how the Licensee will integrate recreation resource needs with other resource management needs over time, such as cultural, wildlife, and aquatic resources. This program discusses how parallel resource management programs and actions will be coordinated.
- **A Plan Review and Revision Program** that defines how the Draft RRMP will be updated or revised over the term of the new license. Plan revisions may be based on results from LAC monitoring or the results of coordination meetings with other recreation providers in the Project area.
- **An Interpretation and Education (I&E) Program** that defines how hydroelectric energy production, environmental, cultural, and informational interpretation and education will be coordinated and conducted by the Licensee. This program involves several resource areas including recreation, aesthetics, fisheries, water quality, terrestrial, and cultural. A detailed I&E Program will be developed during the first 5 years of the new license, in consultation with the Forest Service, Plumas County, and others.

6. Issues and Assumptions

Based on technical recreation studies conducted during relicensing, and on RWG and other stakeholder consultation, several issues and assumptions were identified regarding the management of recreation resources in the Project area. These issues and assumptions are important to consider when revising or modifying the Draft RRMP over time and include:

- The Project has resulted in public recreation opportunities and needs along the shorelines of Lake Almanor, Butt Valley Reservoir, and the Bypass Reaches. These opportunities and needs are located principally within or directly adjacent to the FERC Project

boundary.

- To satisfy public recreation needs, several recreation providers including the Licensee have developed, operated, and maintained various public recreation facilities, principally within or adjacent to the FERC Project boundary.
- New recreation development will be concentrated in suitable areas where it is compatible with existing and potential land uses.
- The need for public recreation facilities and programs is anticipated to increase in the future and these needs may change over time. New facility needs are likely to occur during the term of the new license and will result in the Licensee having to construct, operate, and maintain new recreation facilities and programs, as well as renovate and upgrade existing recreation facilities. Other recreation providers in the Project area will also be responsible for building, operating, and maintaining new recreational facilities, as well as renovating and upgrading their existing facilities.
- Recreation providers must comply with the federal Americans with Disabilities Act (ADA), and the ADA Accessibility Guidelines (ADAAG), as amended, which mandate the need to upgrade some existing recreation facilities when major maintenance is undertaken or when new facilities are constructed.
- Since additional recreation facilities are anticipated to be needed in the future, new construction will depend on future monitoring of recreation facility use levels and condition, and will rely upon LAC-type indicators and standards to justify new facilities.
- The potential exists for partnerships and/or cost sharing between the Licensee and other recreation providers to cooperatively fund some measures in the Project area that will benefit the general public and improve the overall recreation experience in the Project area.
- The Draft RRMP concentrates new recreation development in appropriate locations, thereby retaining as much of the natural open space as possible to protect a range of resource values, such as wildlife, aesthetics, and cultural resources.
- Private resort and residential areas on or near the Project shorelines have unique recreational needs. These needs should be accommodated while allowing for adequate and compatible public access and use of the Project shoreline.

7. Explanation of Terms

Key terms used throughout the Draft RRMP and relevant to recreation planning for the Project are defined below.

- **Project** - The Upper North Fork Feather River Hydroelectric Project, FERC Project No. 2105.
- **Project Boundary** - The FERC Project boundary.
- **Project-Related Recreation Needs** - The existing and future recreation needs that are associated with the lands and waters of the Project.
- **Project Area** - The Project area includes all waters and adjacent lands within the FERC Project boundary and all recreation resources within and adjacent to the Project boundary. The Project boundary includes Lake Almanor and Butt Valley Reservoir, and areas of the Belden and Seneca Reaches that are used for recreational purposes.
- **License** - The FERC license for the Upper North Fork Feather River Hydroelectric Project, FERC Project No. 2105.
- **Term of the New License** - The length of the new license to be issued by the FERC to the Licensee for the Project, ranging from 30 to 50 years.
- **Recreation, Land Use, and Aesthetics Work Group (RWG)** - A technical work group specifically established by the Licensee during relicensing to help develop recommendations for proposed recreation, land use, and aesthetics/visual resource protection, mitigation, and enhancement measures (PM&Es).

C. GOALS AND OBJECTIVES

The Draft RRMP satisfies FERC requirements to prepare a recreation plan and to define the responsibilities of parties when public recreation facilities are to be provided. To satisfy this need, the Draft RRMP has established goals and objectives for managing recreation resources. These goals and objectives are intended to guide the Licensee while managing, planning, designing, and constructing recreation resources and facilities in the Project area, and in making appropriate resource decisions during the term of the new FERC license. As questions arise regarding decisions about implementing the Draft RRMP and future PM&E measures, particularly those anticipated beyond 2010, resource managers may compare future actions against these goals and objectives to evaluate consistency with the original intent of the Draft RRMP.

Seven Draft RRMP goals and their respective objectives are outlined below including:

- Help meet existing recreation resource needs in the Project area
- Help meet future recreation resource needs in the Project area
- Provide adequate public access along the Project shorelines
- Preserve recreation resources
- Coordinate recreation planning and needs
- Provide cost-effective and diverse recreation opportunities

- Provide compatible recreation opportunities

Goal 1: Help Meet Existing Recreation Resource Needs in the Project Area

Help provide a diverse spectrum of public and private recreational facilities, use areas, and opportunities within the Project area that help meet existing Project-related recreation needs.

- Objective 1a: Help provide for the continued operation of existing public and private recreation facilities and use areas in the Project area.
- Objective 1b: Help provide public and private recreation facilities and use areas that respond to visitor facility preferences and needs as identified in visitor surveys conducted during relicensing.
- Objective 1c: Enhance existing recreation facilities, as needed, by making necessary facility repairs and modifications and/or changes to facility operations and maintenance practices.
- Objective 1d: Comply with federal ADA guidelines (ADAAG, as amended) and provide for the health and safety needs of all recreation visitors.
- Objective 1e: Establish monitoring indicators and standards for the Project area and manage existing recreation resources in accordance with the Recreation Monitoring Program.
- Objective 1f: Manage existing Project-related recreation resources in accordance with existing land and resource plans and policies in the Project area.
- Objective 1g: Develop an I&E Program and implement the program's actions to enhance the visitor experience, inform visitors of facility use options, educate boaters about potential boating hazards, better distribute use amongst facilities, and educate visitors about sensitive resources and appropriate behavior.

Goal 2: Help Meet Future Recreation Resource Needs in the Project Area

Help provide a diverse spectrum of public and private recreational facilities, use areas, and opportunities within the Project area that help meet future Project-related recreation needs.

- Objective 2a: In the future, continue to monitor future changes in recreation demand and help provide for recreation needs consistent with resource values and established monitoring indicators and standards. Changes may include the emergence of new recreation technologies, trends toward larger recreational vehicles (RVs) and shorter day use hiking opportunities, increasing demand for water-based recreation opportunities, increased desire for educational/interpretive recreation opportunities, or others.
- Objective 2b: In the future, help provide additional new public recreation facilities or use areas as justified by periodic monitoring of recreation facility and use area visitation,

condition, demand, and monitoring indicators and standards over time.

- Objective 2c: In the future, continue to implement the Recreation Monitoring Program using established monitoring indicators and standards; monitor recreation use levels as needed, and update the visitor needs and preference survey periodically.
- Objective 2d: In the future, help provide adequate funding to implement identified future recreation-related development projects and programs.
- Objective 2e: In the future, periodically update the Recreation Needs Analysis for the Project area (RRMP to be updated at least every 12 years, or two FERC Form 80 cycles).
- Objective 2f: In the future, periodically monitor dispersed shoreline recreational use in the Project area and address related site impacts as necessary. Close or harden sites as necessary.
- Objective 2g: In the future, continue to utilize the I&E Program to help distribute use amongst recreation facilities, if needed, and to educate the public about resource values, appropriate behavior, and potential boating hazards.

Goal 3: Provide Adequate Public Access Along Project Shorelines

Help provide adequate public access to, and use of, Project water bodies and shorelines in the Project area.

- Objective 3a: Help provide adequate public shoreline access and safe public recreation opportunities on Project lands and waters as identified in the Draft RRMP, including campgrounds, viewpoints, shoreline trails, boat launches, swimming areas, and day use areas.
- Objective 3b: Through the I&E Program, provide adequate informational signs and programs to alert boaters, swimmers, anglers, and other users about operational or natural hazards in and around Project reservoirs.
- Objective 3c: Support increased multi-use/non-motorized trail opportunities in the Project area by granting access rights (easements) across Project lands and exploring partnering and/or cost sharing options with other recreation providers in the areas.
- Objective 3d: Improve universal accessibility in the Project area by adhering to federal ADA guidelines (ADAAG as amended) at all existing and future Project recreation facilities.
- Objective 3e: Through the I&E Program, communicate to the public the range of recreation facilities and use areas that are available in the Project area.
- Objective 3f: Coordinate with local law enforcement agencies in the Project area and provide funding to supplement existing funding sources for Marine Patrols, including hazard identification and marking, and land-based patrols in the Project area.

Goal 4: Preserve Recreation Resources

Avoid, minimize, or mitigate existing and future Project-related impacts to recreation resources in the Project area and help preserve the resource base.

- Objective 4a: Allow for recreation use of the Project reservoirs and reaches by providing facilities that accommodate a range of reservoir pool levels.
- Objective 4b: Through the Recreation Monitoring Program, conduct periodic monitoring of recreation use at Project water bodies and the downstream reaches to assess potential impacts to recreation, natural, and cultural resources over time and take appropriate corrective measures as needed.
- Objective 4c: Through the I&E Program, provide environmental education opportunities in the Project area to foster a better understanding and stewardship of natural and man-made resources.
- Objective 4d: Allow for public access to appropriate Project open space lands to help meet the long-term recreation goals and objectives in the Project area and to maintain the existing recreational experience over time.
- Objective 4e: Focus future recreation development in suitable areas that do not significantly affect the existing recreation experience or sensitive resources in the Project area. Physical and cultural resource constraints will be considered in determining suitability in the adaptive management strategy.
- Objective 4f: In the I&E Program, help protect and interpret significant natural features and enhance the public's recreational experience in the Project area (e.g., through interpretation, trails, Watchable Wildlife programs, etc.).
- Objective 4g: Respect property interests and surrounding natural environments while addressing the need for additional recreation facilities and increased recreation use in the Project area over time.

Goal 5: Coordinate Recreation Planning and Needs

Coordinate future Licensee recreation planning efforts in the Project area with federal, state, and local resource management agencies, public recreation providers, and private recreation providers prior to making new recreation development decisions.

- Objective 5a: In the Recreation Monitoring Program, monitor recreation resources and visitation using monitoring indicators and standards and identify appropriate management actions and associated costs needed to address identified problems.
- Objective 5b: Provide adequate Licensee staffing and resources to address recreation

resource planning and permitting in the Project area over the term of the new license.

- Objective 5c: Participate in comprehensive planning efforts in the Lake Almanor Basin to coordinate implementation of the Draft RRMP over the term of the new license.
- Objective 5d: Periodically consult with natural and cultural resource specialists to ensure that recreational planning, use, and facilities do not limit or unnecessarily infringe on the environmental characteristics necessary to sustain traditional cultural practices.
- Objective 5e: Review the RRMP every 12 years and update the RRMP programs, as appropriate, to address changing conditions over time.

Goal 6: Provide Cost-Effective and Diverse Recreation Opportunities

Help provide cost-effective recreation facilities and programs in the Project area to maximize on-the-ground recreation improvements using available dollars, minimize operational and maintenance costs where possible while meeting standards, and provide for compatible and desirable facilities that help meet the needs of visitors.

- Objective 6a: Help promote recreation facilities and programs that are cost-effective; and work with others on cost sharing of larger projects that benefit visitors to the Project area and area residents.
- Objective 6b: Help provide facilities that minimize, to the extent feasible, long-term O&M costs.
- Objective 6c: Help provide cost-effective recreation facilities that accommodate existing visitor facility preferences, but also allow for future modification if preferences change over time.
- Objective 6d: Help provide a range of recreation opportunities that include developed fee sites and undeveloped or dispersed non-fee sites to allow for a diversity of visitor choice and experience.
- Objective 6e: Allow for appropriate public and private recreation-related opportunities and facilities in the Project area.

Goal 7: Provide Compatible Recreation Opportunities

Help provide recreation resources that are compatible with adopted land and resource plans and policies and sensitive resources in the Project area.

- Objective 7a: Help provide recreation facilities and programs that are compatible with adopted land and resource plans and policies, as well as other Project-related resource needs, goals, and objectives including water quality, cultural, terrestrial, aesthetic/visual, and

aquatic resources.

- **Objective 7b:** Through the I&E Program, help provide environmental education opportunities (e.g., through viewpoints, interpretive signs or kiosks, environmental education programs, and nature trails) that demonstrate compatibility with and stewardship of natural and cultural resources in the Project area.
- **Objective 7c:** Provide recreation facilities that are compatible with the Project operations in the new FERC license.
- **Objective 7d:** Provide recreation facilities and programs that are compatible with private shoreline resorts and residential communities.

THE FOLLOWING SECTIONS ARE STILL IN ANNOTATED OUTLINE FORMAT. Please see the schedule for anticipated completion date for each section below during 2002.

D. PLANNING AREAS

The following planning areas have been defined for implementation of the Draft RRMP. These areas are referenced in the various implementation programs.

1. Overall Project Area

This section will define the project area as it relates to recreation resources. The project area includes the four primary areas associated with the UNFFR project: Lake Almanor and Butt Valley Reservoir, and portions of the Seneca Reach and Belden Reach where project facilities are located. Licensee and Forest Service developed recreation facilities may be included in the Draft RRMP if project-related needs are identified. These sites are located within and adjacent to the FERC project boundary and can be assumed to be in the project's area of influence. Several other dispersed undeveloped day use and overnight sites are included in the project area within the project boundary. These dispersed sites include lakeside (on Lake Almanor and Butt Valley Reservoir) and riverside (in the Seneca and Belden Reaches near project facilities) day use and overnight sites and trails.

2. Areas Within the FERC Project Boundary

This section will define the area within the FERC project boundary.

3. Planning and Monitoring Management Units

For purposes of recreation planning and monitoring related to the project, this section will describe management units (reservoir areas or river reaches) along the reservoirs that will be presented in an exhibit. Future management units to be identified will be based on geographic area or recreation experience type. Periodic data collection and analysis should occur at the management unit level to allow for adequate decision making on a unit-by-unit basis.

E. RECREATION MANAGEMENT PROGRAMS

This section will describe the Draft RRMP's six programs that are intended to meet the project goals and objectives including:

1. Recreation Facility Development Program
2. Recreation Operations and Maintenance Program
3. Recreation Monitoring Program

4. Resource Integration and Coordination Program
5. Plan Review and Revision Program
6. Interpretation and Education Program

The Licensee will have the responsibility for addressing the various recreation resource measures identified by the RWG, utilizing agency and other stakeholder consultation, in the development of the Draft RRMP. The Draft RRMP programs are intended to detail specifically how the Licensee will implement their specific measures and responsibilities over the term of the new license.

1. Recreation Facility Development Program

This section will describe the Recreation Facility Development Program that is intended to describe Licensee's role in helping meet some of the existing and future recreation facility needs identified in the project area by the RWG or during agency consultation. The facility component of this program is intended to:

- Define the construction-related responsibilities of the Licensee and/or construction funding provided to others by the Licensee;
- Identify proposed recreation development projects and their estimated costs;
- Provide conceptual diagrams of anticipated improvements; and
- Discuss facility development standards and criteria to be used by the Licensee.

The operations and maintenance component will describe the Licensee's role in the operation and maintenance of existing and future recreation facilities in the project area. It is anticipated that periodic plans will be developed to guide O&M activities for particular timeframes. The timeframe for each set of planned O&M activities will be reconfirmed during annual planning and coordination meetings. The Licensee's role in funding annual O&M of Licensee and non-Licensee recreation facilities and use areas will be identified in a future exhibit. The O&M component will define facility and use-area maintenance standards.

- a. Recreation Facility Development and Upgrades

This section will describe expanded and renovated recreation facilities that will be constructed through the new term of the license following periodic review, prioritization, and approval. These improvements will be funded and/or constructed by the Licensee.

- b. Recreation Development Locations

This section will describe the locations of proposed recreation improvements that will be listed in a future exhibit and indicated in diagram format in a future exhibit. For Licensee-constructed and designed

projects, construction documents (plans, specifications, and permit applications) will be prepared as required prior to construction for review and approval by the applicable jurisdiction.

c. **Recreation Facility Design Guidelines**

This section will discuss appropriate design guidelines, siting criteria, and other standards that should be consistently used to:

- Comply with public health and safety codes and regulations;
- Provide design continuity and consistency with the ROS class (or equivalent) where the site is located;
- Provide a high quality visitor experience and/or enhance visitor convenience;
- Minimize facility and site deterioration and operations and maintenance costs; and
- Protect the environment.

Recreation facilities constructed within federally managed lands should be designed and constructed to meet federal facility construction standards and other appropriate design guidelines for the appropriate ROS class (or equivalent). Project-related recreation facilities constructed on Licensee lands should also be designed and constructed to be consistent with the appropriate ROS-type class (or equivalent)

d. **Americans with Disabilities Act (ADA) Compliance and Facility Upgrades**

This section will describe ADA-related improvements that have been identified. Upgrades to campground and day-use facilities, when modified or constructed, should conform to Americans with Disabilities Act Accessibility Guidelines (ADAAG) and standards formally adopted at the time of construction.

e. **NEPA Compliance and Environmental Project Review**

This section will describe environmental compliance for future recreation projects on federal lands. These projects will need to be reviewed by a lead federal agency, in compliance with the National Environmental Policy Act (NEPA) and other environmental and land use regulations and policies, including Forest Land and Resource Management Plans and appropriate Records of Decision. This section will describe who will prepare necessary environmental documentation and fund the costs of NEPA or other compliance. This section will also address future recreation projects on project lands that may involve the issuance of

permits, licenses, authorizations, or other certifications.

f. **Agency and Public Review**

This section will address opportunities for agency, tribal, and public review of proposed recreation projects, programs, and improvements.

g. **Facility Construction Coordination, Scheduling, and Phasing**

Anticipated facility construction timeframes will be identified in exhibits. This section will discuss the development of periodic implementation plans to guide decision making for planned construction project periods. Construction project timeframes will be reconfirmed during annual planning and coordination meetings.

The Draft RRMP, with further consultation, will describe project selection and prioritization criteria to be used in developing implementation plans and in annual review of projects. The criteria to be developed should foster group consensus building and decision making and should include strategies to address:

- How, when, and if proposed projects move up or down the list of identified needs;
- How unexpected opportunities are addressed;
- How new cooperative or partnership funding sources are evaluated and addressed;
- How proposed projects are matched with available funding; and,
- How priority projects are addressed.

2. **Recreation Operations and Maintenance Program**

This section will describe the Licensee's operation and maintenance responsibilities, provide estimated costs for operations and maintenance, and discuss general facility and use area maintenance standards.

a. **Recreation Facility and Site Operations and Maintenance Program**

This section will identify the Licensee's responsibilities for recreation facility O&M.

b. **Operations and Maintenance Standards**

This section will describe how O&M standards for federal and private lands will be applied to recreation facilities and use areas, based on published recreation maintenance standards. The level of O&M should be

consistent with the ROS class (or equivalent) where the facility or use area is located, as well as applicable federal health and safety codes, as appropriate.

c. **Shoreline Access**

This section will describe how public shoreline access will be provided, such as the maintenance of signs, trails and trailheads, swimming areas, and boating access sites.

3. **Recreation Monitoring Program**

This section will describe the Licensee's role in providing periodic monitoring of recreation resources in the project area. The monitoring component is integral to the long-term management of the Draft RRMP. Features of this program are described below.

a. **Monitoring Program**

This section will describe the Licensee's use of a modified LAC-based approach to monitoring and use of an ROS-type (or equivalent) approach to define different recreational settings in the project area. These two approaches will be used to help maintain the desired resource values and recreation experiences in the project area over time.

Specific details of the monitoring approaches will be presented in future exhibits. ROS-type classes (or equivalent) to be used in the Draft RRMP will be presented in a future exhibit. Monitoring variables (including values to be maintained and enhanced, key indicators of overall condition, management standards to be used, management actions to be implemented, and monitoring to be implemented) by ROS-type class (or equivalent) and identified monitoring sites will also be presented in a future exhibit.

One of the initial tasks during the first five years of implementing the Draft RRMP will be field testing the monitoring standards and indicators so that a baseline can be established. It is anticipated that some modifications to monitoring standards and indicators may be needed. Once these are established as a baseline, follow-on monitoring analyses will be used to track changes over time.

b. **Study Requirements and Survey Scheduling Techniques**

To implement the approaches to monitoring described above, periodic surveys and data collection in the project area will be needed. The

Licensee will be responsible for conducting periodic visitor surveys over the term of the new license. Recreation use and impact data will need to be collected to support the monitoring program. The Licensee and the Forest Service are already collecting some of these data on an annual basis. Other data that are not currently being collected will be defined and collection responsibilities identified. The results of these survey and data collection efforts will be used to make informed decisions about various measures to be implemented.

To support the monitoring program, two levels of periodic surveys and data collection efforts are anticipated:

- Annual data collection at recreation sites, use areas, and management units using readily available data collected by recreation providers during normal routine management of recreation resources; and
- More in-depth recreation surveys and data collection conducted periodically if needed (every 12 years).

A number of short-term and long-term survey and data gathering methodologies will be considered. These methodologies will focus on generating appropriate data to be used to identify when monitoring threshold levels are reached or exceeded will be presented in a exhibit.

c. **Reporting Requirements**

This section will describe the Licensee's periodic reporting requirements for the project area. Periodic assessment reports will be prepared by management unit and will document:

- Statistical methods applied in analyzing monitoring data;
- Success of developed recreation visitor management efforts;
- Recreation facility use levels and counts;
- Overall recreation facility and shoreline conditions;
- Trends in recreation facility use; and
- Projected needs based on monitoring standards, indicators and thresholds.

These reports will be used by the Licensee and others to assess visitor trends, assess whether monitoring thresholds have been exceeded, assess the success of visitor management control measures, and make plans for the next timeframe.

d. **Future Facility and Recreation Resource Decision Making**

This section will describe how recreation resource decision-making will

occur in the project area over the term of the new license. A model for decision making for when to initiate or implement components of the Draft RRMP, as well as other appropriate actions, will be developed based on further consultation. It is expected that decision-making will be based on the analysis of monitoring report findings.

The Licensee will participate in periodic recreation planning and coordination meetings with other recreation providers in the project area. At these meetings, it is expected that recreation resource management decisions for the project area will be made or reaffirmed, such as:

- Plan, design, expand, renovate, and/or construct facilities in one or more phases per future exhibits;
- Monitor facilities and resource conditions at sites in question;
- Begin planning and designing facility renovations;
- Pursue or delay enhancements; or
- Modify monitoring indicators if conditions warrant.

4. Resource Integration and Coordination Program

This section will develop a process by which the Licensee can make coordinated, timely, and informed decisions related to their responsibilities and which will be defined in the Draft RRMP. This process will likely be the same or similar to other processes developed for other resource areas. Because of simultaneous activities occurring by various technical resource groups, both formal and informal communication is necessary. An important goal of this communication is to achieve a balanced integration of sometimes competing or complementary resource goals for project lands and waters. The Resource Integration and Coordination Program may include processes such as:

- Conducting ongoing and regular consultation with necessary parties and resource groups;
- Sharing of information that is used to make resource decisions;
- Clarifying resource goals, objectives, and priorities as necessary; and
- Coordinating or conducting an assessment or consultation that will help solve a particular problem or resolve key issues.

5. Plan Review and Revision Program

This section will describe how the Draft RRMP will be reviewed and revised over the term of the new license. Recreation and resource conditions can be expected to change over time. It is possible that unforeseen recreation needs, changes in visitor preferences and attitudes, new recreation technologies, or other actions will arise over the course of the new license term. As a result, the Draft RRMP, or portions thereof, may be updated and/or revised. Revision of the Draft RRMP

will require that changes be fully documented. The frequency with which the Draft RRMP is revised or updated will likely depend on monitoring results and management responses made over time. This section will develop guidelines for how the Draft RRMP will be reviewed or revised over time for efficiency and continuity purposes.

6. Interpretation and Education Program

This section will discuss the Licensee's role in the area of interpretation and education (I&E) within the project area, including a component on signs. The purpose of the I&E Program is to provide enhanced experiences for visitors and residents, encourage participation in resource protection measures by area visitors, and promote cooperative, safe behaviors to benefit all project area resources and visitors. With the assistance of the Licensee, recreation providers and resource managers in the project area will develop the program. It will identify interpretive themes, media, sites, and services for interpretation and environmental and cultural education in the project area. It is expected that the plan will involve multiple resources and that other resource work groups will desire to participate in the development and implementation of the plan and program.

Development of the future detailed I&E Program will involve review and selection of:

- Appropriate themes;
- Appropriate interpretive media;
- Consistent signs and their design;
- Prioritized sites where the media will be located;
- Services to be provided; and
- Program elements to support the needs of other resource areas including aesthetics/visual, fisheries, water quality, terrestrial, and cultural.

This section will also describe a support program to maintain the I&E Program over the term of the new license.

F. REFERENCES AND LITERATURE CITED

This section will list all Draft RRMP references and literature cited. References for this annotated outline include:

USFS 1990. U. S. Forest Service. Recreation Opportunity Spectrum Primer and Field Guide, General Technical Report R6-Rec-021-90. April 1990. Washington, D.C.

USFS 1985. U. S. Forest Service. The Limits of Acceptable Change (LAC) System for

Wilderness Planning. General Technical Report INT-176. January 1985. Ogden,
Utah.

EXHIBITS

1. Exhibit 1 — Proposed Recreation Measures

This future exhibit will provide a detailed listing of recreation measures that the Licensee would implement over the term of the new license.

2. Exhibit 2 — Estimated Costs of Proposed Recreation Measures

This future exhibit will provide a detailed cost breakout of recreation measures that the Licensee will be responsible for implementing over the term of the new license.

3. Exhibit 3 — Locations of Proposed Recreation Measures and Conceptual Site Plans

This future exhibit will provide conceptual diagrams of recreation measures that the Licensee will be responsible for implementing over the term of the new license.

4. Exhibit 4 — Land Management Units

This future exhibit will define and map Recreation Opportunity Spectrum (ROS) classes (or equivalent) and management units (reservoir areas and river reaches) in the project area for use in developing the Draft RRMP and recreation measures that the Licensee will be responsible for implementing over the term of the new license.

5. Exhibit 5 — Limits of Acceptable Change Indicators and Standards

This future exhibit will identify limits of acceptable change (LAC) key indicators and monitoring sites for use in developing the Draft RRMP.

6. Exhibit 6 — Monitoring Sites

This future exhibit will identify monitoring sites used for developing, implementing, and maintaining the measures defined in the Draft RRMP.

7. Exhibit 7 — Agreements Between the Licensee and Other Parties

This future exhibit will provide all agreements between the Licensee and other parties, such as Forest Service Collection Agreements.

8. Exhibit 8 — FERC License Terms and Conditions for Recreation Resources

This future exhibit will provide the final FERC License Terms and Conditions following issuance of the new license.

9. Exhibit 9 — Baseline Recreation Studies Conducted During Relicensing

This future exhibit will serve as a database for future reference and will include all recreation resource surveys, planning studies, and inventories conducted for relicensing by the Licensee. Additional study results from future studies may be added over time.

AUGUST 27, 2002

MEETING AGENDA

**Upper North Fork Feather River Hydroelectric Project
FERC Project No. 2105**

**Recreation, Land Use, and Aesthetics Work Group
August 27 and 28, 2002 Meetings
Chester Memorial Hall, Chester, CA**

August 27, Tuesday (9am to 4pm with lunch break) – Recreation Resources

- Agenda review and comment
- Meeting minutes approval (Aug. 8 and 9)
- September meeting dates to be confirmed
- Action item list review (Recreation)
- Recreation site distribution (existing and proposed)
- Recreation site plan updates
- Stover Ranch site and 1st Avenue shoreline access options in Chester
- Southwest shoreline access zone – access points
- Anticipated capacities of recreation sites
- Visitor use trends at public campgrounds (3 to 5 years)
- RRMP – comments on sections currently out for review (Aug 9 version)
- RRMP- additional sections added (Aug 27) – planning areas; RRMP programs including monitoring, resource integration, plan review and revisions, and interpretation and education (I&E)
- Prelim. responses to comments on the Draft Lic. Appl.
- Adjourn

August 28, Wednesday (9 am to 12 pm) – Land Use, Aesthetics and Shoreline Mgmt.

- Agenda review and comment
- Action item list review (Land Use, Aesthetics, and Shoreline Mgmt.)
- Shoreline erosion issue
- Potential shoreline erosion control measures
- Septic systems
- Permitting outreach
- Dust and fire suppression activities
- Prelim. responses to comments on the Draft Lic. Appl.
- Lake levels and competing resource values (discuss agenda for a future meeting)
- Adjourn

MEETING NOTES

**UNFFR PROJECT RELICENSING (FERC No. 2105)
Recreation, Land Use, and Aesthetics Work Group Meeting
August 27, 2002
9 A.M. to 4:00 P.M.
Chester Memorial Hall, Chester, CA**

Attendees:

Bill Cheek	596-4601	voyagers@psln.com
Marvin Alexander	343-6575	Plumas10@psln.com
Mac Hinman	259-2014	hThinmaniii@yahoo.com
Marian Liddell	258-3115	chesterprogressive@hotmail.com
Jack Gauger	259-3058	gauger@thegrid.net
Bill Dennison	259-2058	dennison@citlink.net
Jerry Duffy	256-3227	dyermt@citlink.net
Chuck Warner	259-4490	
Aaron Seandel	259-4335	aseandel@psln.com
Bob Lambert	259-2272	ralambert@attbi.com
Mike Willhoit	259-3647	mcwill@psln.com
Dean Larson	259-4288	
Mary Getz	925-455-5070	mgetz@reloaction.com
Joan Stewart	259-3643	
Mike Taylor	534-6500	mftaylor@fs.fed.us
Michael Condon	283-7820	mcondon@fs.fed.us
Lee Hoge	259-4646	wacc@citlink.net
Mike Conlon	925-246-6224	mmcf@pge.com
Dick Davis	259-5341	addickted@earthlink.net
Kirby Gilbert	425-482-7701	kgilbert@fwenc.com
Mark Sanford	530-894-4653	ams0@pge.com
Tim Schreiber	206-622-1176	schreiber@edaw.com
Chuck Everett	206-622-1176	everettca@edaw.com
John Mintz	415-973-5779	jsm9@pge.com
Christi Goodman		

John Mintz called day #1 of the meeting to order and provided a general overview of the intended focus of the day's meeting.

Bill Dennison expressed that he was disappointed at Tom Jereb's absence from the meeting. John apologized for Tom's absence and indicated that Tom had just returned from vacation and had several issues in San Francisco that needed his attention.

The minutes from the previous August meetings (August 8th and 9th) were discussed, with Bill Dennison reading from his emailed comments on those minutes. The minutes for the

August 8th and 9th meetings were not approved, and will be reissued with Bill Dennison's comments amended to the minutes.

Regarding the Dyer Mountain Resort, Jerry Duffy of the Resort explained that the planned development is moving forward as fast as something that involved can be pushed. The slowdown is due to the stage of the development process that it has currently reached.

Action Items

Chuck Everett handed out a new Action Item List created from the previous meetings in August. John Mintz also proposed that a new separate issue status document be created that shows where stakeholders and PG&E stand on each issue so that there will be no confusion. John Mintz proceeded to read through the Action Item List, discussing the actions that have been addressed since the last meeting.

1—Fish cleaning stations: John Mintz contacted Sharon at the State Regional Water Quality Control Board, who stated that fish cleaning stations are generally good for water quality, provided that they are well maintained.

2 & 3—Survey action items: John Mintz stated that John Baas would be at the meeting in the afternoon to go over confidence levels and local responses to the recreation surveys.

Marvin Alexander asked that an analysis be done to address the issue of new development pressure over the next 10 to 20 years, and that new recreation facilities be based on projections of future growth, not on the current situation. Chuck Everett responded that future demand projections from state and other published sources were used. Bill Dennison responded that he has found the State projections to be low and asked instead that realtors be approached to get the real story of growth in the area. John Mintz responded that three projections – the State of California Department of Finance (DOF), the State of California Department of Parks and Recreation, and the United States Forest Service projections – were used to estimate growth in recreation demand over the license period. These sources are industry standards use in recreation planning. John indicated that PG&E would consider additional professionally acceptable sources if others submitted them to PG&E. Kirby indicated that real estate development projections are generally included in the State's DOF projections. Chuck indicated that EDAW would reassess planned residential development at or near Lake Almanor for its future impact on long term needs, potentially to day use facilities.

4, 23 & 31—Action items that called for John Mintz discussions with Tom Jereb have not occurred, as Tom Jereb had been away on vacation.

5—PSEA Camp fire protection capacity: Mark Sanford reported that he had spoken with the Prattville Fire Department, who requested secondary fire protection measures. The PSEA Camp currently has water storage tank and a fire hydrant has been installed on Almanor Drive West for use by the Prattville Fire Department for local community needs. The concern was that the PSEA Camp system should have sufficient fire

protection measures for its own needs as well as for structures adjacent to the Camp. Mark Sanford stated that Pratville Fire Department has requested to place a water pipe to the lake and a pump, both on PG&E property. Mark has requested the fire department provide him drawings of their proposal. Mike Willhoit mentioned that there is also concern about fuel management issues in the PSEA Camp area. Mark Sanford responded that the thinning that had occurred at the site last year was only of non-merchantable trees. Mike Condon of the USFS stated that he had gone by the site recently and found that there was still excessive fuel on the site as well as ladder fuel in the trees. He also mentioned that the Forest Service could assist PG&E in establishing management practices and finding grant money for fire suppression thinning.

6,7,8—Erosion and septic leach field issues: These would be discussed at the next day's meeting (8/28).

9 & 10—Expanding study area beyond ¼ mile: Janie Ackley or Jane Goodwin was not present at the meeting.

11—Contact Dale Knutzen regarding fuel load reduction areas: Mark Sanford provided handouts on fire safety previously provided to him by Dale Knutzen. Mark is attempting to get a hold of him to find out if there are updates to these handouts.

12—Document on Red River Deed assumptions and agreements: John Mintz is working on it.

13, 14, 15—Recreation issues: Chuck will discuss later at the meeting.

16—Expansion of USFS swim beach: Chuck will meet with the District Ranger tomorrow (8/28) to discuss.

17—Swim beach at North Shore Campground: The 2105 Committee had not discussed the issue in order to arrive at a consensus.

18—Map fishing access points: Mary Getz stated that the Fishing Association has published a brochure identifying fishing spots on the lake, and that she would provide one to Chuck Everett (map provided on 8/28).

19—Additional copies: John Mintz passed out additional copies of Lake Level Issues handout to those who wanted it.

20—Tree Removal Policy: Mark Sanford stated that it is the policy of PG&E to ask property owners for permission to access hazardous trees, and that remnants are removed, though the rounds are left for the property owners if they want them. Mark indicated that he is the person to contact to have dead trees removed from shoreline areas, and Mike Best should be contacted regarding trees along distribution power lines. Bill Dennison stated that the response is appreciated, and that they would like to see it in writing. Mike Willhoit contended that the conditions in the current license are clear, but if the resources

are not available to follow through, then it is an insignificant policy. He expressed that the 2105 Committee wants PG&E to allocate funds to follow up on hazard removal. Mark indicated that the current license indicates that the "hazard" should be removed and by cutting down hazardous tree PG&E has been in compliance with the license condition. Removal of the cut down trees from PGE& lands is being addressed by the new policy.

21—Caribou Clubhouse: Michael Condon reported that he has spoken with his USFS management (Plumas National Forest District Ranger) about the topic of the Forest Service potentially finding a concessionaire to take on the Caribou Clubhouse. The Forest Service indicated to make this a viable option they would prefer the entire facility, including the cabins and annex as well as the clubhouse. They don't want to deal with having two separate special use permits for the site. Therefore, the Forest Service would like clarification as to what PG&E is proposing for the site. Mark Sanford responded that currently three of the buildings provide residences for operators, and that there are offices in the annex building, which would need to remain. John Mintz stated that he would discuss the matter with Tom Jereb.

22—Review shoreline erosion information: Aaron Seandel indicated that he was unable to find shoreline erosion report in the DLA. Kirby Gilbert provided additional information on the location.

22a—Hamilton Branch: John Mintz indicated that he had put in a request to Bill Zemke to include the 2105 committee representatives on Hamilton Branch correspondence. John indicated that a notice of the Hamilton Branch initial public meeting for September 30 and site visit for October 1 had recently been sent out. Marian Liddel who had a copy of the mailed notice indicated that both Bill Dennison and Christi Goodman of Plumas County were on the cc list of this mailing. Marion also noted that FERC requires that PG&E publish meeting announcements in the local newspaper, and that no such announcements have been published to date. John Mintz indicated that he would check with Bill Zemke about the status of the newspaper announcement.

Bill Dennison pointed out that he believes that adding the Hamilton Branch development to the UNFFR license is an attempt by PG&E to delay implementing the new license, thus delaying the implementation of the recreation plan. Several stakeholders inquired as to whether the Hamilton Branch issue would be pursued if the PG&E reorganization plan (POR) is rejected. John Mintz responded that it his understanding that PG&E will not pursue Hamilton Branch if the PG&E POR is rejected.

24—Identify non-PG&E Alternatives to floating debris removal: Mike Willhoit pointed out that it is good business for PG&E to provide this service (either pay now or pay in court), as well as good public relations. No alternatives were discussed.

25—Hazard marking plan: Christy Goodman stated that the Sheriff had not received the MOU from PG&E. Mark Sanford responded that the MOU has just come back from PG&E's attorneys, who were reviewing and revising the MOU to address the Sheriff's comments.

26—Receive input from shoreline neighbors re: Strobe Light: Mike Willhoit stated that the 2105 Committee suggests that a half-shield be used on the strobe lights to keep them from bothering neighbors. Mike felt it was PG&E responsibility to contact the neighbors. John Mintz agreed to make these contacts. A concern was expressed that providing strobe lights poses a liability issue for hazards that are not marked. Kirby Gilbert also expressed concern that putting in the lights might encourage nighttime use of the lake. Mike Willhoit responded that PG&E will pay either way in the case of an accident on the lake; that they can do nothing and settle out of court; or do something and test the merits of their actions in court.

27—Dust abatement proposals at Butt Valley: John Mintz stated that dust abatement proposals are in the Draft License Application (DLA). Forest Service representatives responded that they would like consideration of pavement of the County road along the Butt Valley road to the last campground (Cool Spring), or 3 miles. Christi Goodman indicated that the County does not plan on paving this road. Chuck Everett indicated another option was extending the paved road from Ponderosa Flat Campground down to Alder Creek Boat Launch to benefit boaters (1.5 miles).

28—Fuel Load Reduction: John Mintz stated that there would be further discussion with the USFS and Dale Knutzen on this issue.

30—Bear issue: Chuck Everett stated that PG&E discussed the issue with CDFG and is still considering installing bear-proof food lockers at its recreation facilities. No decision has been made yet.

32—Beetle tree damage: Mark Sanford spoke with CDF, who reported that this is an issue related to the drought season last year, which causes increased beetle infestations. The beetles have already left the tree by the time it begins to show signs of stress from infestation, so infested trees are hard to locate. Measures to abate the problem would need to be extreme—removing trees within a fairly large radius of infested trees—causing a severe aesthetic impact, and is impractical. With wetter winters, the beetles will die out, and the problem will subside. Bill Dennison stated that there area also trees dying from root erosion, and that it needs to be mitigated.

33—PG&E representative at Lake Almanor: Mark Sanford and John Mintz thought that having a PG&E staff person stationed in the area during the summer months was generally a good idea, but needed to discuss this potential internally at PG&E.

September Meetings

John Mintz discussed the agenda and location of the meetings to be held in September. He suggested that they might be held in Oroville in order to get more agency representatives to attend. Aaron Seandel responded that it is important to maintain the meetings in Chester as this is where the community that will be most affected by these decisions is located. More people from the community are likely to become involved in the process as it approaches the final stages. He also pointed out that these meetings are

not of much value without people who can make decisions for PG&E present, specifically Tom Jereb.

Christi Goodman pointed out that the agency representatives are public servants and are obligated to be at these meetings. They should not be using the distance from Sacramento as an excuse not to attend. Michael Condon proposed that perhaps some meetings that will be more technical in nature could be held elsewhere, but that RLA Work Group meetings continue to be held in Chester. Mike Taylor, however, expressed concern about splitting up the meetings because these meetings will address the issue of lake level. Bill Dennison stated that since they (the 2105 Committee) have been involved in the process up to this point and want to go to the end, the meetings should continue to be held in Chester where more 2105 Committee members are located.

There was a brief break, followed by continued discussion of future meetings. John Mintz asked if September 11th and 12th were satisfactory meeting dates, as had been discussed at the previous meeting on August 9th. There was some concern expressed about meeting on the 11th (one year anniversary of 9/11), and it was agreed that the 11th meeting would be for the morning only, as some had patriotic obligations during the afternoon.

Some concern was also expressed about whether there would be any evening meetings for working people to attend. Concern was also expressed that announcements for upcoming meetings include agenda items, as the public might be more likely to attend if they have a better idea as to what will be discussed at the meeting.

John Mintz mentioned that Tom Jereb is considering either September 24th or 25th as possible dates for an inter-resource meeting, likely in Sacramento. Bill Dennison proposed that a table be created on a flipchart stating the issue and the stance of the stakeholders and PG&E.

PSEA Camp

John Mintz brought up the issue of converting the PSEA Camp to a public facility, which had been proposed by 2105 Committee members at a previous meeting. Bill Dennison stated that this did not need to be made an issue. The 2105 Committee and PG&E were in agreement that the camp should remain as a PSEA site. John introduced Mike Conlon, a PSEA representative, who described the PSEA organization, stating that it is a non-profit entity, separate from PG&E. He also explained that the beach area has been open to the public as of two years ago. He welcomed the proposed improvements at the PSEA Swim Beach.

Recreation Site Distribution

Chuck Everett stated that it is one of the goals of the recreation plan (RRMP) to achieve a greater dispersal of recreation sites around the lake, (particularly to the north and east) and proceeded to describe several of the new proposals that PG&E is considering.

Stover Ranch: The primary issues regarding the proposed shoreline access option at Stover Ranch include a concern about vandalism at the site, and that PG&E sold much of the land to Chester PUD. Chester PUD has expressed concern about people getting near their ponds. The site would require an increased management presence, would need to be barricaded in areas to reduce vehicular access, trails would need to be improved, and an interpretive program would be considered. The ranch is not eligible for historic designation per PG&E's cultural resource specialist. Stakeholders expressed approval of the plan.

1st Ave Shoreline Access: Chuck also mentioned the proposal on 1st Ave, to the south of Chester. This project could be done in conjunction with the USFS and Chester Recreation and Parks District. The site would be for shoreline access and a future LART trailhead. Positive sentiments were expressed for this project with the stakeholders showing a desire for both this site and the Stover Ranch site to be included in the RRMP.

New East Shore Campground: Bill Dennison stated that it is a good plan and offered that there is also potential for expansion at this site on the other (east) side of Highway 147.

East Shore DUA/conversion to Group Campsite: The site could be converted from a day use area to a group RV campsite. A comment addressed the presence of water at the site. Mark Sanford responded that there is a well with pump, but studies would need to be done to determine the adequacy of the site for septic.

Canyon Dam Day Use Area: An information kiosk might be located here per the future Interpretation and Education program (I&E). Also there is undeveloped property here that might be held in reserve for future recreation expansion, possibly for campsites. Meeting participants questioned the exact size of the expansion area. Chuck Everett responded that he would get a parcel map to determine the area available.

Almanor Campground Swim Beach Expansion: Chuck Everett would report back at the next meeting on his findings from his meeting with the Forest Service (District Ranger).

A meeting participant expressed an interest in having access restored to the area near the Bailey Creek Springs, as this is an area where good trout fishing is located. The area is popular with tube anglers. Chuck Everett responded that the Catfish Beach day use area and/or campground would provide improved access to a point near the Bailey Creek Springs area. Tube anglers could float to the springs area from the end of the improved access area.

Boat Ramps: Representatives of Plumas County stated that getting boat ramps extended on Lake Almanor and Butt Valley Reservoir are high priorities, and want landowners to be able to get permits to build boat ramps at Lake Almanor. John Mintz responded agreed that at least one public boat ramp should be extended at Lake Almanor and that PG&E generally provides permits for those wishing to extension their boat ramps. The CPUC request to review PG&E permits, though, has recently held up the permitting process, but this should not be a long term issue. One meeting participant questioned the

need to extend the Alder Creek Boat Launch ramp at Butt Valley Reservoir. Chuck Everett responded that he would check into this need.

Butt Valley Angler Access Trails: Michael Condon stated that the biggest problem with these sites currently is that there are a lot of people, and asked whether there will be adequate room made available. Chuck Everett responded that the intention of the plan is to improve existing access, not to increase capacity to any great extent.

Butt Valley Boat-in/Walk-in Sites: Regarding the presence of the PG&E gate at the head of the road along the west shore of the lake, Mark Sanford responded that it is there for security purposes. Because the intake tower is located in that vicinity, the gate can't be moved closer. Michael Condon pointed out that it is important to keep that road closed for habitat and fire concerns as well.

Chuck Everett asked that people make comments on the site plans and get them back to him by the next meeting. Christi Goodman noted that there was no mention of a bike trail along Highway 147 on the East Shore. Chuck Everett responded that John Mintz still needs to discuss the matter with Tom Jereb. He asked if there is a trail route plan that the County could give him. Christi Goodman responded that the trail route they had in mind went at least as far as the proposed new East Shore Campground, though ideally it would extend to the northern extent of PG&E property.

The meeting adjourned for lunch.

Recreation Survey Results

Dr. John Baas and Jim Vogel addressed issues related to the recreation survey data and methods. John Baas passed around a handout with a summary of his presentation on the survey data, and proceeded to go over its contents. He stated that Gary Machlis of the National Park Service—a noted expert on recreation surveys—has found that response rates of 10-30% are sufficient, and that under 10% one should “use caution” in drawing conclusions based on survey data. John Baas also pointed out that in private industry market research, 10-15% response rates are considered satisfactory. He then went on to explain that the recipients were determined randomly from county parcel maps. A sample size of 50 is considered an adequate minimum number of responses for a smaller population within the larger study area. As a result, Chester responses (43) were lumped in with other communities in the area to get sufficient data for some purposes. Christi Goodman pointed out that there are other inputs that affect the recreation plan, including input from the 2105 Committee. Bill Dennison again pointed out that the realtors are an anecdotal source for determining future growth in the area. Mary Getz stated that the Lake Almanor Country Club (LACC) surveyed its own residents, received a high 71% response rate, and found that the overwhelming response was that LACC's own private recreation opportunities are insufficient. High responses are more common when people are directly affected.

John Baas described the differences between weekend users and weekday users in the onsite surveys. Using a 9 point scale, differences between the 2 groups varied by only 0.6. The issues where they differed most significantly were perceived crowding, enjoyment of the site, and safety. Mike Willhoit questioned the value of results based on expectations, asking whether a situation could be regarded as sufficient because it is considered "no worse than expected." John Baas responded that prominent recreation researchers have found that getting at expectations is a good way to get meaningful information from survey responses.

Jim Vogel then went over the differences between Chester responses and other communities, and found that the responses were not significantly different. Only five of the 34 items revealed a difference in the perception of Chester residents versus other towns in the area. These items were: ability to launch a boat, use of alcohol, water level fluctuations, exposed shoreline, and shallow areas. These issues were perceived to be somewhat larger problems to Chester residents than to residents of other communities.

Mike Willhoit asked whether responses showed a change over the course of the summer, to which Jim Vogel responded that the mail surveys were not time specific but addressed general perceptions. Mike Willhoit expressed concern that the survey may not have expressed the frustration of boaters during a season when they could not easily launch boats on the lake from July on because of low water levels. Mike Condon felt the survey responses likely reflected that users perception that Lake Almanor is a relatively easy reservoirs to launch a boat compared to other reservoirs in the area that fluctuate considerably more. John Baas indicated that the mail surveys were distributed after the summer season. Bill Dennison asked if there were any survey data on the impact of the lake level on the economy, specifically tourism. John Mintz responded that private resorts reported high occupancy during the low lake level year.

2105 Committee Lake Level Proposal

Members of the 2105 Committee passed around a copy of their new Lake Level Proposal and presented its details. The 2105 Committee proposes that at the end of the calendar year, PG&E draw down the lake to an elevation no lower than 4,480 feet and that PG&E monitor power releases from January through May in order to refill and maximize lake level by the end of May. Through the summer months, PG&E could draw down the lake no more than 4 feet from the pool level at the end of May. These standards were developed from average lake levels and are not significantly off of the average per the 2105 committee. The 2105 Committee would like this proposal to become a license condition, and would like comments from PG&E on the proposal. John pointed out that the end of year draw down was considerably higher (4480') than the current minimum operating level (4466'), particularly during a period when recreation use is low. Kirby emphasized that having fixed targets, greatly limits hydro operating flexibility and value, but also indicated that such lake level proposals are common conditions in FERC licenses. John indicated that the proposal would be provided to Tom Jereb and discussed at the future lake level meeting.

Lake level affect on visitation

John Mintz stated that visitor use levels do not significantly decrease during low water years. Chuck passed around information on occupancy trends at Lake Almanor Campground, and presented the information from the handout. Concern was raised as to whether people are willing to pay increasing fees over the years for rustic camping at PG&E and USFS campgrounds. This observation might be creating the flatness of the use at these sites. Chuck Everett acknowledged that as populations age, they like to have more amenities, including showers. Kirby Gilbert pointed out that Lassen National Monument also shows flat visitation, and that this is a good indicator that the trends presented are valid for this area as well. Aaron Seandel asked whether there might be some effects on travel because of the 9/11 events. Chuck Everett responded that there was a "bump" in use since that event, but that it has generally reduced in recent months. He went on to state that new development in the area will likely have an impact on day use areas but not likely at campgrounds. Chuck added that he would be reevaluating the affect of future residential development on future facility needs, particularly day use areas.

Aaron Seandel stated that there is a need for careful monitoring. When the triggers are reached they should be acted upon in a timely manner. Michael Condon pointed out that a "License Opener" could be built into the new license and that an objective trigger be established. John Mintz responded that the only current professional used trigger he is aware of is the USFS's 60% seasonal occupancy rate trigger. Michael Condon responded that the USFS's Almanor Campground will always be a little lower because so many of the campsites are far from the water and people often go elsewhere rather than camp so far from the lake. Chuck Everett responded that that preferably that more than one trigger be used (e.g. season-wide occupancy, peak time occupancy, and the number of times that capacity is reached). Also perceived crowding and environmental impacts could be used to judge when a trigger has been reached. Mike Taylor mentioned that money could be set aside in a fund that would not be accessible until the triggers come in order to ensure that the appropriate money exists to take action when needed. John Mintz indicated that once a trigger becomes a condition of the license, the license is obligated to come up with the funds to implement trigger items.

The conversation moved again to the topic of lake level, and its impact on the local economy. A point was made that Holiday Market gross sales could indicate an impact on the local economy. It was agreed that the lake level issue could not be settled by the group present at the meeting.

The meeting was adjourned until the following day.

UNFFR Visitor Surveys

**Presentation given to
Recreation, Land Use, and
Aesthetics Working Group
August 27, 2002**

UNFFFR Visitor Surveys-Response rates for other recreation studies in California

Concern: representative of survey results

- 1992 statewide survey for DPR, mailback response rate was 40%
- 1997 statewide survey conducted for DPR, mail back response rate was 53% *(with incentive)*
- 2000 statewide survey of visitors to federal lands (telephone response rates 35-40%, depending on subgroup)
- UNFFFR (all survey groups) mailback response rate was 32%

UNFFR Visitor Surveys-Low lake levels and displacement

Concern: 2001 was an abnormal year

- Some visitor impacts did occur as a result of lake levels in 2001 (Section 5.2.1 and 5.2.2)
- However, attendance data from 1997-2001 suggest relatively constant occupancy levels
- Some data were collected at sites (overflow area) beyond the ¼ mile project boundary
- Area resident data best available re. displacement

UNFFR Visitor Surveys-Reasons for low response rates

- Part of national trend of declining survey participation
- Lower educated individuals less likely to respond (Kubota, 2002, pers. comm)
- If level of interest is low, response rate likely to be low (Baas et al., 1984; Baas 1986)
- Lowest responding group (Towns and Environs) lives furthest from Lake Almanor

UNFFER Visitor Surveys- sampling error

- “Error” refers to variation from the true population value.
- “Population” refers to all individuals in area x or y (i.e., Chester, Plumas county)
- Proportion of population sampled doesn't matter much once population size is 1000

UNFFR Visitor Surveys-sampling error

- Variation in responses to a question can have a big influence on the amount of error
- Amount of error considered acceptable for decision making varies widely among professions

Apply

UNFFER Visitor Surveys-Sample sizes and error rates

not less than 50 responses

Pop. Size	+/-10% error	+/-10% error	+/-5% error	+/-5% error
1000	88 responses	58 responses	278 responses	198 responses
10000	95 responses	61 responses	370 responses	240 responses

Source: Dillman, D. 2000. Mail and Internet Surveys, Second edition.

UNFFR Visitor Surveys-Return rates for area residents

Community	Number mailed	Number returned	Response rate
Chester	189	43	23%
Greenville	164	28	17%
Westwood	103	15	15%

Corrected* Response rates for Area Resident Survey

Group	Number Mailed	Number Returned	Response rate
Shoreline	502	188 (195)	37% (39%)
Backlot	499 (517)	153 (178)	31% (34%)
Towns and Environs	626 (608)	117 (113)	19%

* Numbers in parentheses represent corrected values

UNFFFR Visitor Surveys-Response rates

Resource Area	Number Mailed	Number Returned	Response rate
Lake Almanor	828	250	30%
Butt Valley	235	133	57%
Belden	162	75	46%

UNFFER Surveys-Differences between weekday and weekend users

- Analyzed responses to on-site survey, which included questions that asked visitors to evaluate their *current experience*, which included:
 - Overall crowding
 - Crowding by segment of Lake Almanor
 - Crowding by resource area
 - Enjoyment of lake and river-related activities
 - Safety for lake and river-related activities

UNFFR Surveys-Differences between weekday and weekend users

- Generally, minor differences were found in average responses to questions from the on-site survey
 - For example, differences between weekend and weekday users were typically 0.6, for a 9 point scale.

Chester Residents vs. Other Towns

- No sig. difference in perceptions of crowding at primary res. area or effects on enjoyment
- Significant differences in perception of problems for 5 of 34 items (bigger problem)
 - Ability to launch a boat (slight/moderate problem)
 - Use of alcohol (slight/moderate problem)
 - Water level fluctuations, exposed shoreline, shallow areas (moderate/big problems)

Area

Chester/Lake Almanor West/Peninsula vs. All Other Shoreline Residents

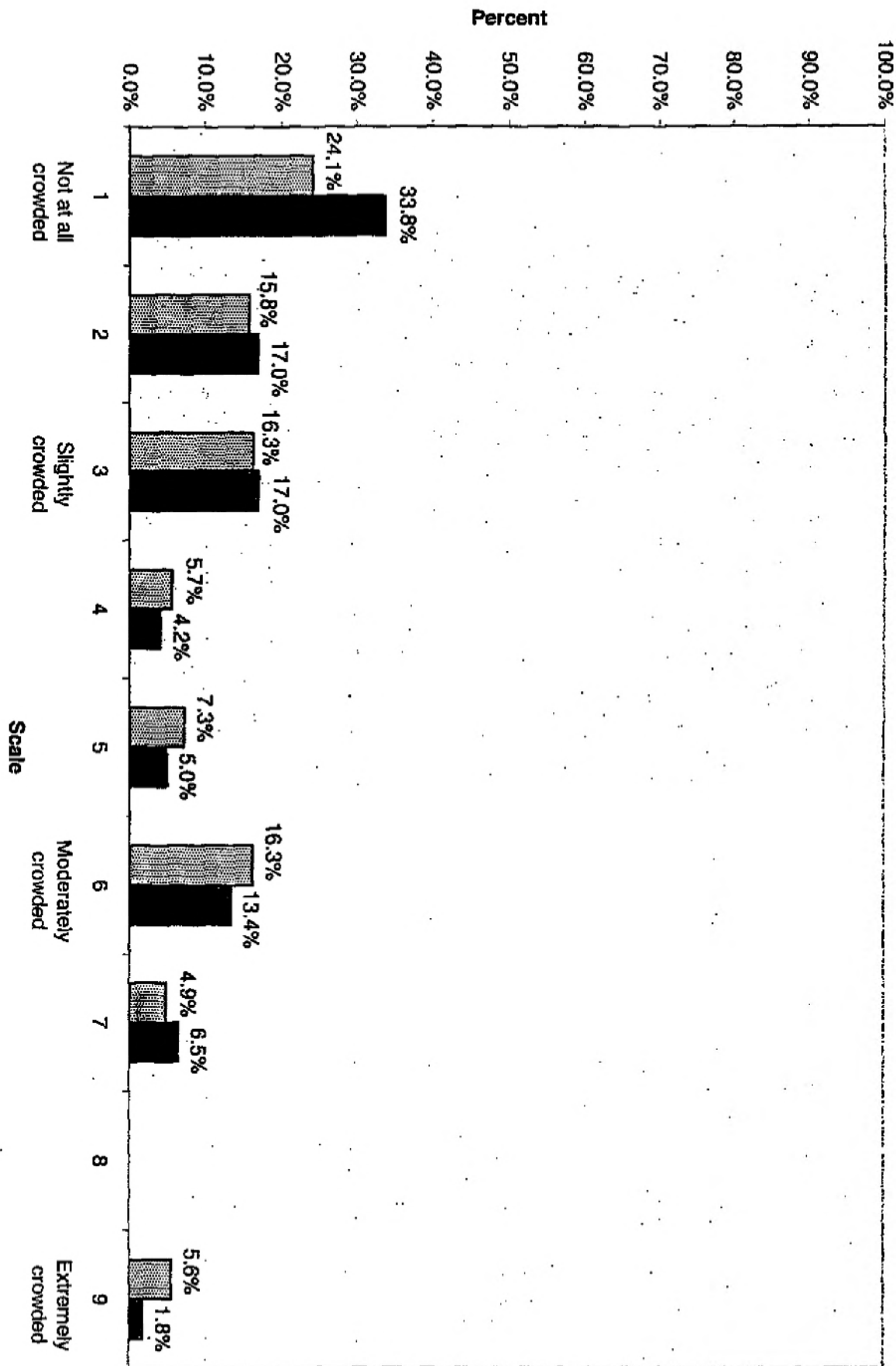
- No sig. difference in perceptions of crowding at primary res. area or effects on enjoyment
- Significant differences in perception of problems for 3 of 34 items (bigger problem)
 - Ability to access shoreline (slight/big problem)
 - Shallow areas during low water (mod/big problem)
 - Adequate protection from wind (slight problem)

Chester vs. LACC Residents

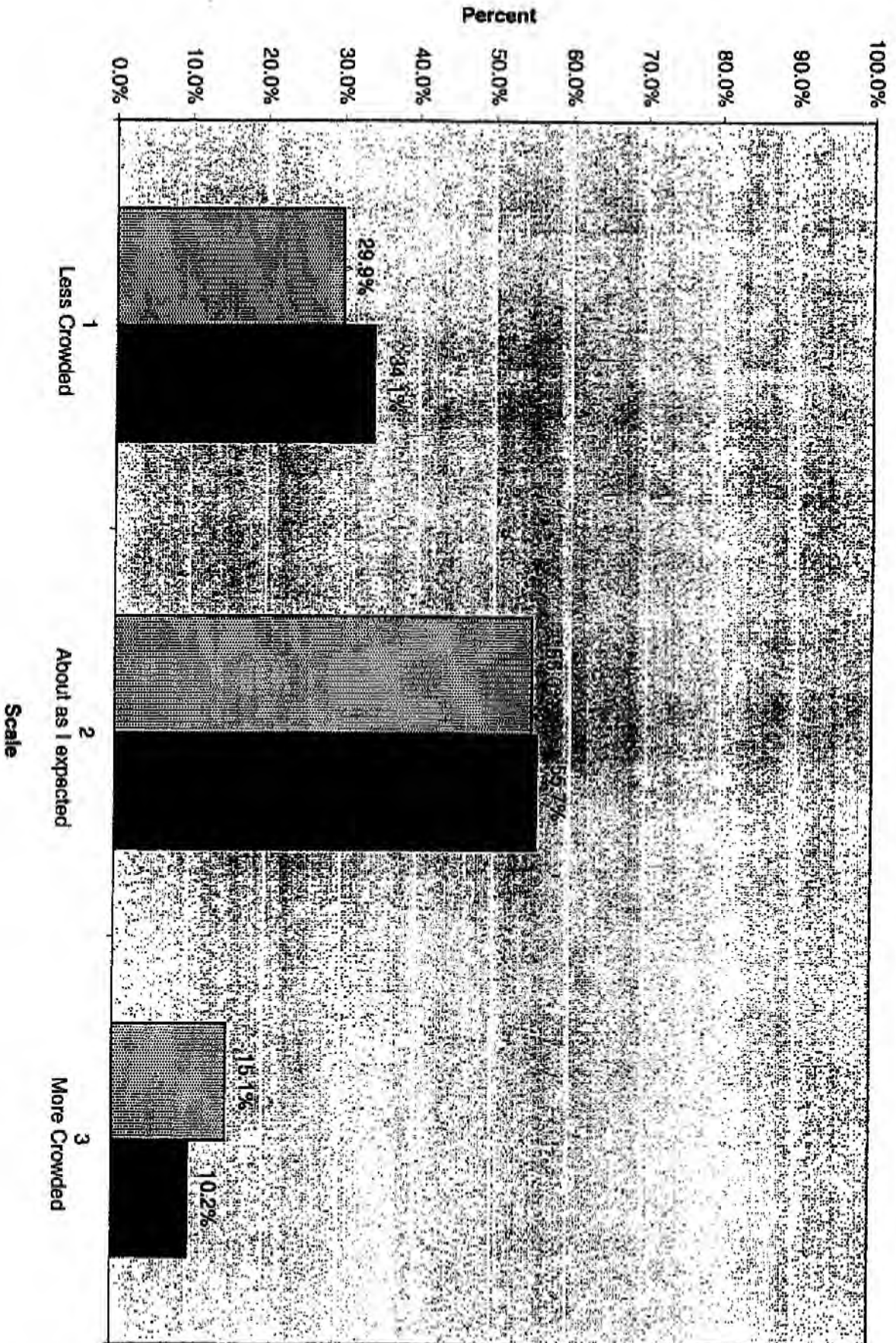
- No sig. difference in perceptions of crowding at primary res. area or effects on enjoyment
- Significant differences in perception of problems for 5 of 34 items (bigger problem)
 - Ability to access shore (big problem)
 - Cost to use facilities (slight problem)
 - Ability to launch boat (slight/mod problem)
 - Gates blocking shore access (moderate/big prob)
 - Water quality (slight/mod problem)

Area	# returns
Almanor Environs, North, and Northshore	10
Almanor West	55
Bailey	10
Camp Prattville	15
Canyon Dam	5
Chester	43
Clear Creek	6
Crescent Mills	17
East Shore	50
Greenville	28
Hamilton Branch	44
Lake Almanor Country Club	132
Lake Almanor West	11
Peninsula	40
Reaches environs	4
Unknown	1
Westwood	15
Total area resident returns	486

Crowding Results for Resource Area where Visitor was Contacted

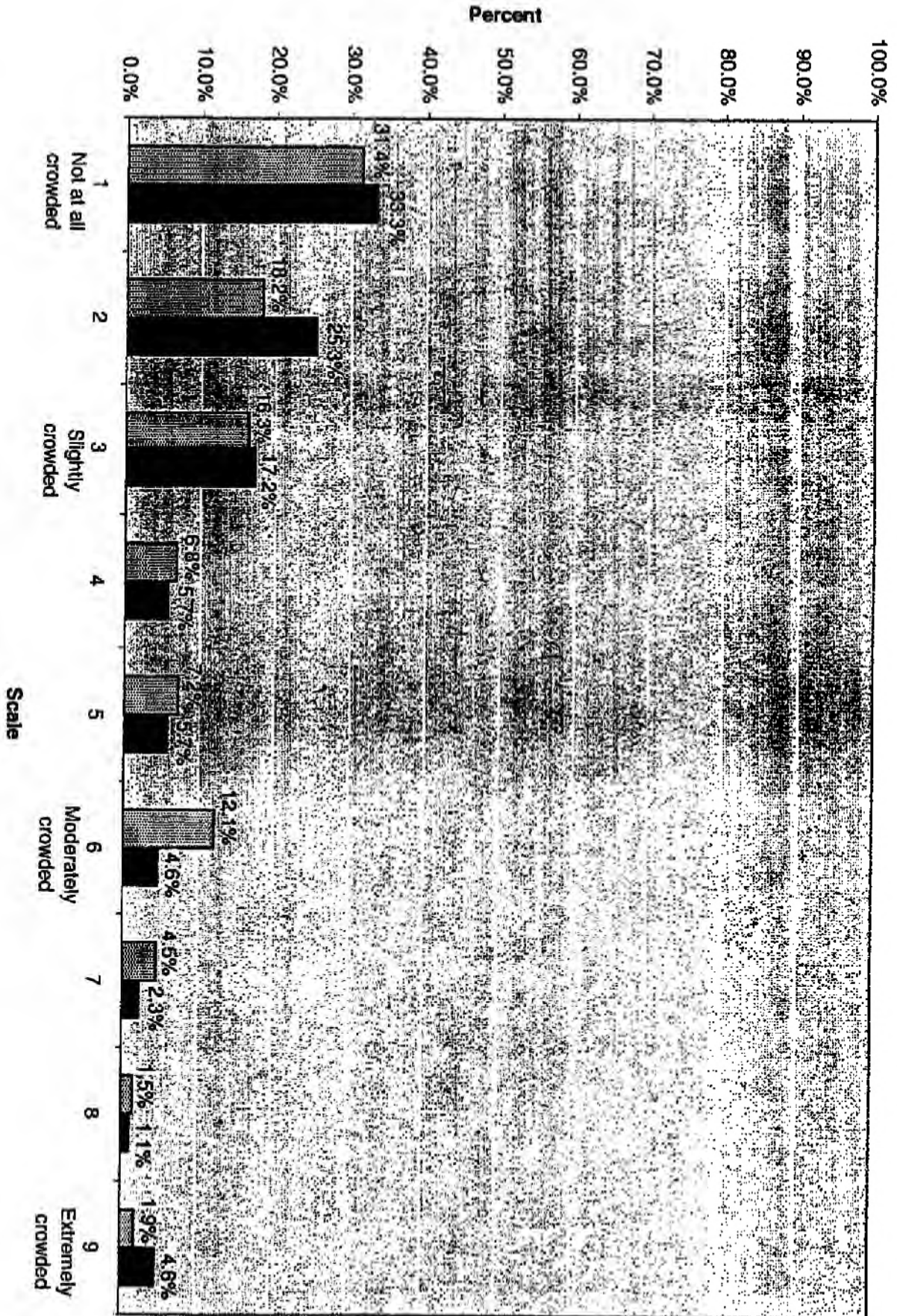


Expectations of Crowding Results at Locations where Visitors were Contacted

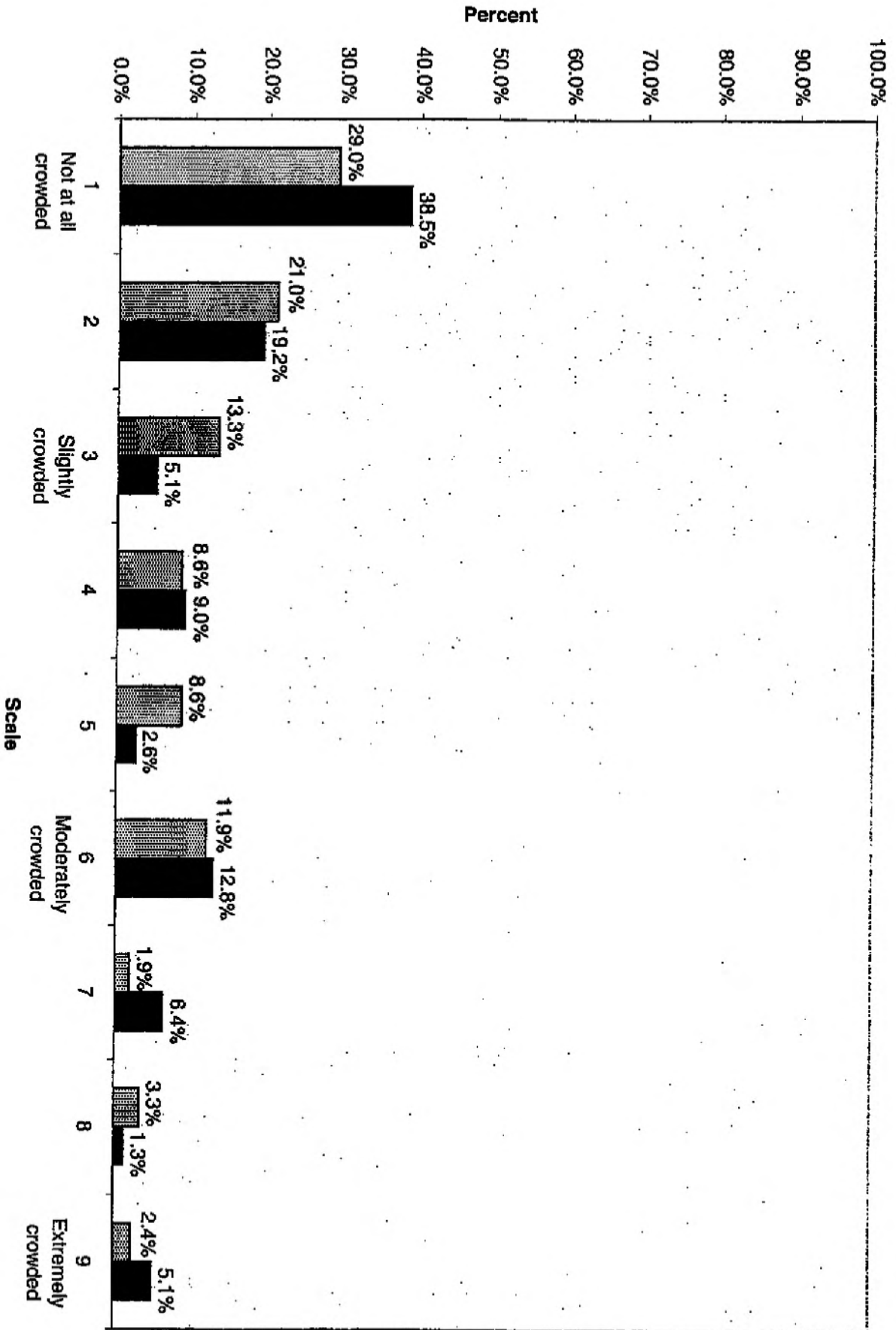


Weekend/Holiday Weekday

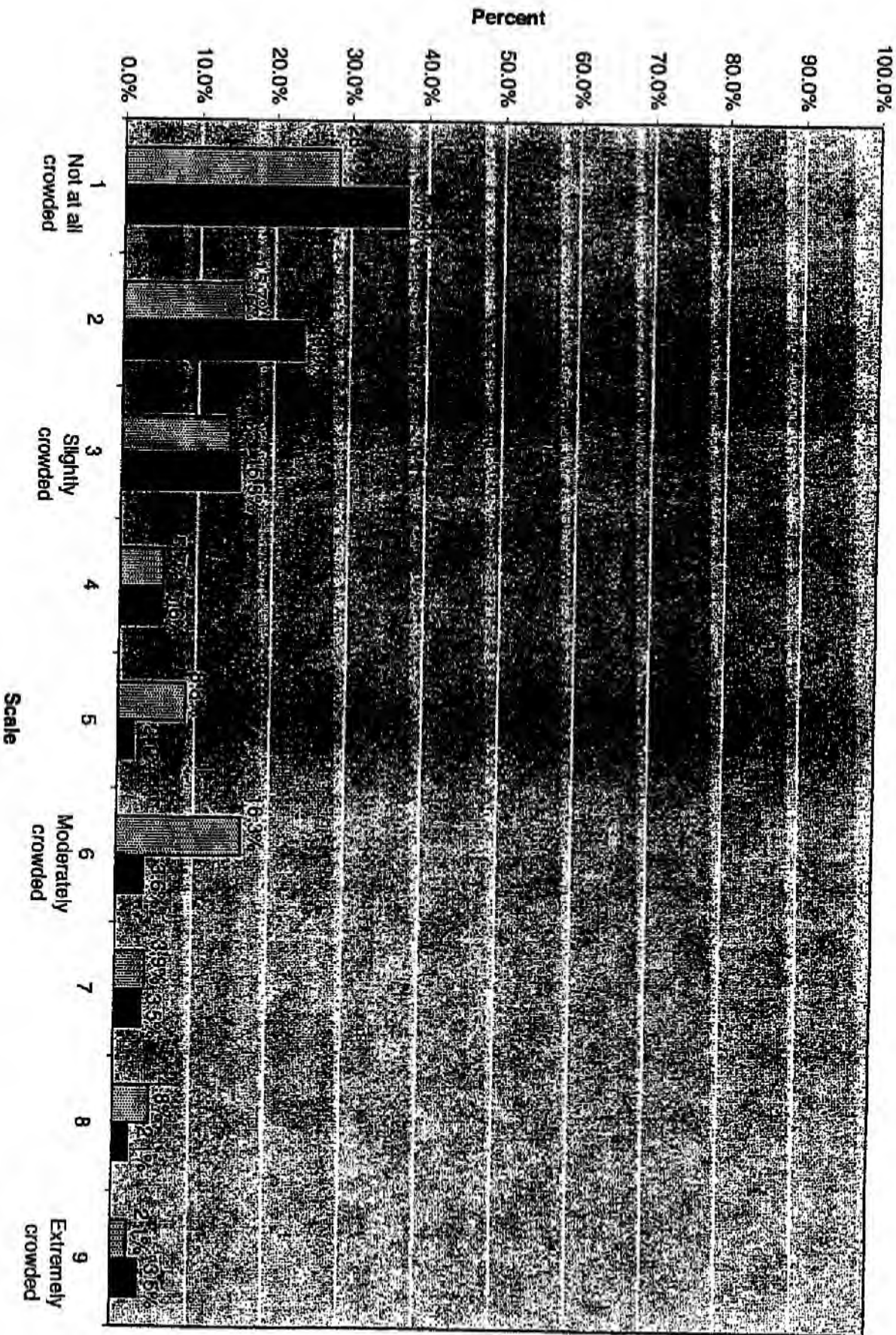
Lake Almanor Segment B Crowding Results



Lake Almanor Segment C Crowding Results



Lake Almanor Segment D Crowding Results



Projected Occupancy Trends at Lake Almanor Campgrounds

Inquiry

- Occupancy data for Almanor Campground (USFS) and Lake Almanor Campground (PG&E) were analyzed in more detail to determine how 2001 occupancy rates (reported in the Draft License Application) compared to past years. Concern was expressed about the potential effect of the lower water year on Lake Almanor campground occupancy in 2001.
- Occupancies at these 2 campgrounds around Lake Almanor were reported in the Draft License Application (DLA) in terms of seasonal weekend occupancy and peak month (July and August) weekend occupancy.
- At Almanor Campground (USFS) in 2001 per the DLA, the average seasonal weekend occupancy was 32% and average peak month weekend occupancy was 72%.
- At the Lake Almanor Campground (PG&E) in 2001 per the DLA, the average seasonal weekend occupancy was 46% (14% higher than the USFS campground) and the average peak month occupancy was 90% (18% higher than the USFS campground).

Trend Analysis Review

- USFS records from 1999 through 2001 provided by Janie Ackley indicate average seasonal occupancy at the USFS' Almanor Campground did decline in 2001 (see attached - Table 1 and Seasonal Occupancy at Almanor Campground figure). Average peak month occupancy also declined in 2001 at the Almanor Campground (see attached - Table 1 and Peak Month Occupancy at Almanor Campground figure).
- USFS campground occupancy in general has been declining from 1999 to 2001. The occupancy is higher in 2000, likely due to the earlier campground closure during the lower use late shoulder season months of September, October, and November. Seasonal and peak month weekday and weekend occupancy averages have declined from 1999 to 2001 (see attached - Table 1, Seasonal Weekday and Weekend Occupancy figure, and Peak Month Weekday and Weekend Occupancy figure).

- It should be noted that it is difficult (and problematic) to determine a trend given 3 years of data, especially since two years could be considered atypical in terms of environmental conditions (the Storie Fire in 2000 and the low water year in 2001). Differences in average occupancies from year to year were not tested for statistical significance.
- Based on USFS campground occupancy from 1999 to 2001, the peak month averages used in the DLA appear to be reasonable (see Table 2). The peak month weekend occupancy rate used in the DLA was 72%, slightly higher than the 69% average from 1999 to 2001. The difference seems to come from overflow site accounting which is hard to adjust for. So the higher percentage will be used for future projections in the FLA.
- However, the seasonal weekend occupancy rate reported in the DLA for the USFS campground was 32%, 7% lower than the 39% average reported by the USFS from 1999 to 2001. Seasonal timeframes, opening and closure date changes from year to year, and other variable affect the percentage. So the higher percentage will be used for future projections in the FLA.
- Occupancy trends for the last 16 years at PG&E's Lake Almanor Campground were included in the Existing Recreation Study (Section E5.2.2 of the DLA). Over the past 16 years, occupancy at the Lake Almanor Campground has remained relatively constant within a range at about 48 percent for the season (see attached – PG&E's Lake Almanor Campground Seasonal Occupancy (1985-2001). Occupancy rates did decline somewhat in 2001. The peak was in 1993 at 56%.
- However, both the seasonal weekend average (46%) and peak month weekend average (90%) used in the DLA are still considered reasonable given the trend information. As a result, the percentages in the FLA will not be changed.

Conclusions

- The estimate to add approximately 90 new public developed R/V/rent campsites over a 30 year timeframe through 2035 is still valid for the Lake Almanor area.
- Last Chance Campground north of the causeway is treated separately as a distinct unit given its uniqueness. An estimated 5 additional campsites would be added there in the future. This is currently a low priority at this time (after 2020).

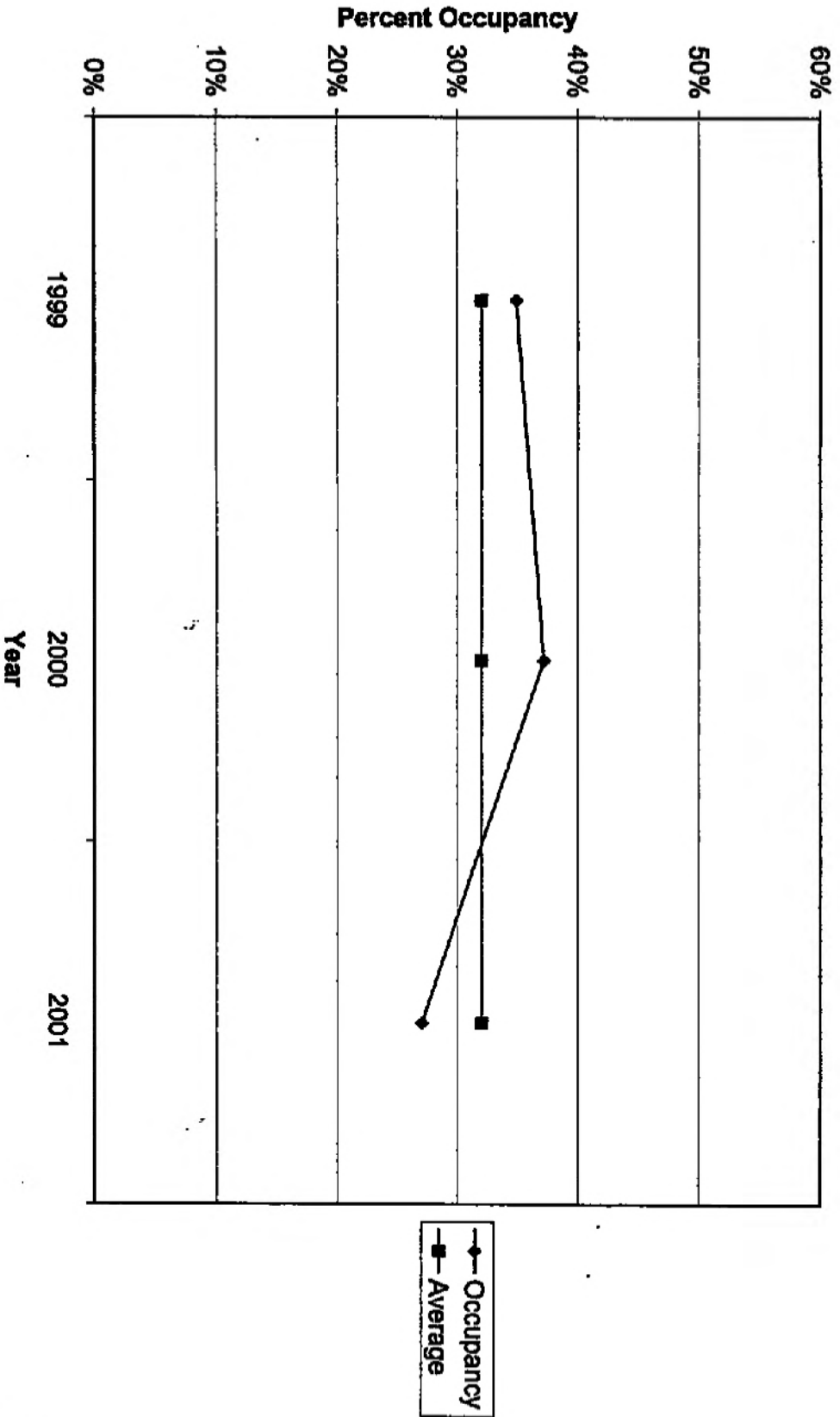
- Ninety (90) sites could be added at the new proposed PG&E Southeast Campground in two phases: 60 sites in loops 1 and 2 in 2010-2015, and 30 sites in loop 3 in 2025-2035. The exact timing of each phase would be based on ongoing monitoring and hitting trigger points per the RRMP Monitoring Program. These dates could move up or back based on continuing trends.
- This assumes that the USFS will not be constructing any new campsites in the Prattville area that could absorb some of this projected need per comments made by Janie Ackley.

Table 1. Seasonal Occupancy Average at USFS Almanor Campground (1999-2001).

Year	Season Days	Average Seasonal Occupancy			Average Peak Month (July and August) Occupancy			Percent of Season Days Overflow Used
		Weekday	Weekend	Total Days	Weekday	Weekend	Total Days	
1999	197	29 percent	43 percent	35 percent	62 percent	79 percent	70 percent	5 percent
2000	159 ¹	32 percent	44 percent	37 percent	55 percent	68 percent	60 percent	11 percent
2001	208	23 percent	32 percent	27 percent	49 percent	61 percent	54 percent	5 percent
AVERAGE	-	28 percent	39 percent	32 percent	55 percent	69 percent	61 percent	7 percent

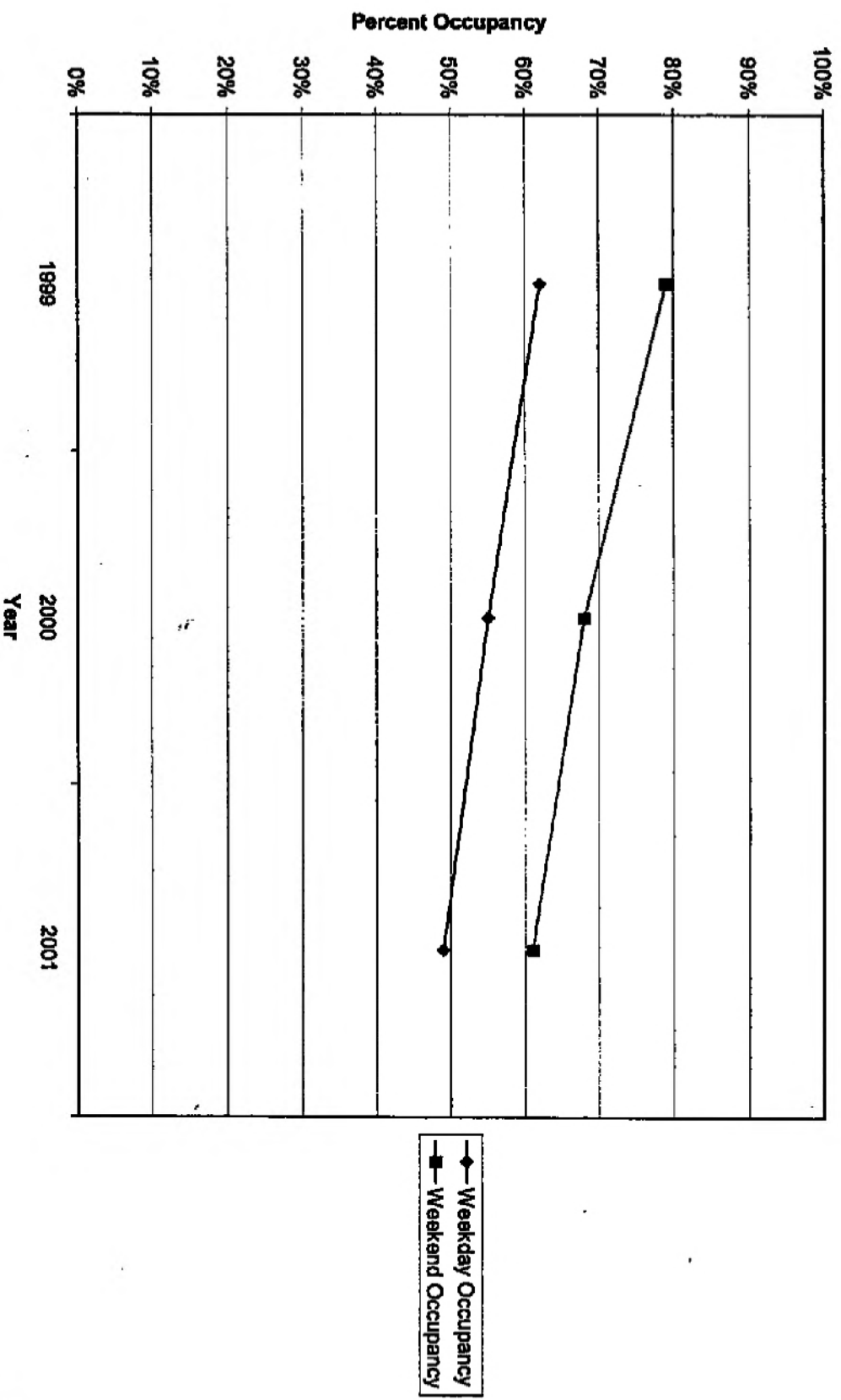
¹ Storm Fire resulted in campground being closed earlier in the year.

Seasonal Occupancy at Almanor Campground

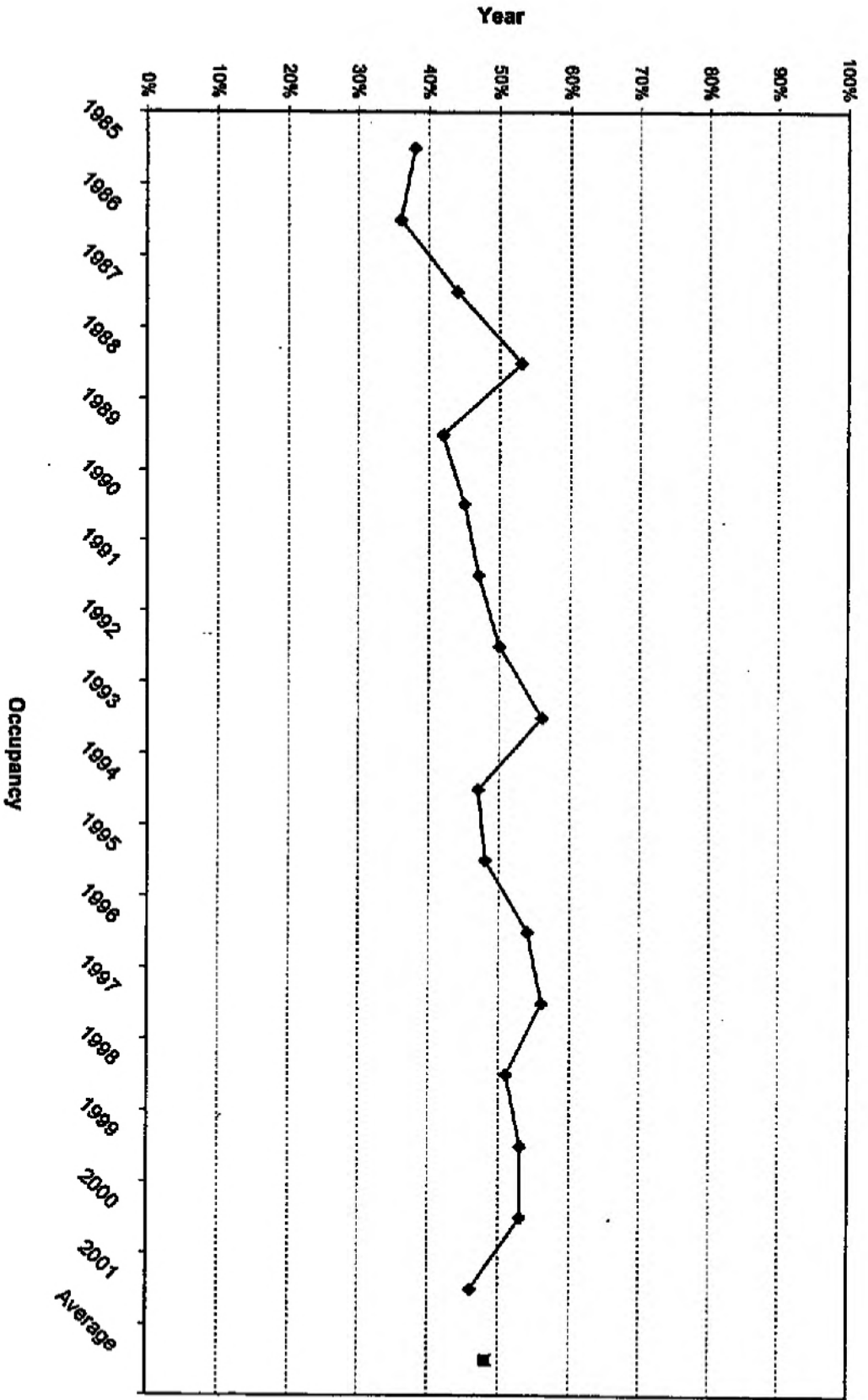


Projected Occupancy Trends at Lake Almanor Campgrounds (08/26/02)

Peak Month Occupancy at Almanor Campground



Lake Almanor Campground Occupancy (1985-2001)



Projected Occupancy Trends at Lake Almanor Campgrounds (08/26/02)

Table 2. Estimated Seasonal and Peak Capacity of Project Area Licensee- and Forest Service-Developed Recreation Sites

Recreation Sites	No. of Sites/ Spaces	Turnover Rate (DUs Only) ³	SEASON ¹				PEAK MONTH WEEKENDS ²			
			Maximum Visitor Capacity ⁴	Estimated Average No. of Daily Occupied Sites/Space ⁵	Estimated Current Visitor Use ⁴	Current Seasonal Weekend Occupancy ⁴ (percent)	Maximum Visitor Capacity ⁴	Estimated Average No. of Daily Occupied Sites/Space	Estimated Current Visitor Use ⁴	Current Peak Month Weekend Occupancy (percent)
<i>Developed Campgrounds</i>										
Lake Almanor	Campsites									
Last Chance Campground	12	—	5,962	5	2,484	42 percent	864	7	501	58 percent
Almanor Campground	102	—	45,166	40	17,712	32 percent	7,344	73	5,288	72 percent
Lake Almanor Campground	131	—	76,399	60	34,992	46 percent	9,432	118	8,496	90 percent
Camp Conery Group Camp ⁶	—	—	2,250	—	1,950	87 percent	500	—	500	100 percent
Subtotal⁷			127,526		55,188	43 percent	17,640		14,278	81 percent
Butt Valley Reservoir										
Ponderosa Flat Campground	61	—	30,744	27	13,608	44 percent	4,392	48	3,470	79 percent
Cool Springs Campground	30	—	13,176	10	4,392	33 percent	2,160	19	1,361	63 percent
Subtotal			43,920		18,000	41 percent	6,552		4,830	74 percent
Bypass Reaches										
Queen Lily Campground	12	—	7,258	6	3,629	50 percent	864	9	648	75 percent
North Fork Campground	20	—	12,096	9	5,443	45 percent	1,440	15	1,080	75 percent
Gansner Bar Campground	14	—	10,030	8	5,731	57 percent	1,008	12	867	86 percent
Subtotal			29,383		14,803	50 percent	3,312		2,595	78 percent
Subtotal (All campgrounds)⁷	382	—	200,830		87,991	44 percent	27,504		21,703	79 percent

Recreation Sites	No. of Sites/ Spaces	Turnover Rate (DUAs Only) ³	SEASON ¹				PEAK MONTH WEEKENDS ²			
			Maximum Visitor Capacity ⁴	Estimated Average No. of Daily Occupied Sites/Space ⁵	Estimated Current Visitor Use ⁴	Current Seasonal Weekend Occupancy (percent)	Maximum Visitor Capacity ⁴	Estimated Average No. of Daily Occupied Sites/Space	Estimated Current Visitor Use ⁴	Current Peak Month Weekend Occupancy (percent)
Developed Day Use Sites⁶										
Boat Launches										
Lake Almanor	Parking									
Almanor Boat Launch	53	2	40,958	44	17,002	42 percent	4,876	72	3,312	68 percent
Canyon Dam Boat Launch	64	4	98,918	170	65,688	66 percent	11,776	270	12,420	105 percent
	Subtotal		139,877		82,690	59 percent	16,652		15,732	94 percent
Picnic/Rest Areas										
Lake Almanor										
Almanor Rest Area	15	2	25,185	6	5,037	20 percent	1,380	6	276	20 percent
Almanor Picnic Beach	42	5	81,144	78	30,139	37 percent	9,660	174	8,004	83 percent
Dyer View DUA	13	2	10,046	12	4,637	46 percent	1,196	16	736	62 percent
East Shore DUA	20	1	7,038	7	2,463	35 percent	920	5	230	25 percent
Almanor Scenic Overlook	30	1	10,557	5	1,760	17 percent	1,380	5	230	17 percent
Canyon Dam DUA	45	3	47,507	71	24,985	53 percent	6,210	105	4,830	78 percent
	Subtotal		181,477		69,021	38 percent	20,746		13,570	65 percent
Butt Valley Reservoir										
Alder Creek DUA	20	5	38,640	66	25,502	66 percent	4,600	83	3,818	83 percent
Bydass Reaches										
Belden Rest Stop	15	12	151,110	25	20,988	14 percent	8,280	44	2,024	24 percent
	Total		511,104		198,200	39 percent	50,278		35,880	71 percent
	GRAND TOTAL⁷		711,934		286,191	40 percent	77,782		57,583	74 percent

¹ Season defined as days when sites were open to the public.

¹ Peak months defined as weekends in July and August.

² Turnover rates for DULAs based on traffic counter data and professional judgement. For maximum capacity purposes, turnover rates were used for all DULAs to calculate Theoretical Seasonal and Peak Month Weekend Capacity. A turnover rate is defined as the number of times during a day that new vehicles replace ones that have left a parking area.

³ Assumes an average of 3.6 persons per campsite and 2.3 persons per vehicle per day per 2001 survey results. Number of visitors are in recreation days (any length of stay per day) per FERC Form 80 requirements.

⁴ Estimated average number of sites occupied at campgrounds were provided by the Licensee, Forest Service, or based on user counts taken during 2001 by EDAW. Estimated average number of spaces occupied at DULAs was derived from traffic counter readings and manual traffic counts. In 2001, pool levels at Lake Almanor were lower than normal and may have contributed to lower recreation days at the Almanor Boat Launch and higher recreation days at Canyon Dam Boat Launch.

⁵ Camp Conery is a group facility, which can accommodate up to 50 people at one time. It is rented primarily on weekends. In 2001, Camp Conery was rented 13 out of 15 (87%) weekends that it was open to the public and all weekends during the peak season.

⁶ Camp Conery Group Camp not included.

⁷ Traffic counter data was used for the following sites: Almanor Boat Launch, Almanor Picnic Beach, Canyon Dam Boat Launch, and Canyon Dam DUA. Manual counts were used as a basis for all other DULAs.

Source: EDAW, Inc.

Table 3. Projected Increase in Season Weekend and Peak Month Weekend Occupancy at Campgrounds (2001–2035)

Project Area Campgrounds	2001 Seasonal (Peak Month Weekend) Percent Occupancy ¹	Projected Annual Percent Increase in Occupancy ²	Projected Seasonal (Peak Month Weekend) Percent Occupancy				Projected Date that 60 (90) Percent Seasonal (Peak Month Weekend) Capacity is Reached ³	Projected Date that 100 Percent Seasonal (Peak Month Weekend) Capacity is Reached ³
			2005	2015	2025	2035		
Lake Almanor								
Last Chance Campground	42 (58)	1.11	44 (61)	49 (68)	54 (76)	61 (84)	2034 (—)	—
Almanor Campground	39 (72)	1.11	41 (75)	46 (84)	51 (94)	57 (105)	— (2021)	— (2031)
Lake Almanor Campground	46 (90)	1.11	48 (94)	53 (105)	60 (117)	67 (131)	2025 (Present)	— (2011)
Camp Conery Group Camp ⁴	87 (100)	1.11	—	—	—	—	Present (Present)	— (Present)
Subtotal⁵	43 (81)		45 (85)	51 (94)	57 (105)	63 (118)	— (2011)	— (2020)
Bart Valley Reservoir								
Ponderosa Flat Campground	44 (79)	1.11	46 (83)	52 (92)	58 (103)	64 (115)	2029 (2013)	— (2022)
Cool Springs Campground	33 (63)	1.11	35 (66)	39 (74)	43 (82)	49 (92)	— (2033)	—
Subtotal	41 (74)		43 (77)	48 (86)	53 (96)	60 (107)	2035 (2019)	— (2029)
Bypass Reaches								
Queen Lily Campground	50 (75)	1.11	52 (78)	58 (88)	65 (98)	73 (109)	2017 (2018)	— (2027)
North Fork Campground	45 (75)	1.11	47 (78)	53 (88)	59 (98)	65 (109)	2027 (2018)	— (2027)
Gansner Bar Campground	57 (86)	1.11	60 (90)	67 (100)	74 (112)	83 (125)	2005 (2005)	— (2015)
Subtotal	50 (78)		53 (82)	59 (91)	66 (102)	73 (114)	2017 (2014)	— (2023)
Totals⁵	44 (79)		46 (82)	51 (92)	57 (103)	64 (115)	2031 (2013)	— (2023)

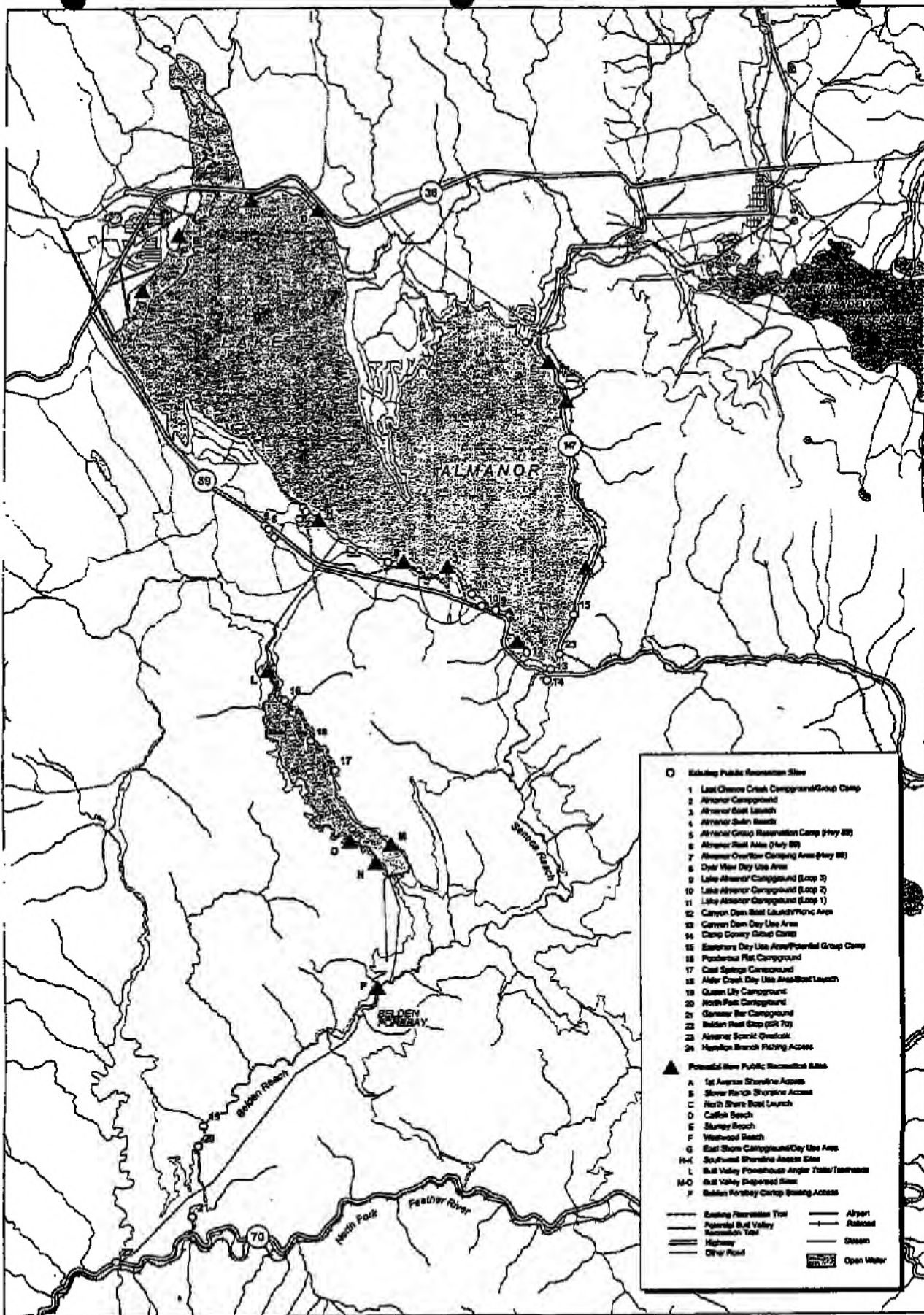
¹ Annual recreation days were provided by the Licensee, Forest Service, or based on user counts taken during 2001 by EDAW. Values not in parentheses represent the season or timeframe that the facility is open. Values in parentheses represent average weekend occupancy during the peak months of July and August only.

² Projected increase based on projected trends in carrying participation included in Table E5.2.4-6.

³ Based on the assumption that capacity (number of sites available) will not increase or decrease.

⁴ Camp Conery is a group facility, which can accommodate up to 50 people at one time. It is rented primarily on weekends. In 2001, Camp Conery was rented 13 out of 15 (87%) weekends in the recreation season (Memorial Day to Labor Day) and all weekends in the peak months (July and August). Demand for this type of group activity is projected to increase by 1.87% annually (Condel 1999). Because the 60%/90% occupancy thresholds have already been reached at this site and because projected demand is high for group camping, projected occupancies were not calculated for this site.

⁵ Subtotal and total do not include Camp Conery Group Camp. Subtotal does not include Last Chance Campground. Source: EDAW, Inc.



Upper North Fork Feather River Project
Pacific Gas & Electric Co.

Existing and Proposed Public Recreation Sites in the UNFFR Project Area



LAKE ALMANOR SOUTHWEST SHORELINE ACCESS ZONE

In the Draft License Application, the Southwest Shoreline of Lake Almanor was identified as an area that needed additional site reconnaissance and review. Several undeveloped vehicular shoreline access points were identified between Lake Almanor West Country Club and Canyon Dam in recent visits to the area. Many routes are already blocked with mounds of dirt, large logs, formal bollards or gates. Others offer informal vehicular access to the shoreline where vehicle use is occurring at and below the 4,494' full pool elevation. Some of these sites appear to receive enough use that they have become *de facto* day use areas, and may be considered for hardening or formalizing as recreation sites by providing gravel, signs, parking areas, improving road surfaces, and blocking vehicular access below the 4,494' level.

Below is an assessment of potential actions to consider in order continuing to provide public access to the shoreline. However, this access would be prohibited below the 4,494' elevation and sensitive resources would be protected. Refer to the attached figure.

Site improvements to consider:

There are four sites currently being used for recreation that may be improved to better accommodate public access rather than closing them off to further use.

Site A at the jetties near the USFS Almanor Campground Swim Beach is the most visible area, as it is adjacent to the Prattville Road, and accessed by two short entry roads of compacted soil.

- Site is the most easily accessed and monitored because of its proximity to road and the Swim Beach
- Entry would be improved and a gravel parking area be provided above the 4,494' level
- Area limits be signed and barricaded depending on site conditions

Site C is located to the south of Prattville and is perhaps the most heavily used site. Another small road to the south of this area has already been barricaded in two locations.

- Proposed that the area be improved to protect the resource values of the adjacent forest and shoreline areas. Access to this site could be decreased by barricading the western entrance, and consolidating and restoring some extraneous roads,
- Improvements made to the remaining road above the 4,494' level.
- Entry would be improved and a gravel parking area be provided above the 4,494' level
- Area limits be signed and barricaded depending on site conditions

Site F on the point to the northwest of Lake Almanor Campground is approached on a road of compacted soil off of the entry road to the PG&E Lake Almanor Campground.

- Degradation of the access road has occurred as it crosses the Lake Almanor Recreation Trail (LART) near the shoreline, and damage to the LART is also likely to occur with increased use
- Access improvements would be necessary to decrease further degradation of the road and the LART
- Entry would be improved and a gravel parking area be provided above the 4,494' level
- Area limits be signed and barricaded depending on site conditions

Site G to the west of the Canyon Dam Boat Launch is accessed from the existing secondary power line road and also receives heavy use. Near to this site, a very steep trail exists from the adjacent highway down to the shoreline. It appears to be used by all-terrain vehicles such as dirt bikes, and should be barricaded.

- Road to could be improved
- Parking provided at the 4,494' level
- Barricades and signage to prevent vehicular access below this level
- Barricade nearby motorcycle trail from highway

Even with improvements to these sights, it is not recommended that they be signed, as this might encourage more use than is appropriate at these limited day use areas, and may further alter the character of the recreation opportunity that these sites currently offer. It is also recommended that barriers be put in place down to the water level at these sights to prevent vehicle use beyond the day use sites.

Potential Site Closures:

Three other access sites that currently allow vehicular access to the shoreline may be considered for formal barricading.

Site B south of Prattville has two short roads that could be closed.

- Roads could be used as walk-in trails.

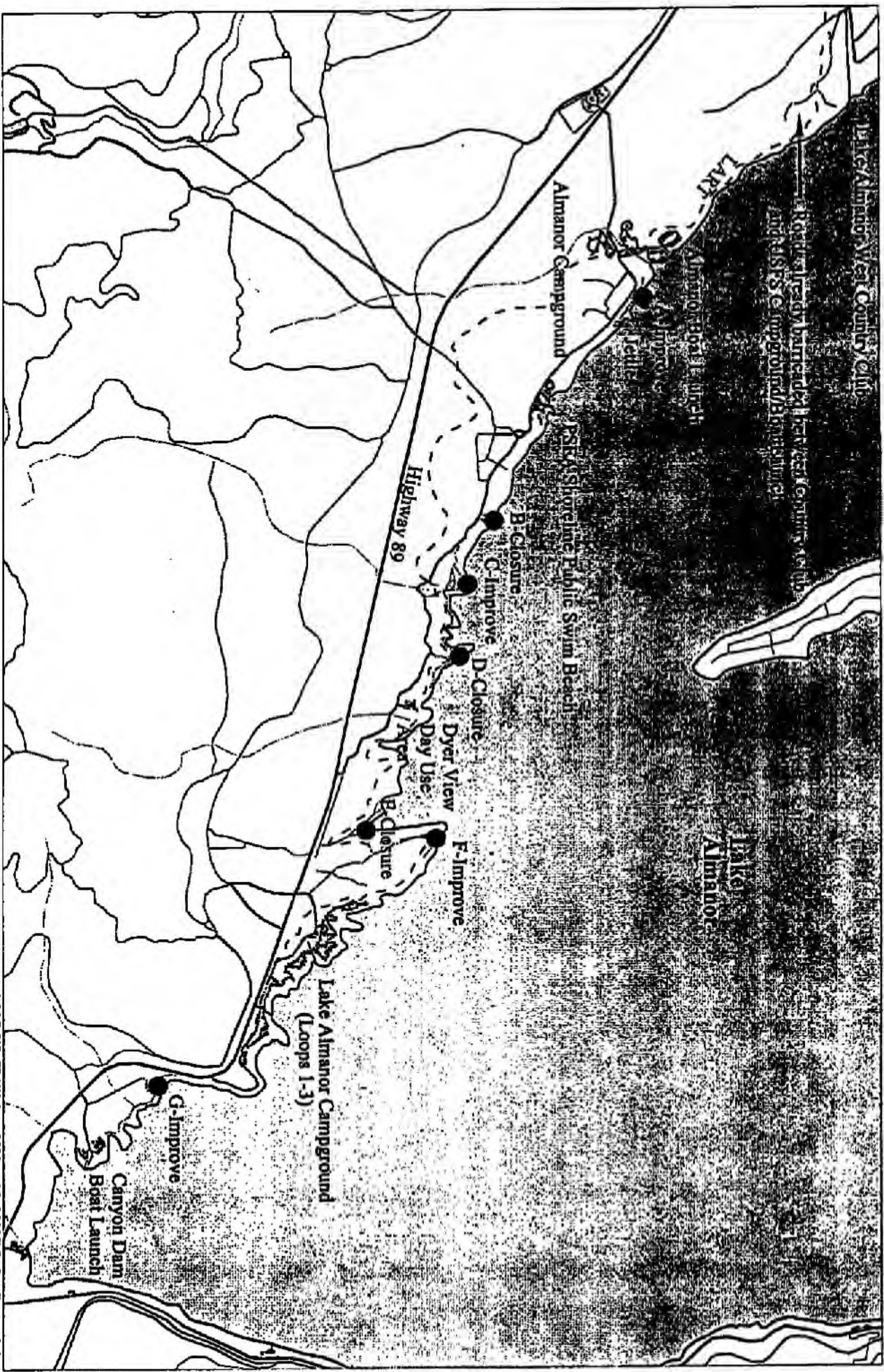
Site D north of Dyer View Day Use Area has a short road access route and is close to two other access points.

- Considered for permanent closure
- Currently blocked by large trees.

Site E is located off of distribution line access road near Highway 89.

- Route is blocked with large trees and could be come a walk-in only trail

The area would need to be monitored to maintain the barricades and to locate new access points that may develop in the future, especially along the power line paralleling the Prattville Road.



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Site Modifications:

- Provide parking at or above the 4,494' elevation and/or block access to shoreline below.
- Provide gravel access road improvements
- Provide signs.
- Restore degraded access routes.


SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0a20006\Geo\unfr\res-2.dwg




Southwest Shoreline Access Zone Options

UNFFR PROJECT RECREATION SITE PLANS WITH PROPOSED PM&Es

LEGEND

 # Site Name/(E) Existing or (N) New

Lake Almanor

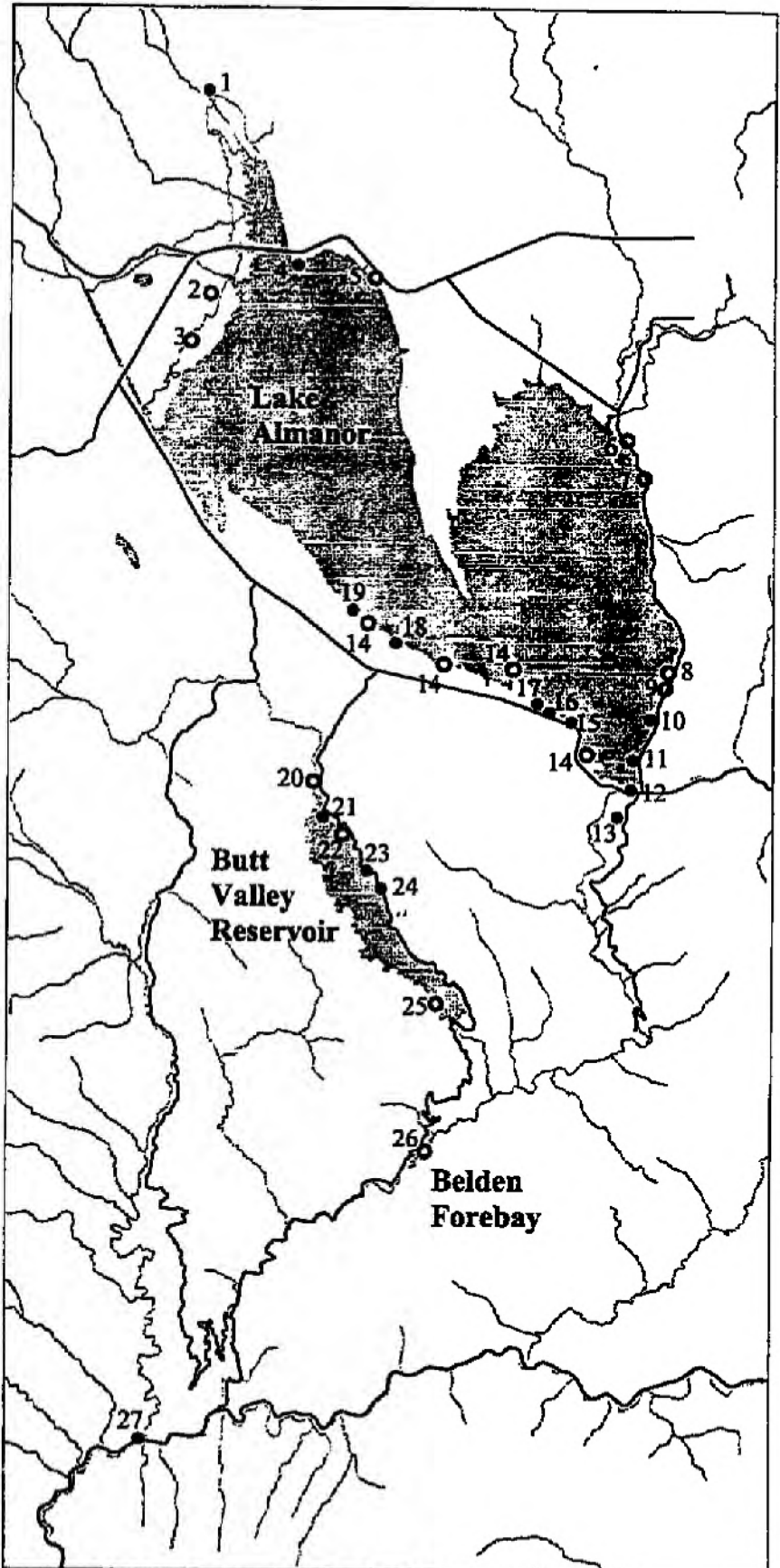
- 1 Last Chance Campground (E)
- 2 Stover Ranch Shoreline Access Option (N)
- 3 1st Avenue Chester Shoreline Access Option (N)
- 4 North Shore Boat Launch (E)
- 5 Catfish Beach Day Use Area (N)
- 6 Stumpy Beach (N)
- 7 Westwood Beach (N)
- 8 Eastshore Campground-- Campsites (N)
- 9 Eastshore Campground-- Swim Beach (N)
- 10 Eastshore Day Use Area/ Group Campsite Conversion (E)
- 11 Almanor Scenic Overlook (E)
- 12 Canyon Dam Day Use Area (E)
- 13 Camp Conery Group Camp (E)
- 14 Southwest Shoreline Public Access Zone (N)
- 15 Lake Almanor Campground Loop 3 (E)
-  Lake Almanor Campground Loop 2 (E)
- 17 Lake Almanor Campground Loop 1 (E)
- 18 PSEA Shoreline Public Swim Beach (E)
- 19 Almanor Campground Public Swim Beach (E)

Butt Valley Reservoir

- 20 Butt Valley Powerhouse Angler Trails (E and N)
- 21 Ponderosa Flat Campground (E)
- 22 Butt Valley Recreation Trail (N)
- 23 Alder Creek Boat Launch (E)
- 24 Cool Spring Campground (E)
- 25 Boat-in/Walk-in West Shoreline Dispersed Sites (N)

Belden Reach and Forebay

- 26 Belden Forebay Cartop Boat Launch/ North Fork Fishing Trailhead (N)
- 27 Belden Rest Stop (E)

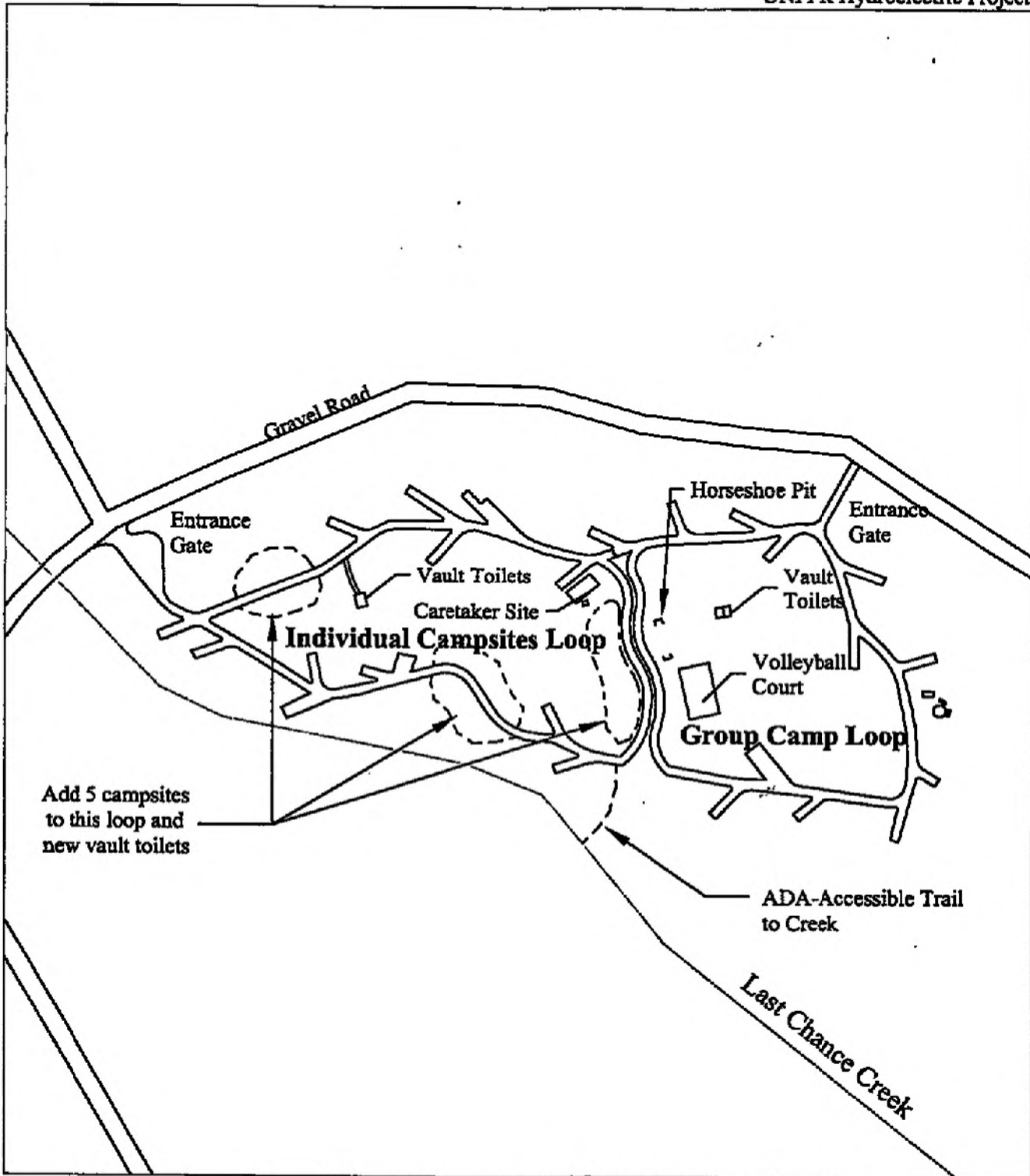


SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unffr_rec-1.dwg

KEY:

-  New Site
-  Existing Site





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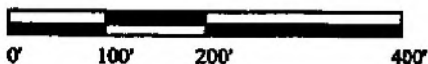
SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unfr_rec-1.dwg

Site Modifications:

- Modify 2 campsites to be ADA-accessible
- Modify existing toilets to be ADA-accessible
- Provide an ADA-accessible route to the nearby creek
- Provide 5 additional campsites and new double vault toilet by 2010

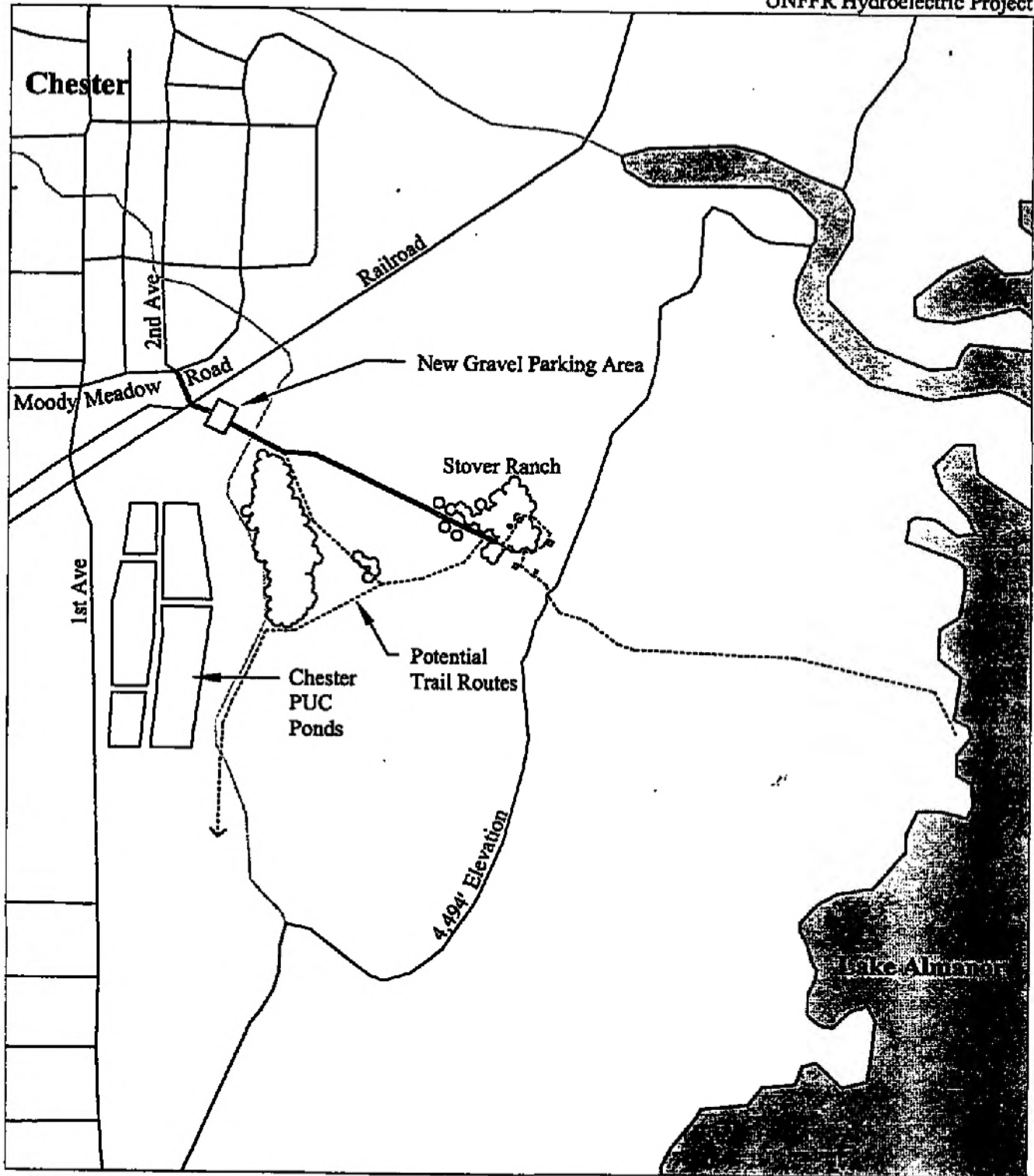


North



**Last Chance Creek Campground/
Group Camp**

Site Plan 1



August 2002

SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unfr_rec-2.dwg

Site Modifications:

- Provide gravel parking area for 10 cars
- Provide trail to shoreline
- Provide interpretive sign (see I&E Program)
- Provide single vault toilet and 4 picnic tables
- Coordinate with Chester PUC and Chester Recreation and Parks District

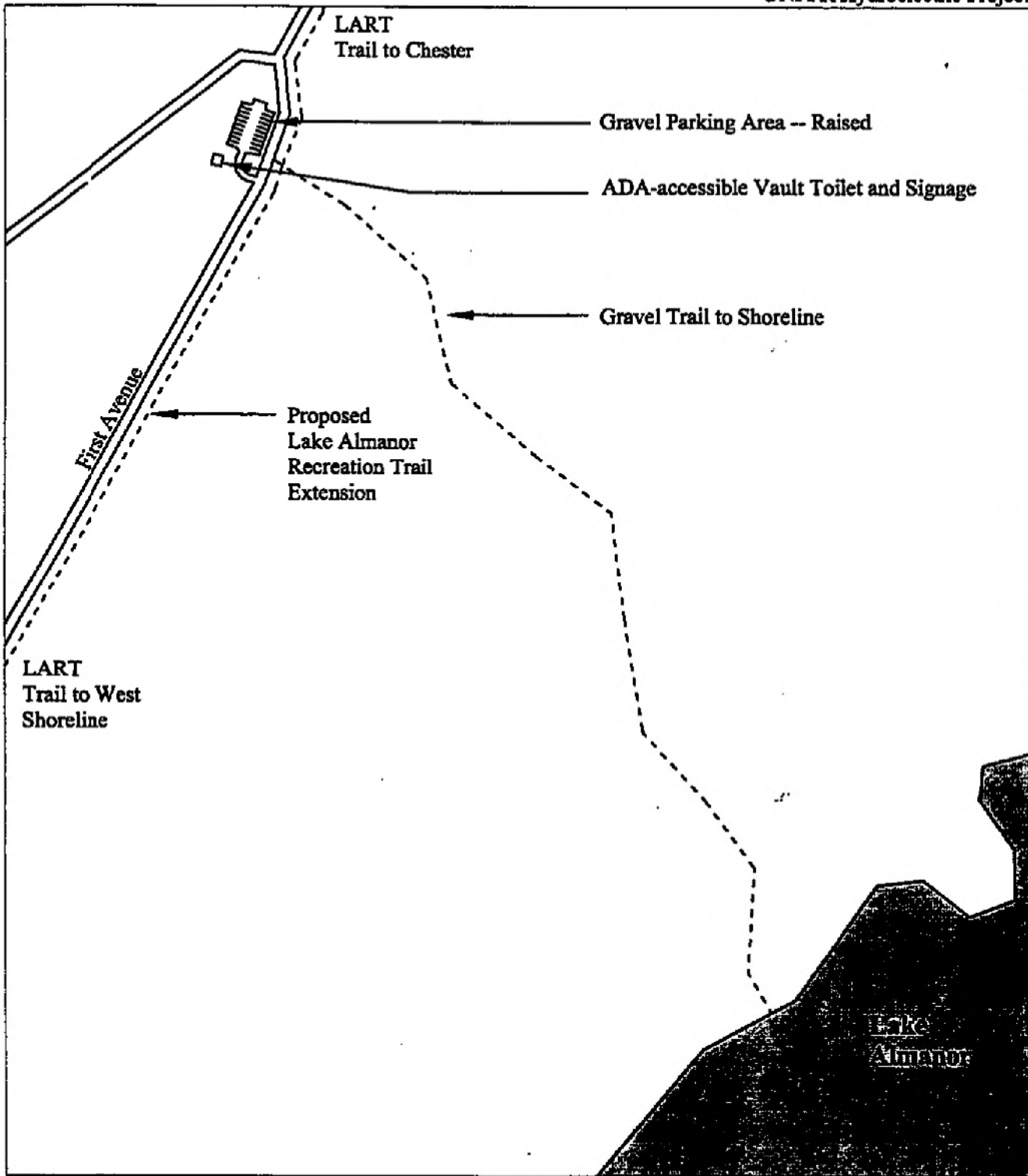


North



**Stover Ranch-Chester
Shoreline Access Park**

Site Plan 2



August 2002

SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unfr_rec-1.dwg

Site Modifications:

- Provide gravel parking area for trail users and shoreline access, raised above maximum pool level
- Provide ADA-accessible vault toilet raised above maximum pool level and signage
- Provide gravel trail to Lake Almanor

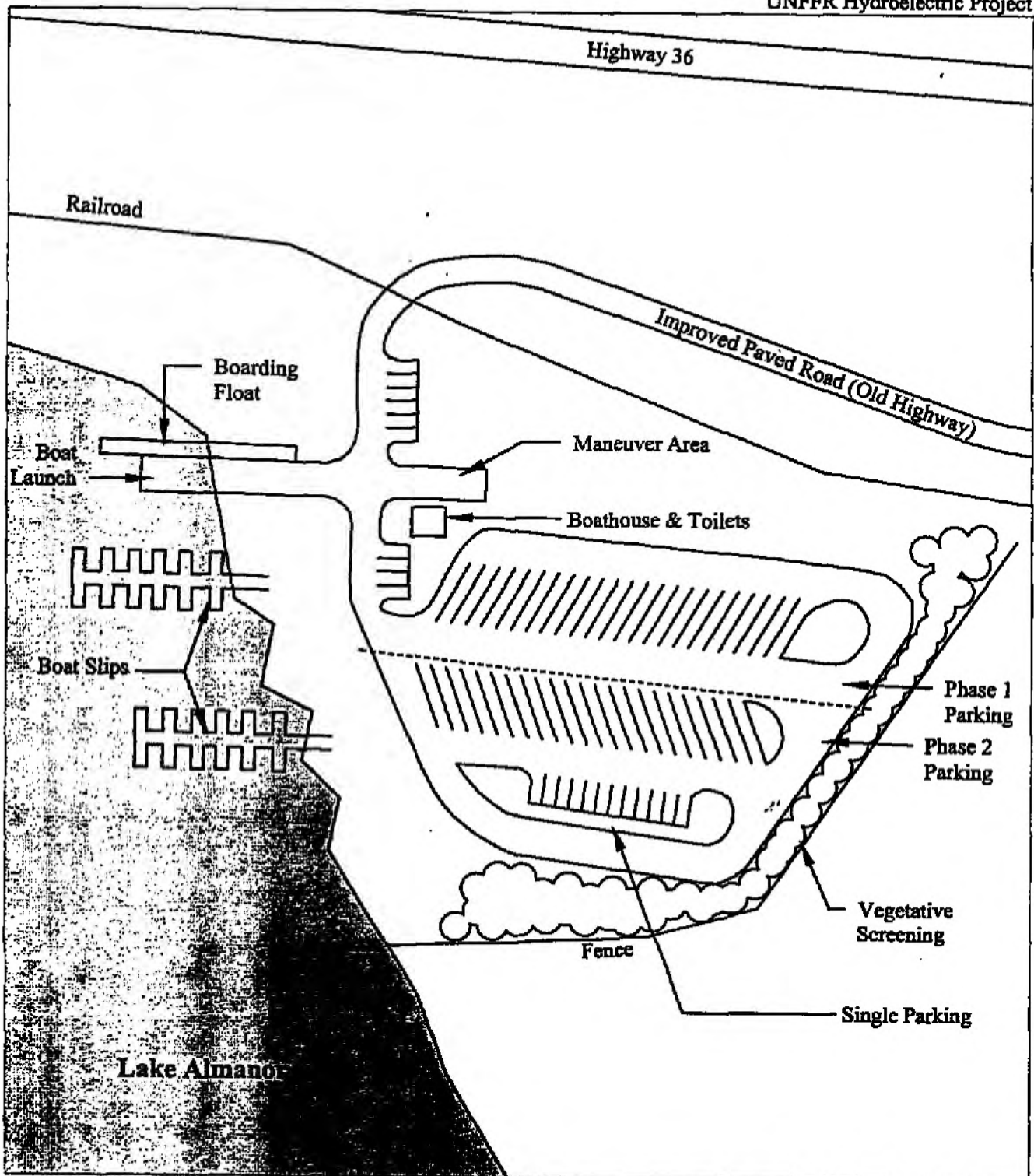
*Project combo with USPS / Rec District
 Logistics location to close 1st Ave*



North



First Ave Chester Shoreline Access



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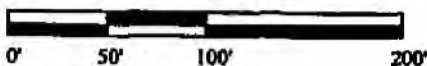
SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unffr_rec-1.dwg

Site Modifications:

- Provide new boat launch and boarding float
- Provide toilets and boathouse facility
- Provide parking for 40 boat trailers plus 12 single spaces, built over 2 phases
- Relocate existing campsites (20) to the eastern portion of the campground
- Boat slips to be relocated by site operator
- Provide new access road using the old highway bed

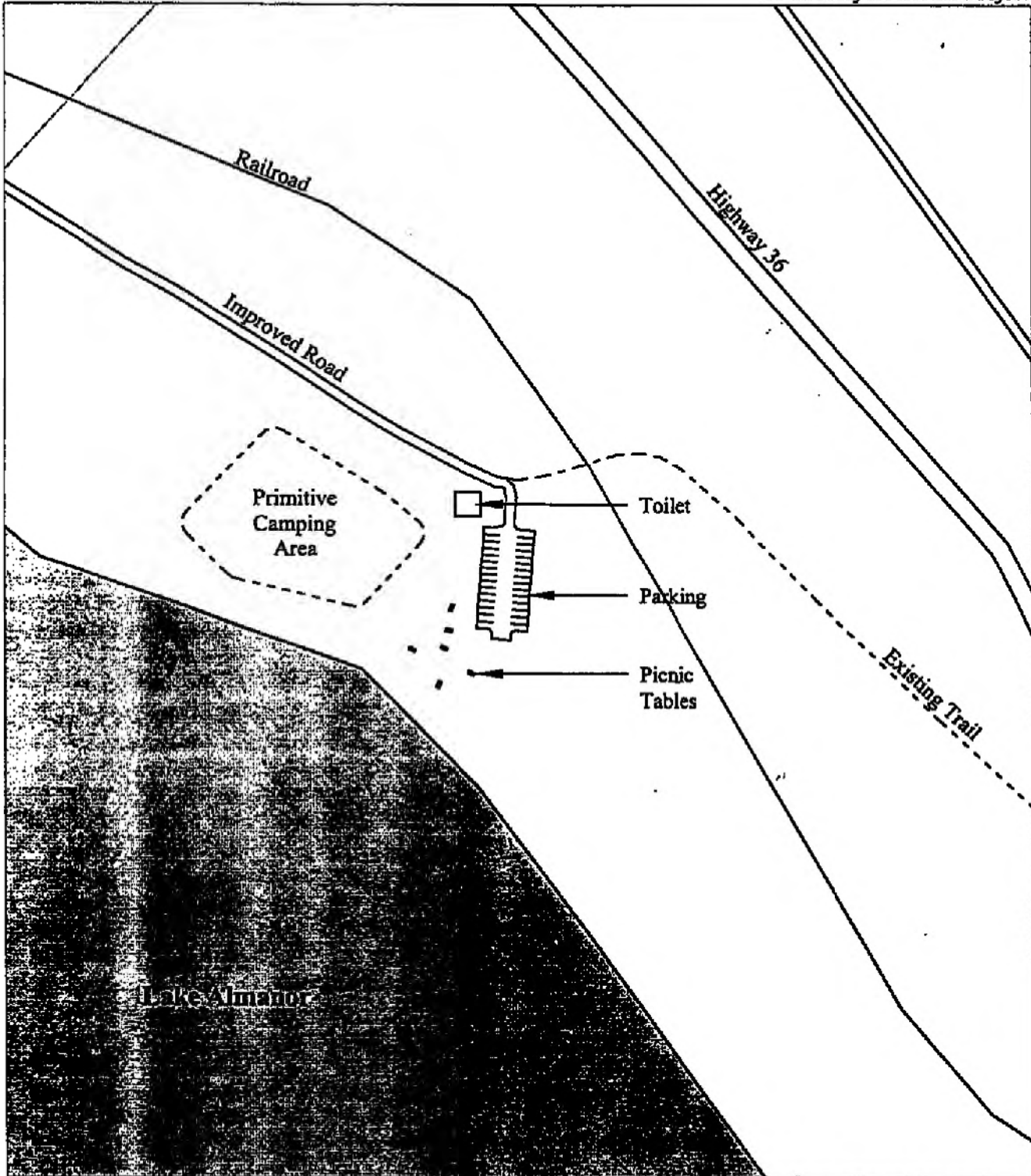


North



**North Shore Campground
Public Boat Launch**

Site Plan 4



August 2002

SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unlfr_rec-1.dwg

Site Modifications:

- Provide gravel road, parking and gate
- Provide primitive 5 picnic sites and 5 camping sites
- Provide single vault toilet

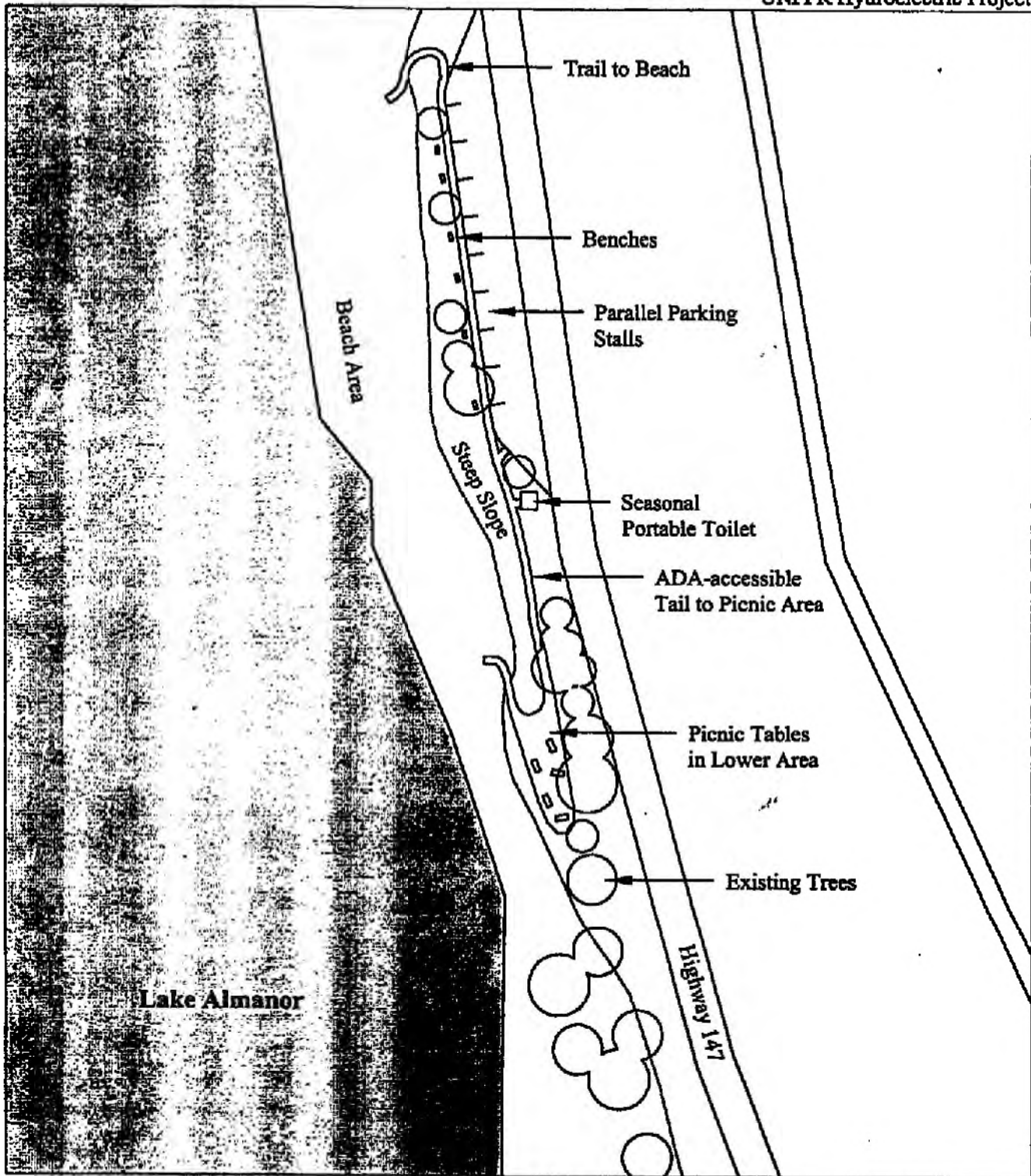


North



Catfish Beach Day Use and Camping Area

Site Plan 5



August 2002

SOURCE: PG&E GIS, EDAAW, Inc., 2000. p:\0e20006\Cad\unifr_rec-1.dwg

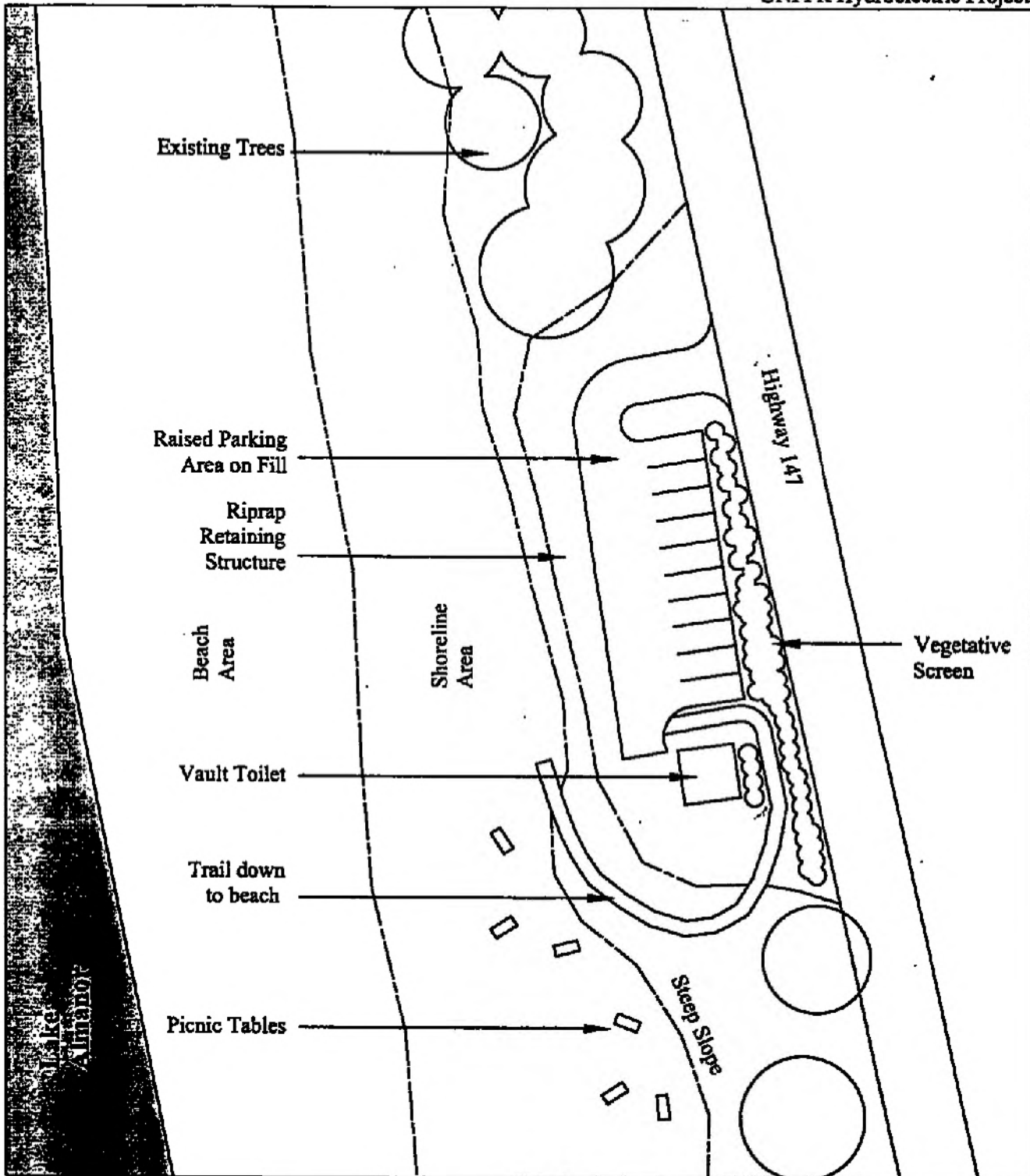
Site Modifications:

- Develop parking stalls parallel to the highway at existing pull-out area
- Provide signage, ADA-accessible seasonal portable toilet and picnic tables
- Provide benches at the parking level with views of the lake and mountains
- Provide erosion control at the shoreline
- Provide trails at north and south ends of site, south trail to be ADA-accessible to the lower picnic area



Stumpy Beach Scenic Overlook

Site Plan 6



August 2002

SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unfr_rec-1.dwg

Site Modifications:

- Provide new raised parking area on fill for 10 cars, 1 ingress/egress at north end for best visibility
- Provide ADA accessible portable (or single vault) toilet and 6 picnic tables
- Provide erosion control at shoreline
- Provide trail down to shoreline

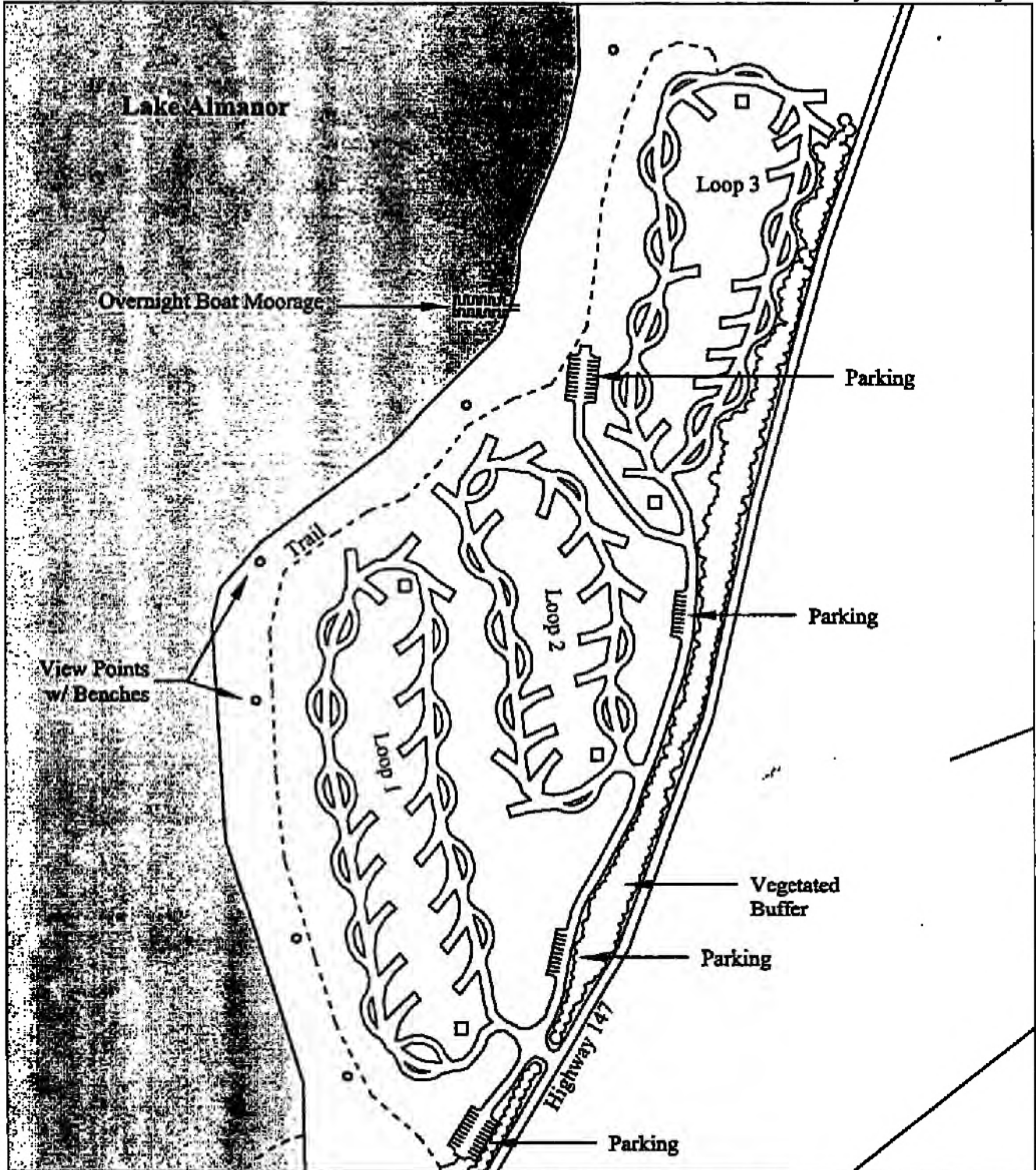


North



Westwood Beach Scenic Overlook

Site Plan 7



August 2002

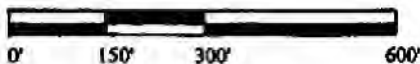
SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unfr_rec-1.dwg

Site Modifications:

- Provide 50 to 90 RV and tent campsites and restroom/showers
- Provide a day use swim beach
- Provide view areas with benches, connected by interior trails along the shoreline
- Provide overnight boat moorage for campers

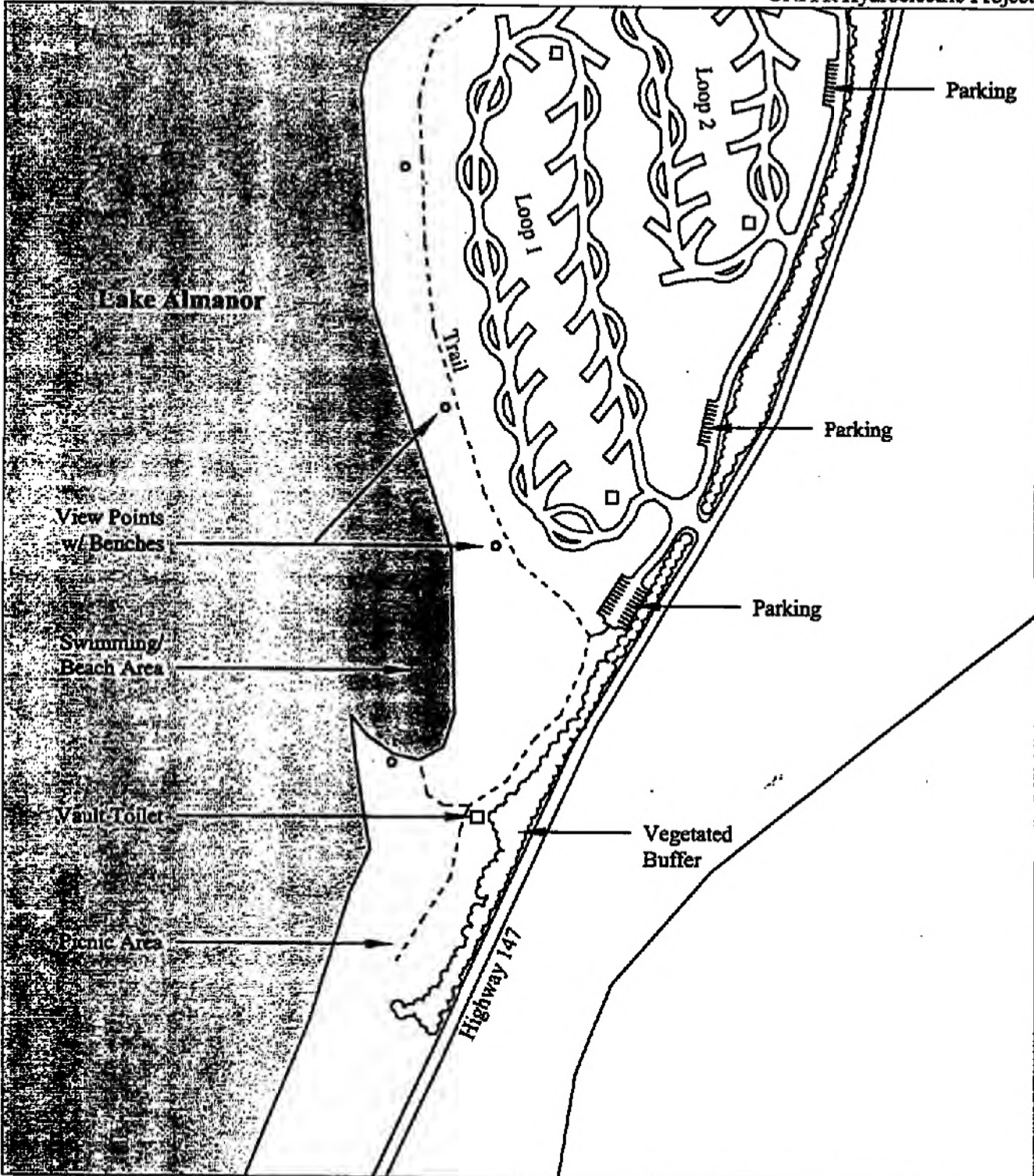


North



**East Shore Campground
Campsites and Boat Moorage**

Site Plan 8



August 2002

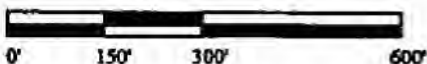
SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unfr_rec-1.dwg

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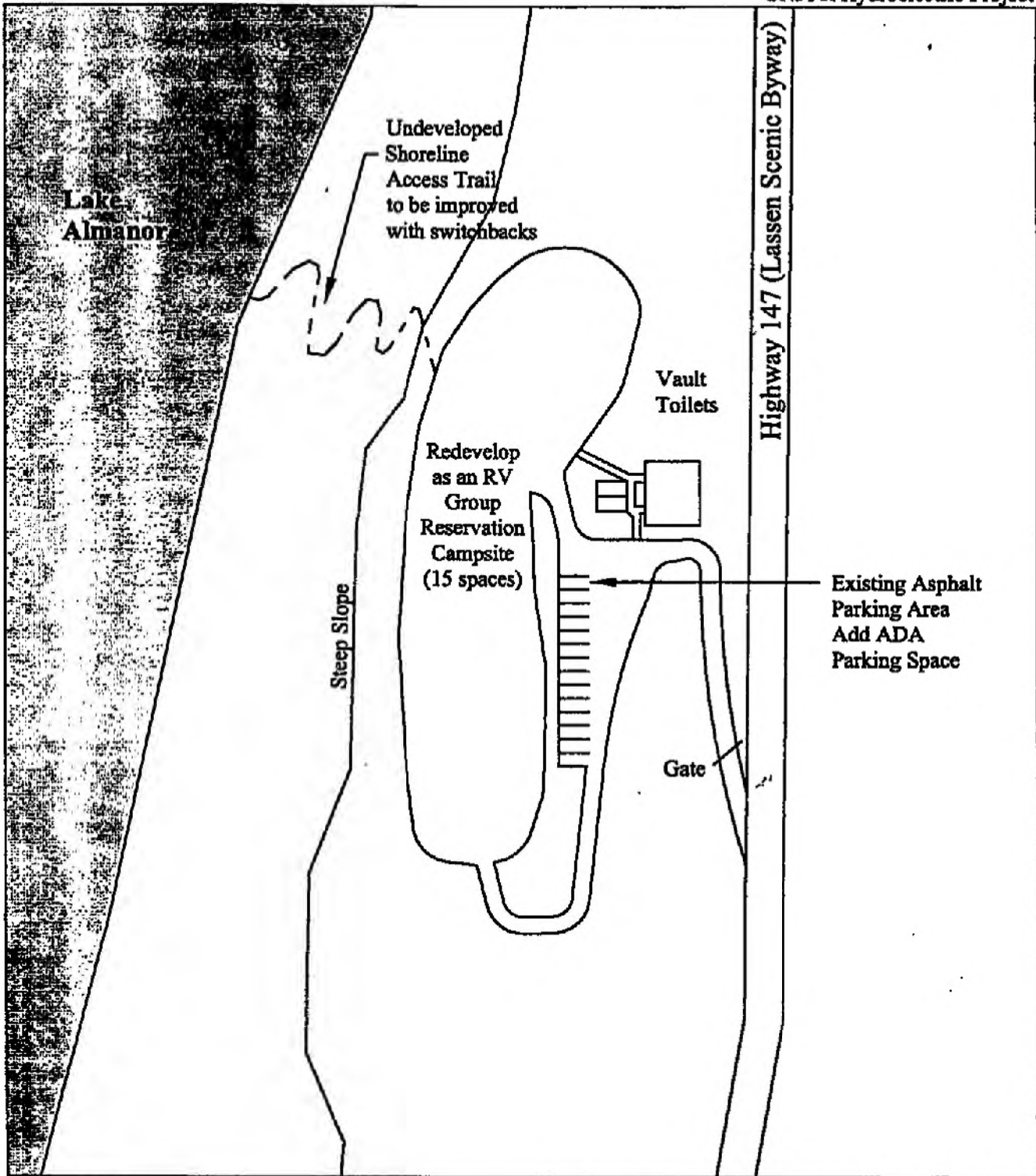


North



**East Shore Campground
 Day Use and Swimming Area**

Site Plan 9



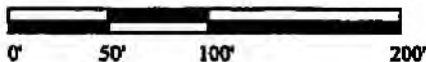
August 2002

SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unfr_rec-1.dwg

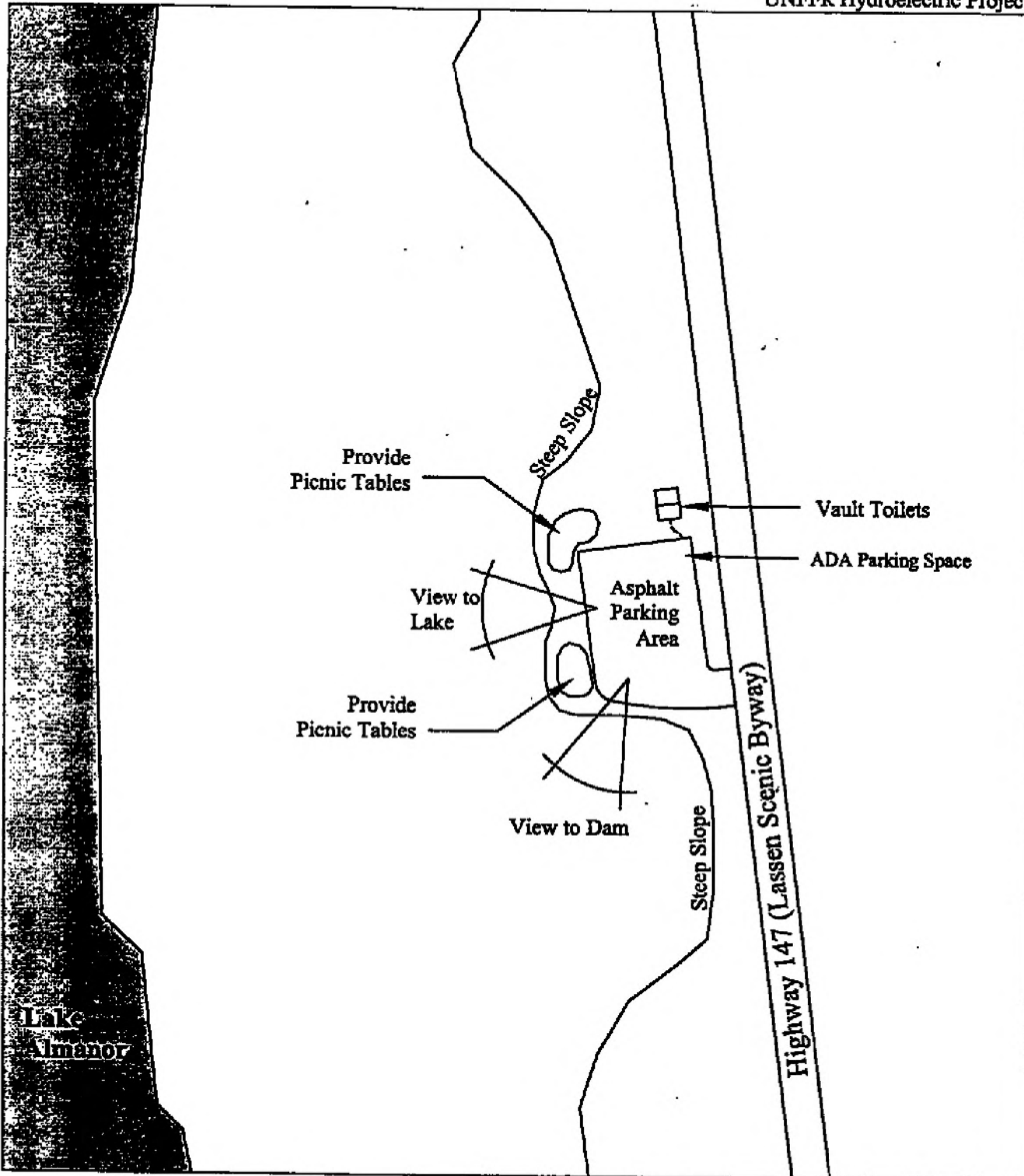
Site Modifications:

- Convert existing picnic area to an RV group reservation campsite (15 spaces)
- Provide 1 ADA-accessible parking space near toilets
- Provide ADA-accessible routes to trash receptacles
- Provide improved trail to shoreline with switchbacks and erosion control on hillside
- Provide a new group shelter

well is there



**Eastshore Day Use Area/
 Group Campsite Conversion**



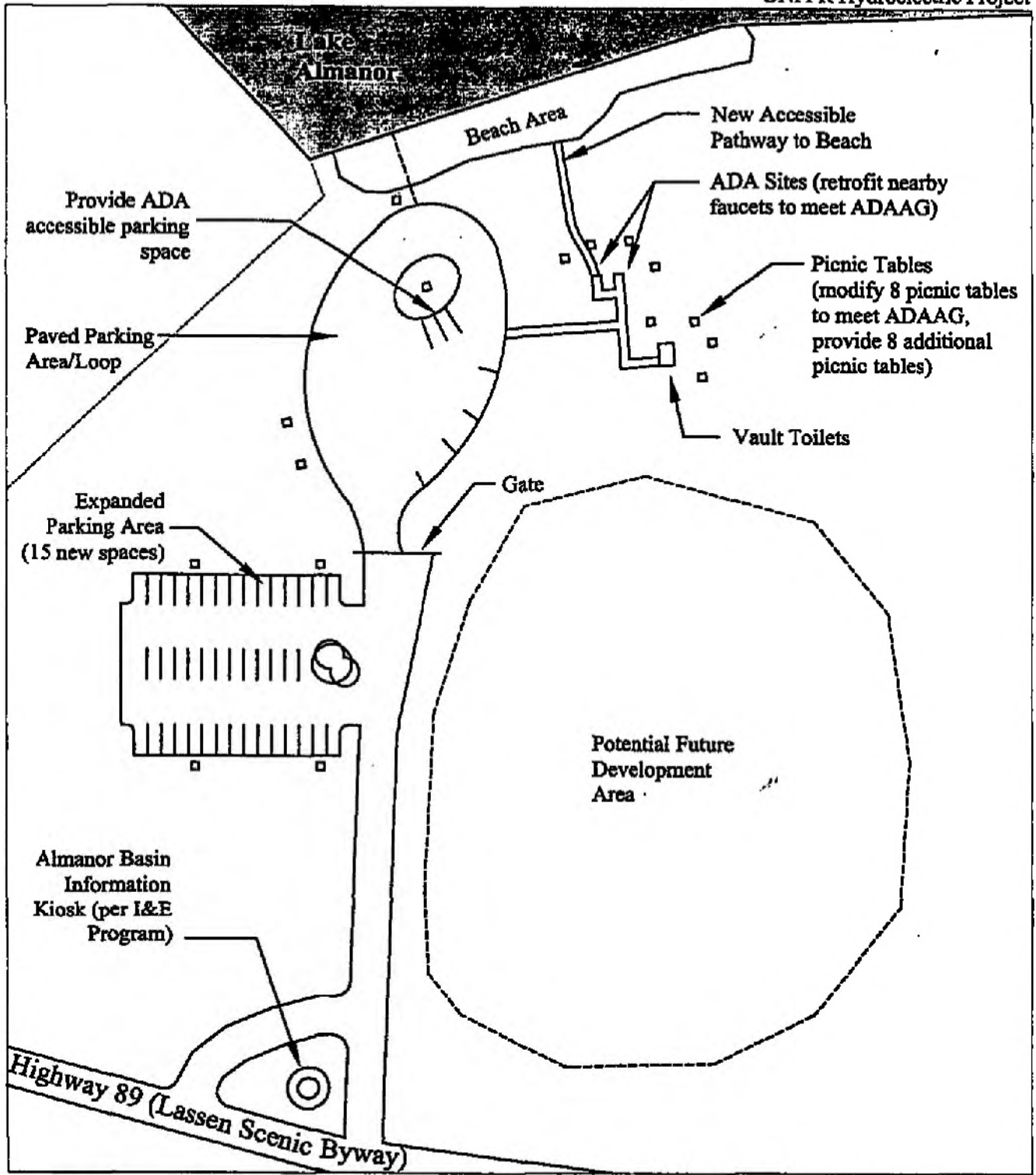
August 2002

SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\De20006\Cad\unffr_rec-1.dwg

Site Modifications:

- Provide ADA-accessible route to toilets
- Provide 1 ADA-accessible parking space near toilet
- Provide 5 additional picnic tables
- Restore views to Lake Almanor and Canyon Dam





August 2002

SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unfir_rec-1.dwg

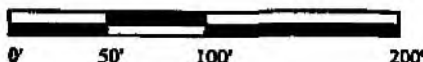
Site Modifications:

- Provide 1 ADA-accessible parking space adjacent to center island in parking area
- Modify 8 picnic tables to meet ADAAG
- Provide 8 new picnic tables
- Provide 15 additional parking spaces (future)
- Replace entrance sign with information kiosk

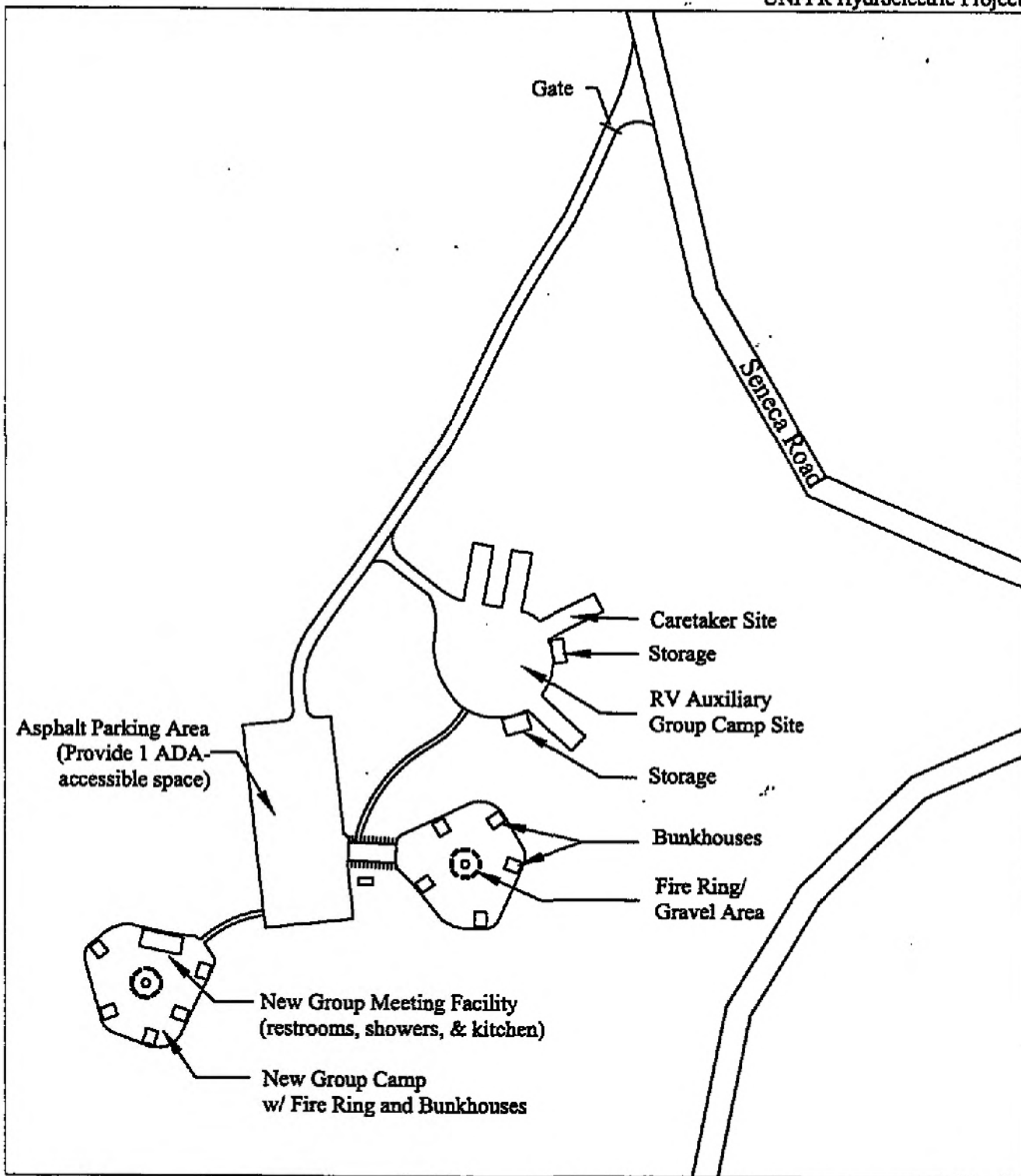
- Retrofit faucets near accessible elements to meet ADAAG
- Reconnect the water system with water supply across highway
- Make beach accessible by improving route
- Provide a sandy beach
- Provide 1 outdoor shower



North



Canyon Dam Day Use Area



August 2002

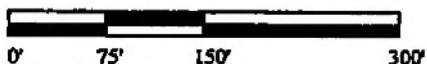
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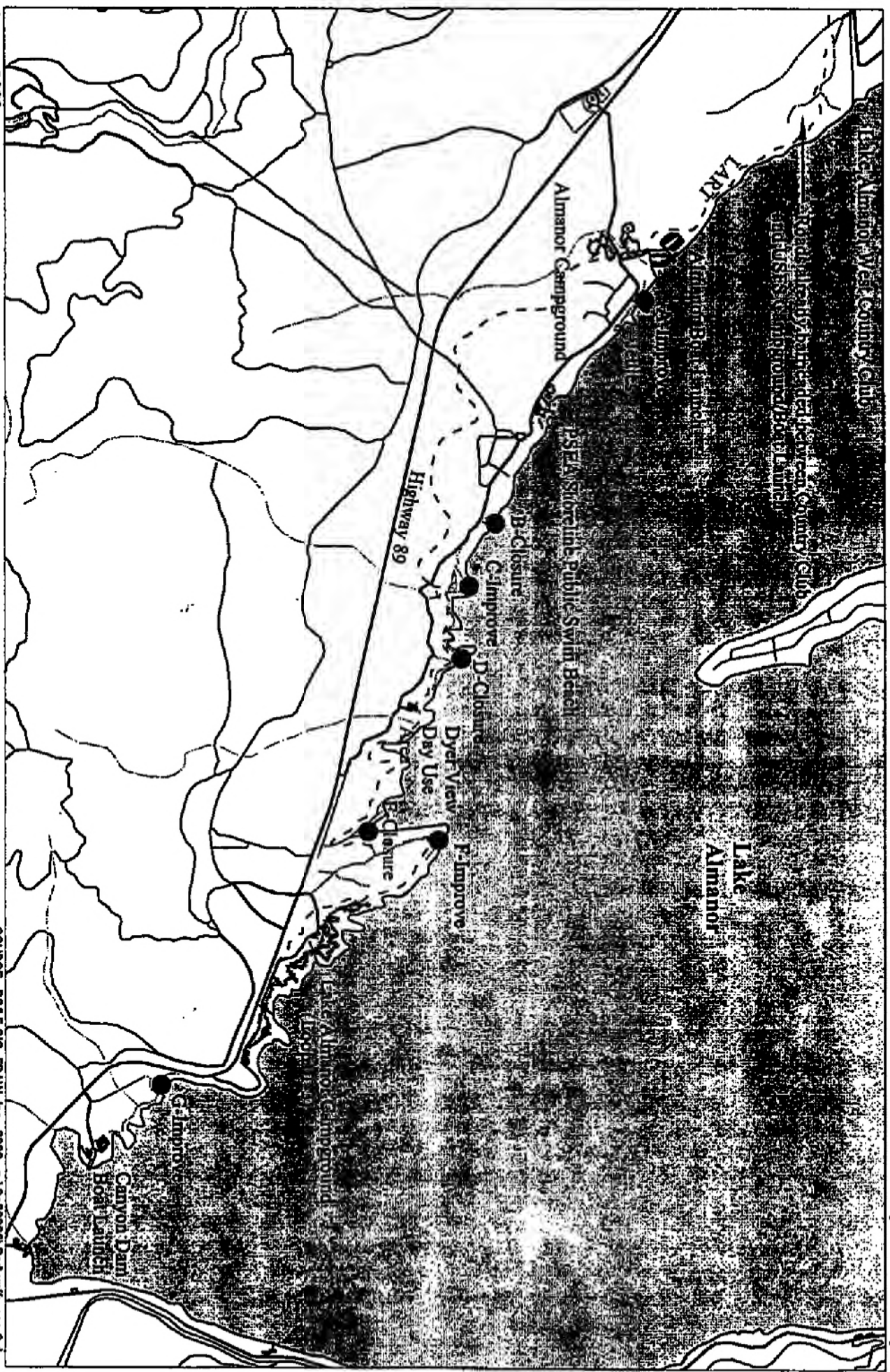
Site Modifications:

- Provide 1 ADA-accessible parking space
- Provide 1 new ADA-accessible cabin with accessible restroom
- Reposition telephone in group meeting facility to meet ADAAG
- Provide additional group reservation area at existing volleyball court
- Repair and resurface access road
- Provide 2 showers
- Retrofit water faucets near accessible elements to meet ADAAG



North





August 2002

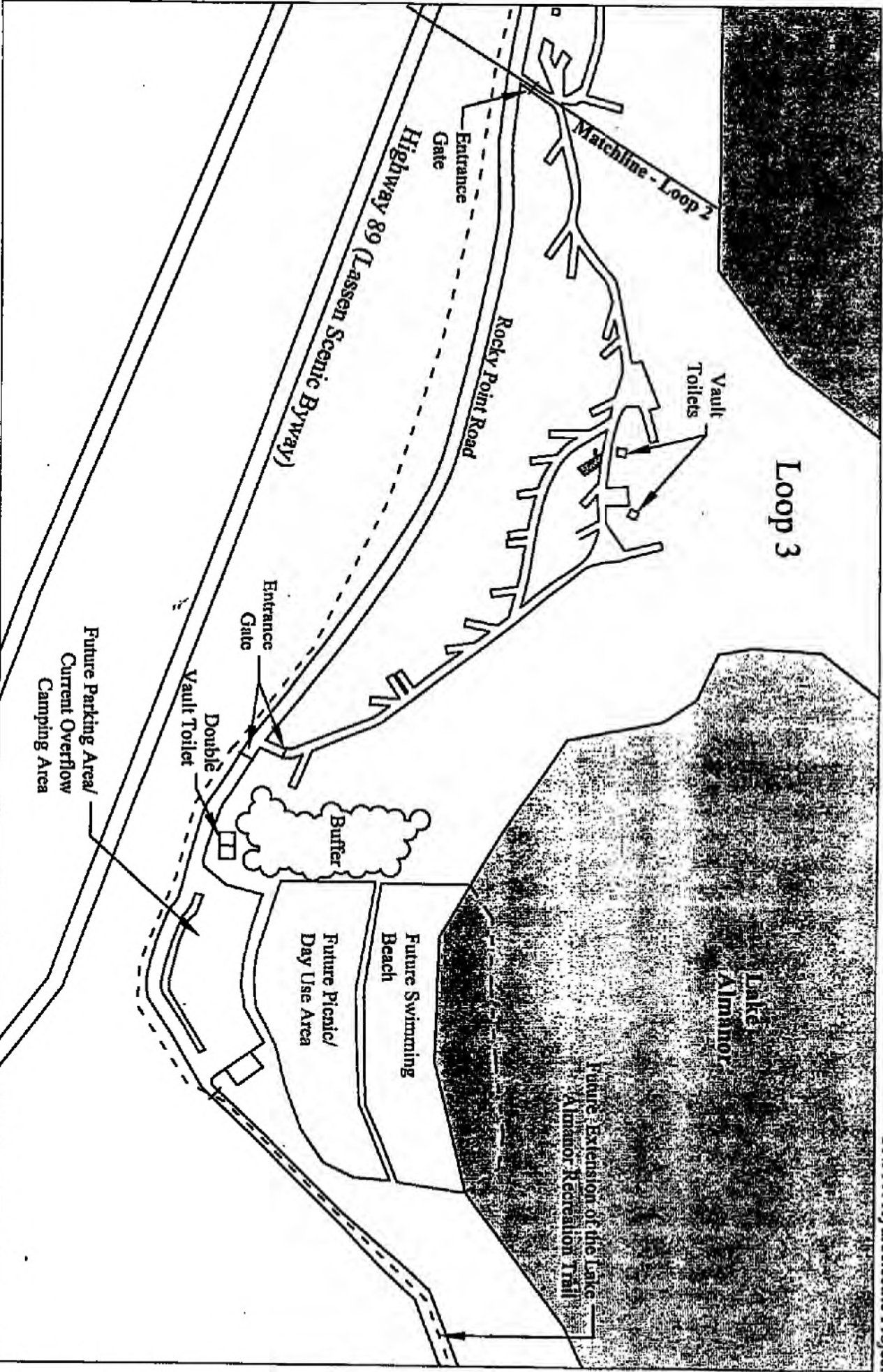
Site Modifications:

- Provide parking at or above the 4,494' elevation and/or block access to shoreline below.
- Provide gravel access road improvements
- Provide signs.
- Restore degraded access routes.

SOURCE: PG&E GIS, ED&W, Inc., 2000. p:\0e20006\Can\unifr_rec-2.dwg

Southwest Shoreline Access Zone Options





August 2002

Site Modifications:

- Modify 3 campsites to be ADA-accessible
- Retrofit 2 existing designated accessible campsites to meet ADAAG

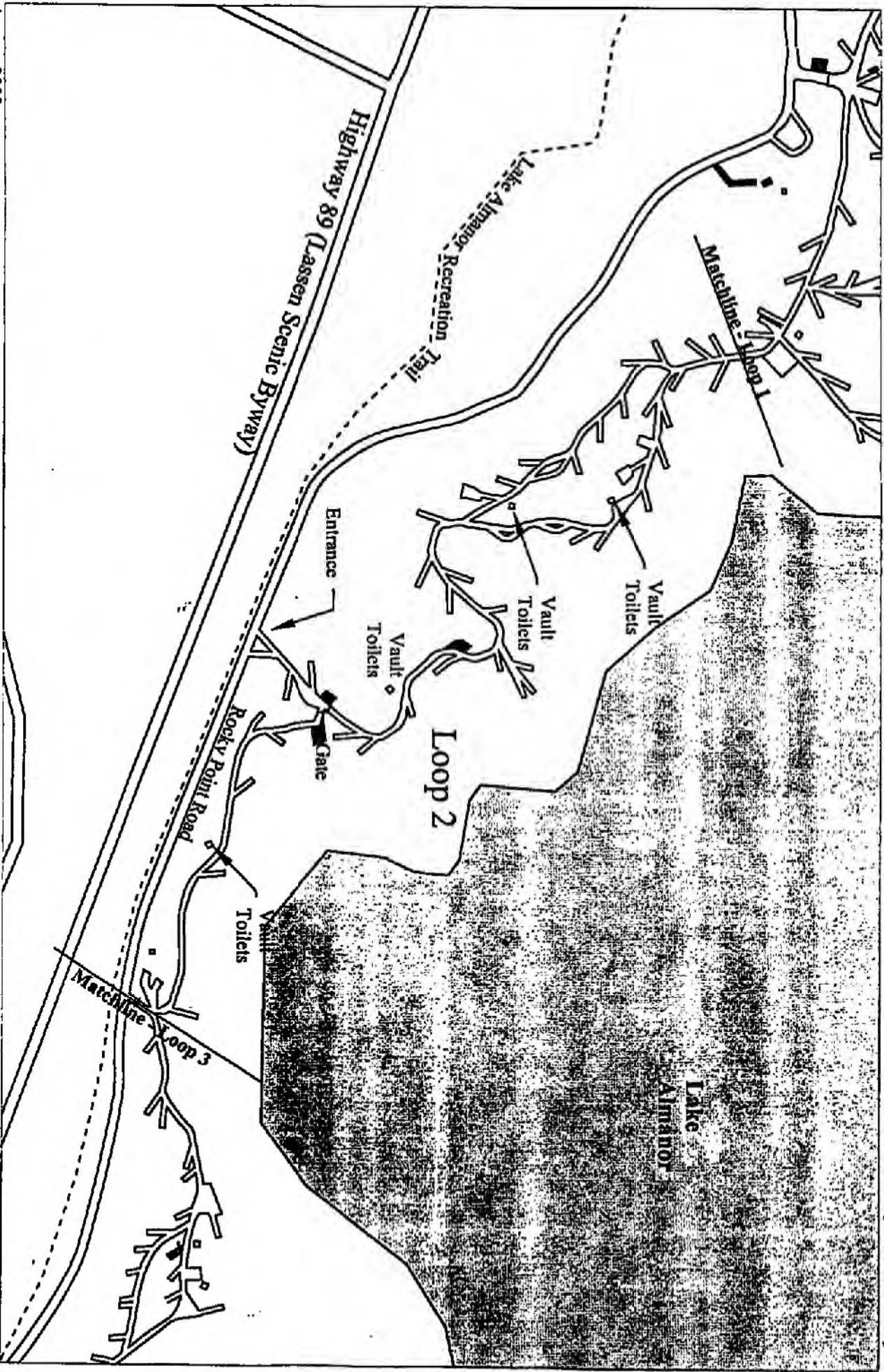


- Provide 1 additional ADA-accessible site
- Provide a new entrance kiosk that serves all three campground loops
- Replace old Klamath stoves
- Retrofit existing water faucets near accessible elements to meet ADAAG height standards, provide ADA-accessible routes

SOURCE: PG&E GIS, EDAP, Inc. 2000. p:\0620006\Caalunfir_rec-2.dwg

- Convert group site/overflow area into expanded day use area/swim beach
- Revegetate disturbed areas
- Provide 1 new indoor shower

Lake Almanor Campground Loop 3



August 2002

Site Modifications:

- Modify 3 campsites to be ADA accessible
- Retrofit 2 existing designated accessible campsites to meet ADAAG

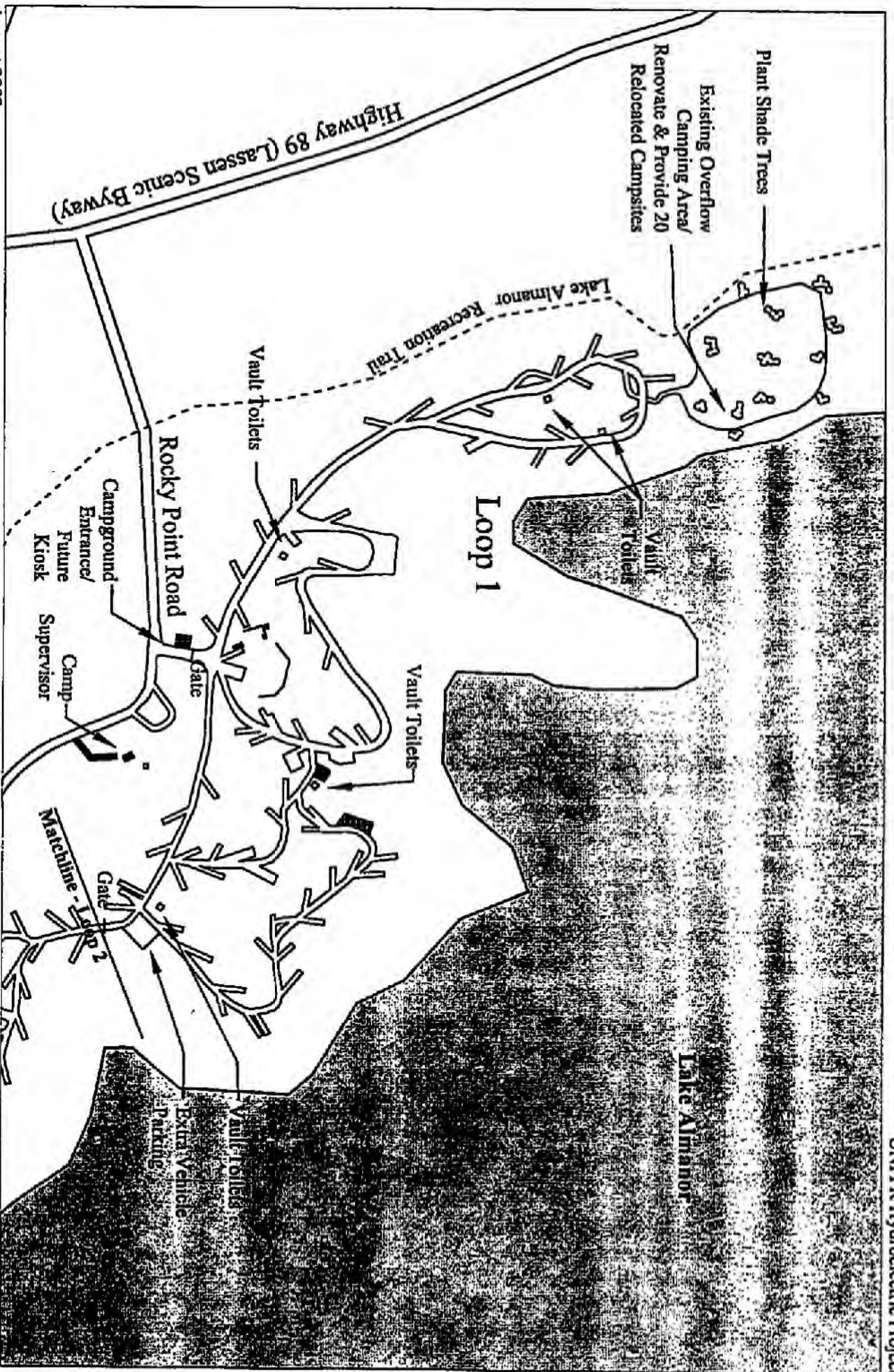


- Provide 1 additional ADA accessible campsite
- Modify surface & slope of the access routes to the toilets near entry and near site #100 to meet ADAAG
- Relocate interior pay station directly to a point directly
- Replace old Klamath stoves (flow-style camp stove with

SOURCE: PG&E GIS, EDW, Inc., 2000, p:\0a200006\CA0\unifr_rec-2.dwg

- Revegetate disturbed areas
- Provide 1 new indoor shower
- Provide a new entrance kiosk that serves all three campground loops

Lake Almanor Campground Loop 2



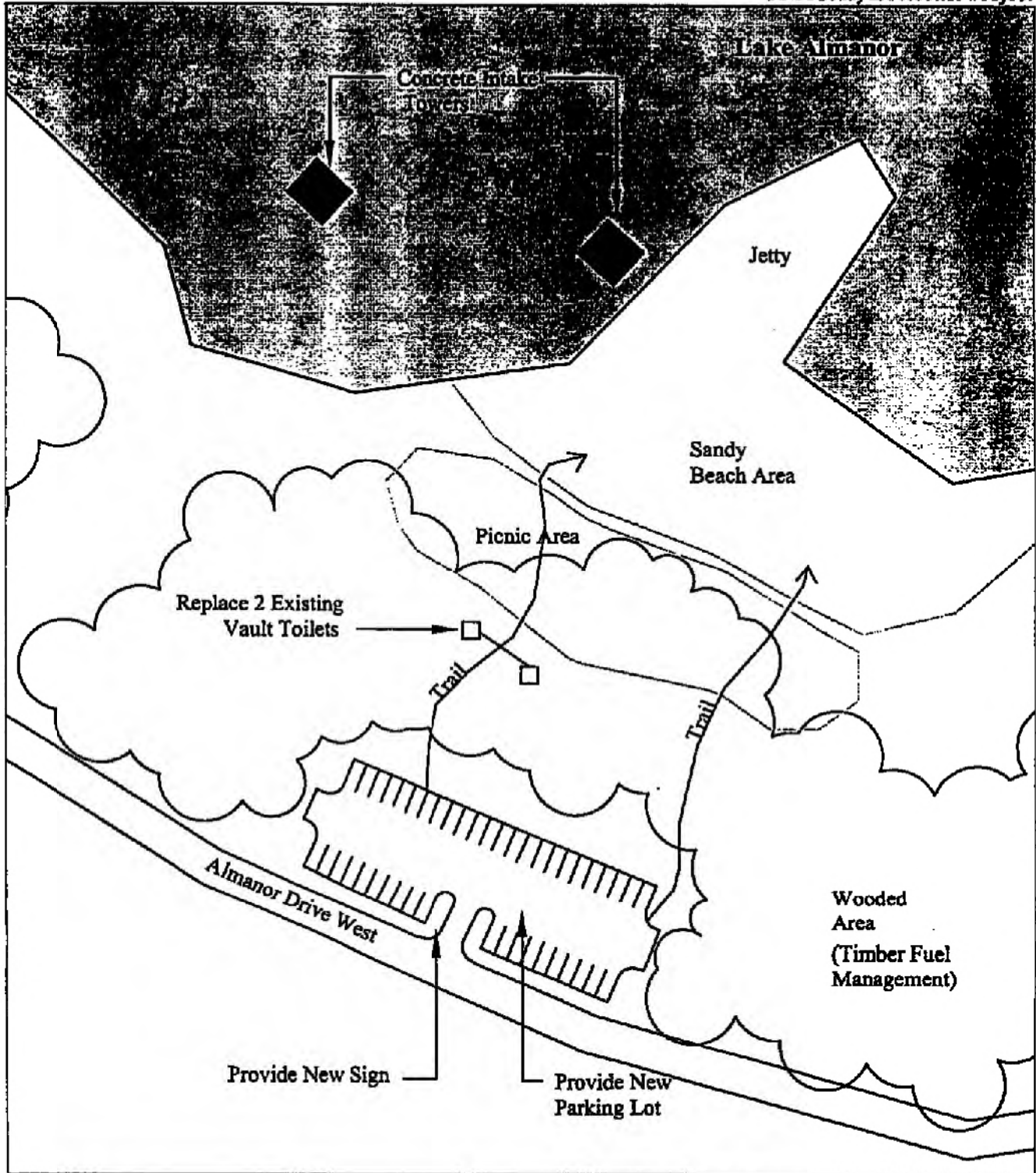
August 2002

Site Modifications:

- Revegetate areas disturbed by pedestrian or vehicular traffic
- Provide 1 new indoor shower
- Replace old Klamath stoves
- Retrofit existing water faucets near accessible elements such as toilets and campsites to meet ADAAG height standards, provide ADA-accessible routes
- Modify 4 campsites to be ADA-accessible
- Provide a new entrance kiosk that serves all three campground loops
- Provide 20 new sites in the north overflow area to replace those lost for day use in lower overflow area
- Retrofit 4 existing designated ADA-accessible campsites

SOURCE: PG&E GIS, ED&W, Inc., 2000, p:\0620006\Gadunfir_res-2.dwg

Lake Almanor Campground Loop 1



August 2002

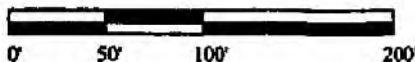
SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unifr_rec-2.dwg

Site Modifications:

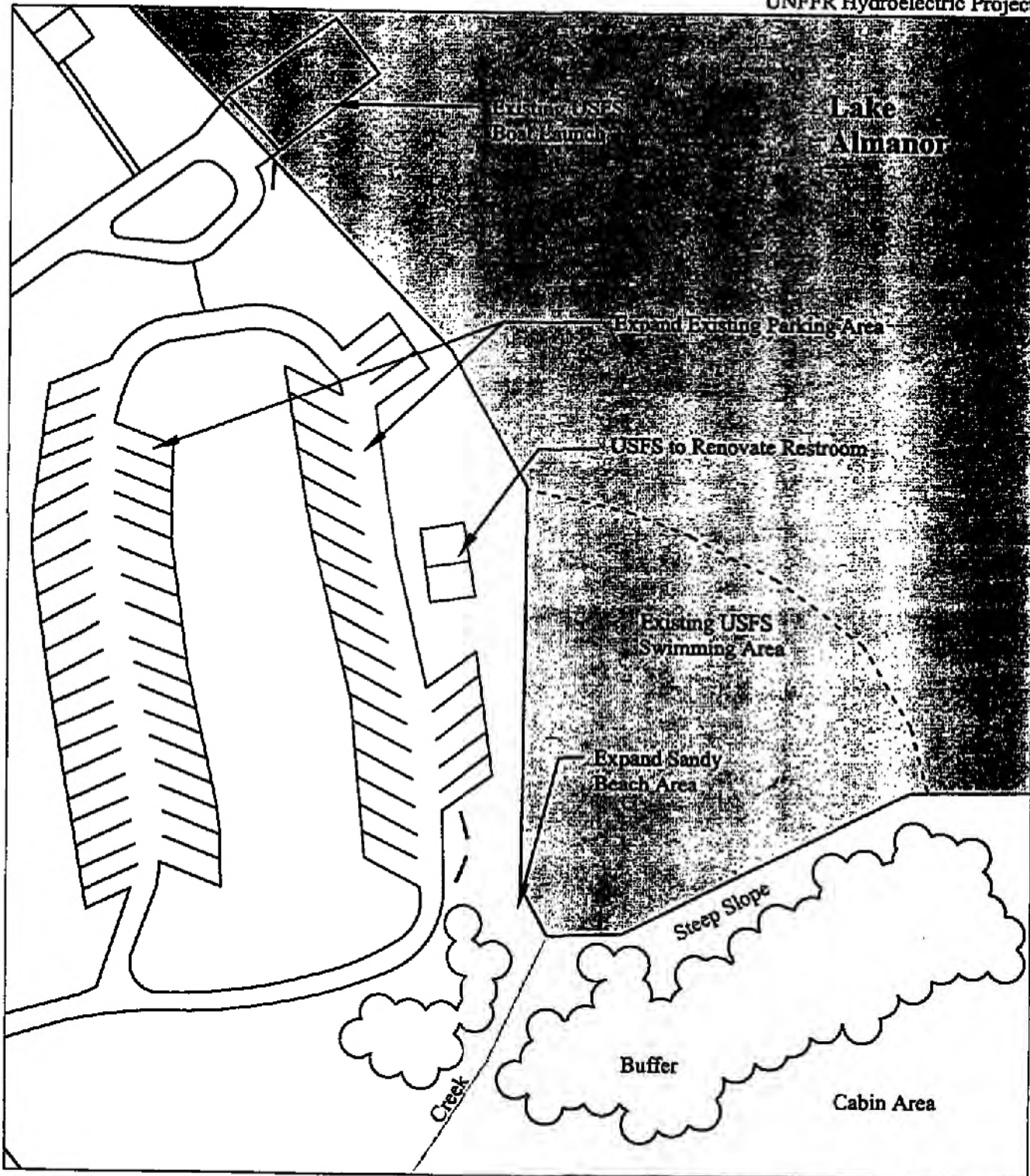
- Build parking lot for beach users
- Replace 2 single vault toilets (ADA)
- Replace existing picnic tables
- Expand and improve sandy beach area
- Meet ADA guidelines for all site elements



North



**PSEA Shoreline
Public Swim Beach**



August 2002

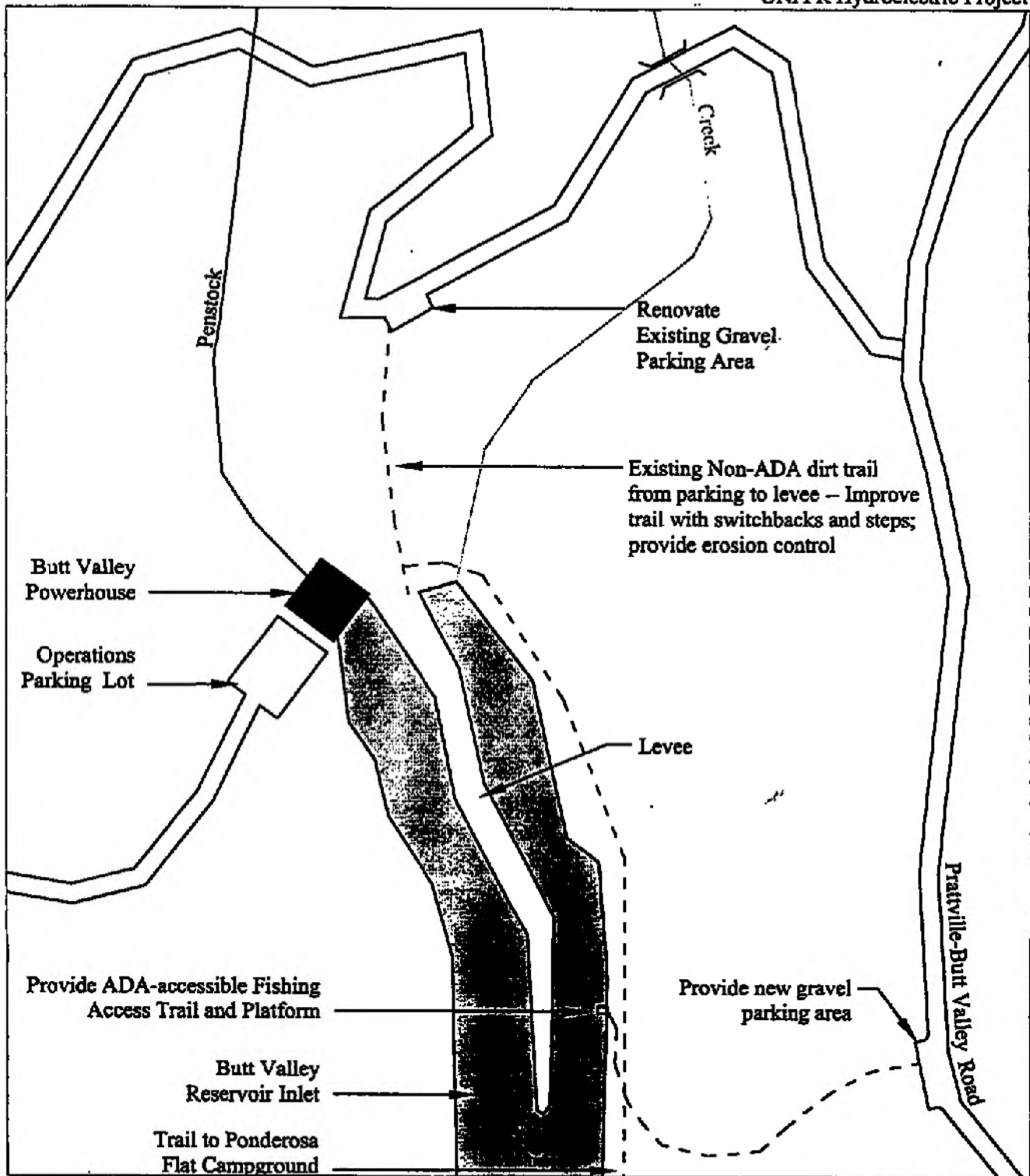
SOURCE: PG&E GIS, EDAA, Inc., 2000. p:\0e20006\Cad\unffr_rec-2.dwg

Site Modifications:

- Work with the USFS to expand the existing USFS-managed sandy beach area at the cove
- Expand existing parking

Area currently not covered on CABET

**Almanor Campground
Swim Beach Expansion**

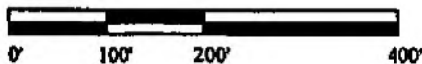


August 2002

SOURCE: PG&E GIS, EDAAW, Inc., 2000. p:\0e20006\Cad\unfir_rec-1.dwg

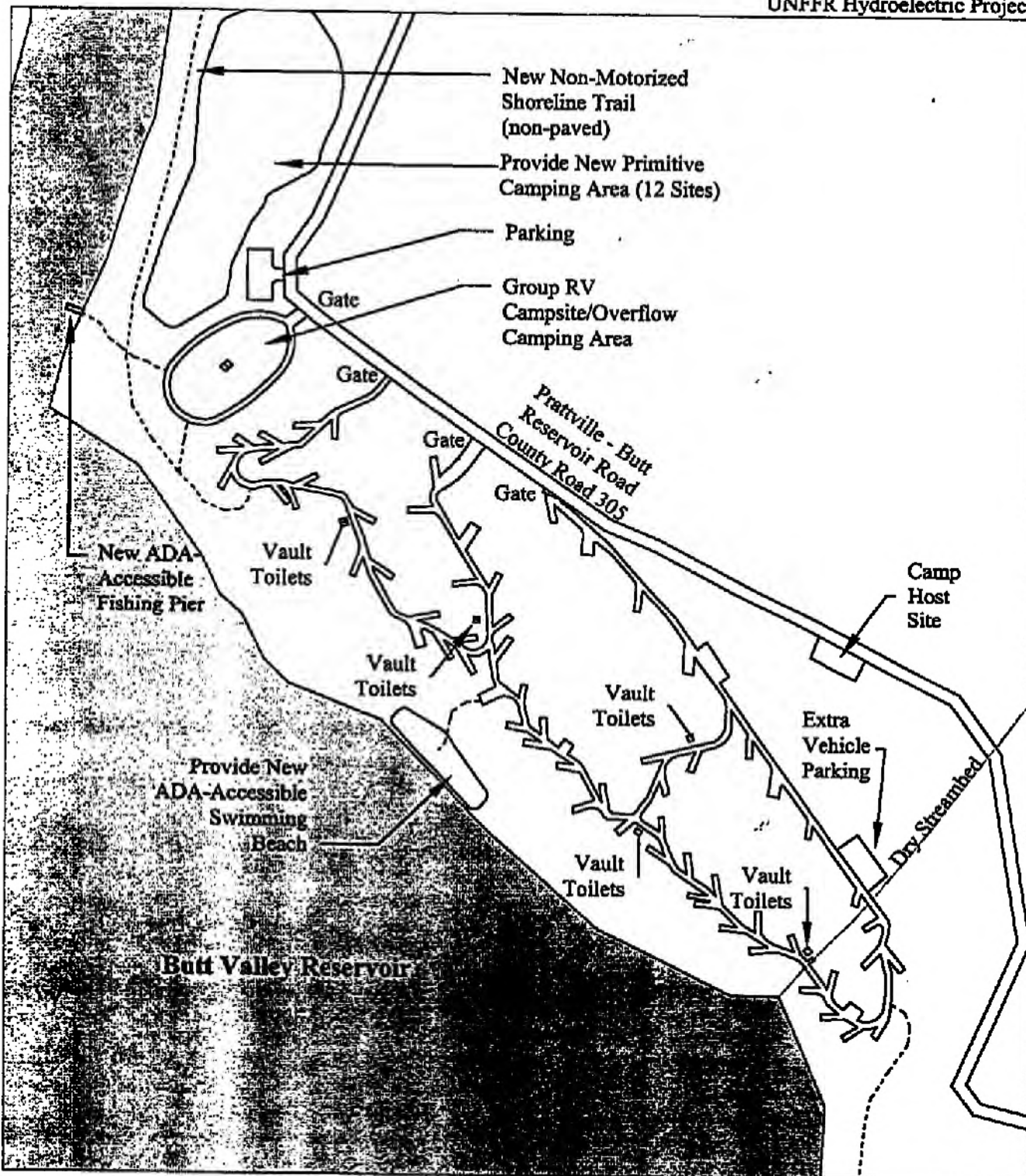
Site Modifications:

- Improve the existing trail near the powerhouse by installing switchbacks, stairs, and erosion control
- Provide a new ADA-accessible fishing access trail and platform from a new gravel parking area along Prattville-Butt Valley Road to inlet near the levee



Butt Valley Powerhouse Area Trails

Site Modifications Plan 20



August 2002

SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unfr_rec-2.dwg

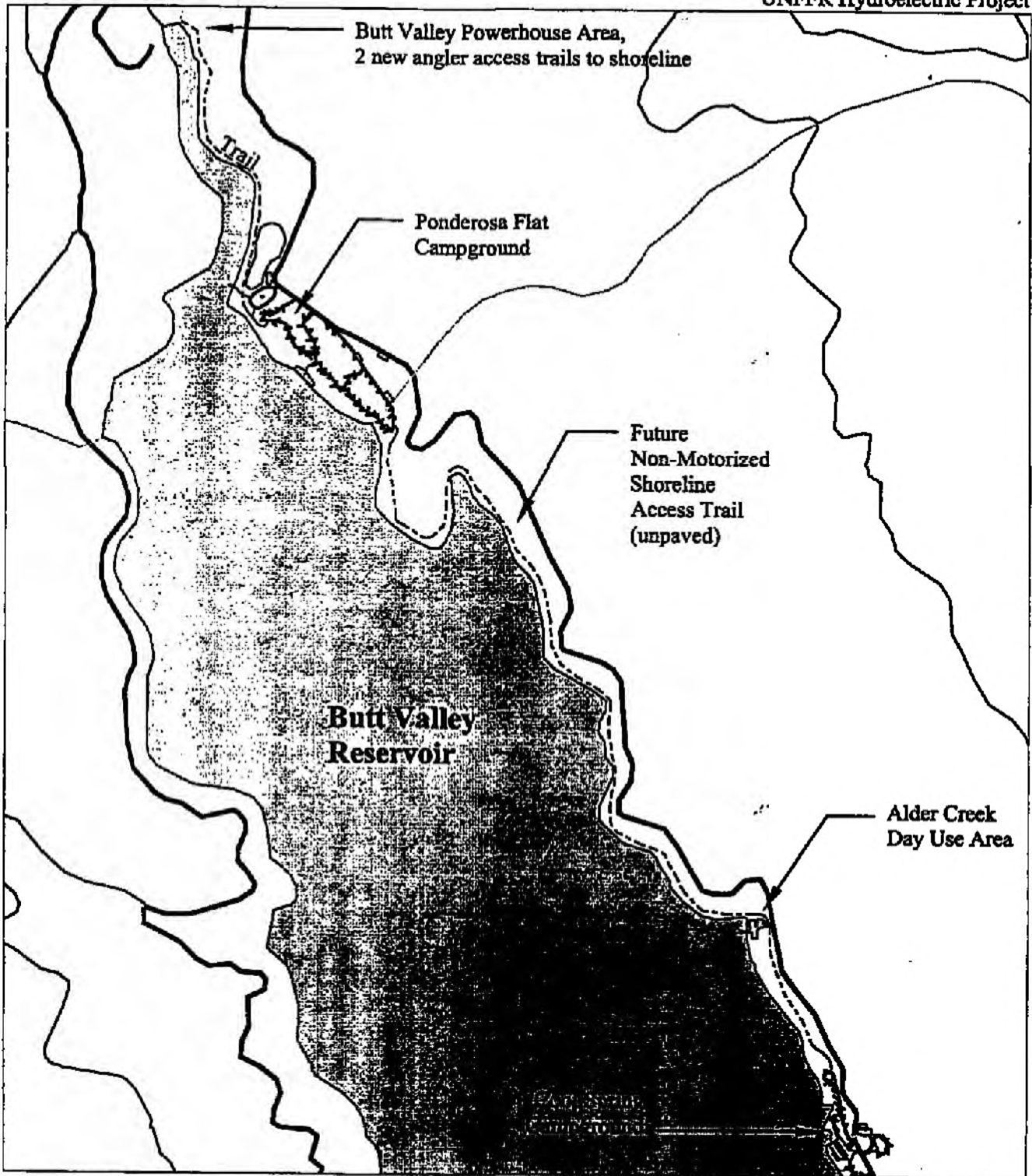
Site Modifications:

- Modify 4 sites to be ADA-accessible, retrofit existing accessible sites to meet ADAAG
- Provide ADA-accessible route for restroom near site #145
- Replace vault toilets in overflow area with new accessible toilets
- Provide 1 ADA-accessible parking space near toilets
- Provide 1 ADA-accessible swimming area at the campground shoreline
- Provide 1 ADA-accessible fishing access trail and pier or platform near the overflow area
- Provide approximately 12 new primitive tent sites near the current overflow area
- Provide 1 outdoor shower area



Ponderosa Flat Campground

Site Plan 21



August 2002

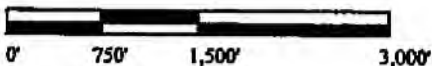
SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unfr_rec-2.dwg

Site Modifications:

- Provide a non-motorized shoreline recreation trail between Butt Valley Powerhouse and Cool Springs Campground
- Provide fishing access trails near powerhouse (see site plan 20)

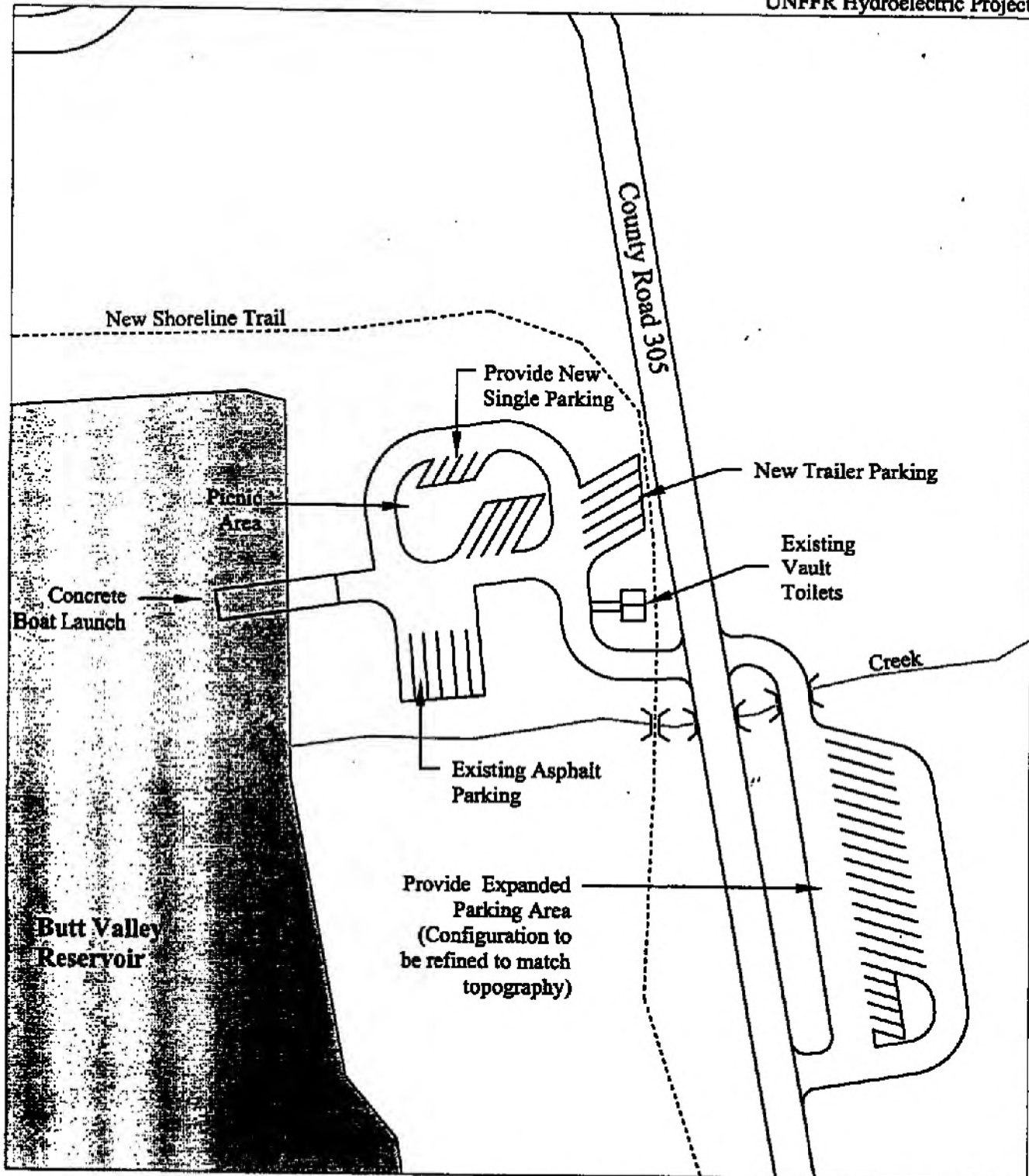


North



Butt Valley Reservoir Shoreline Trails and Angler Access

Site Plan 22



August 2002

SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unifr_rec-2.dwg

Site Modifications:

- Modify boat launch to meet current ADAAG
- Provide 1 ADA-accessible parking space near the toilet
- Expand parking area to accommodate approximately 14 additional vehicles with trailers
- Improve vehicle circulation at the ramp

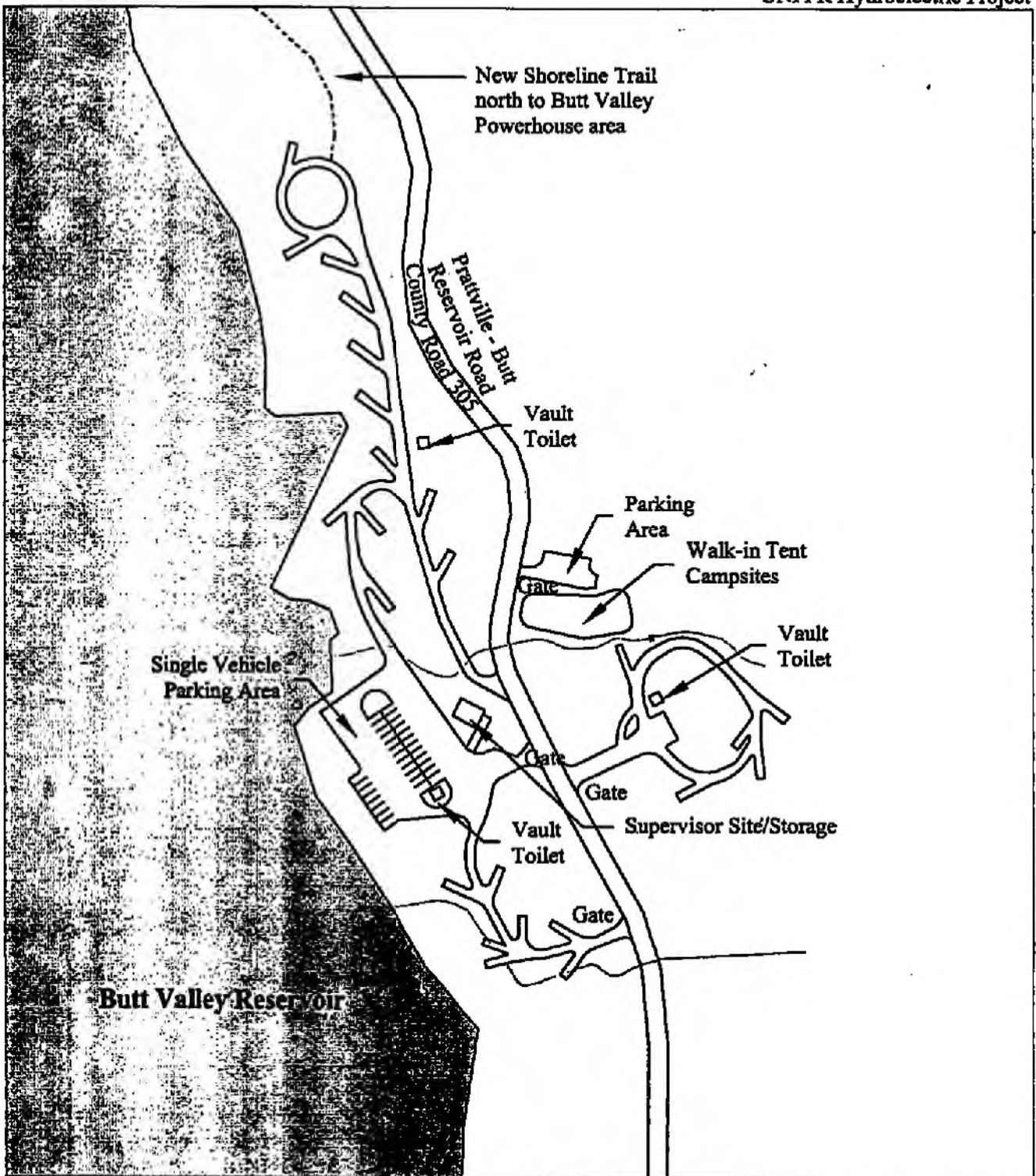


North



Alder Creek Day Use Area/Boat Launch

Site Plan 23



August 2002

SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unifr_rec-2.dwg

Site Modifications:

- Provide 1 new campsite to be ADA-accessible
- Retrofit water faucets near accessible elements to be ADA-accessible
- Provide 1 outdoor shower area to accommodate 2 people
- Provide new non-motorized trail along the shoreline

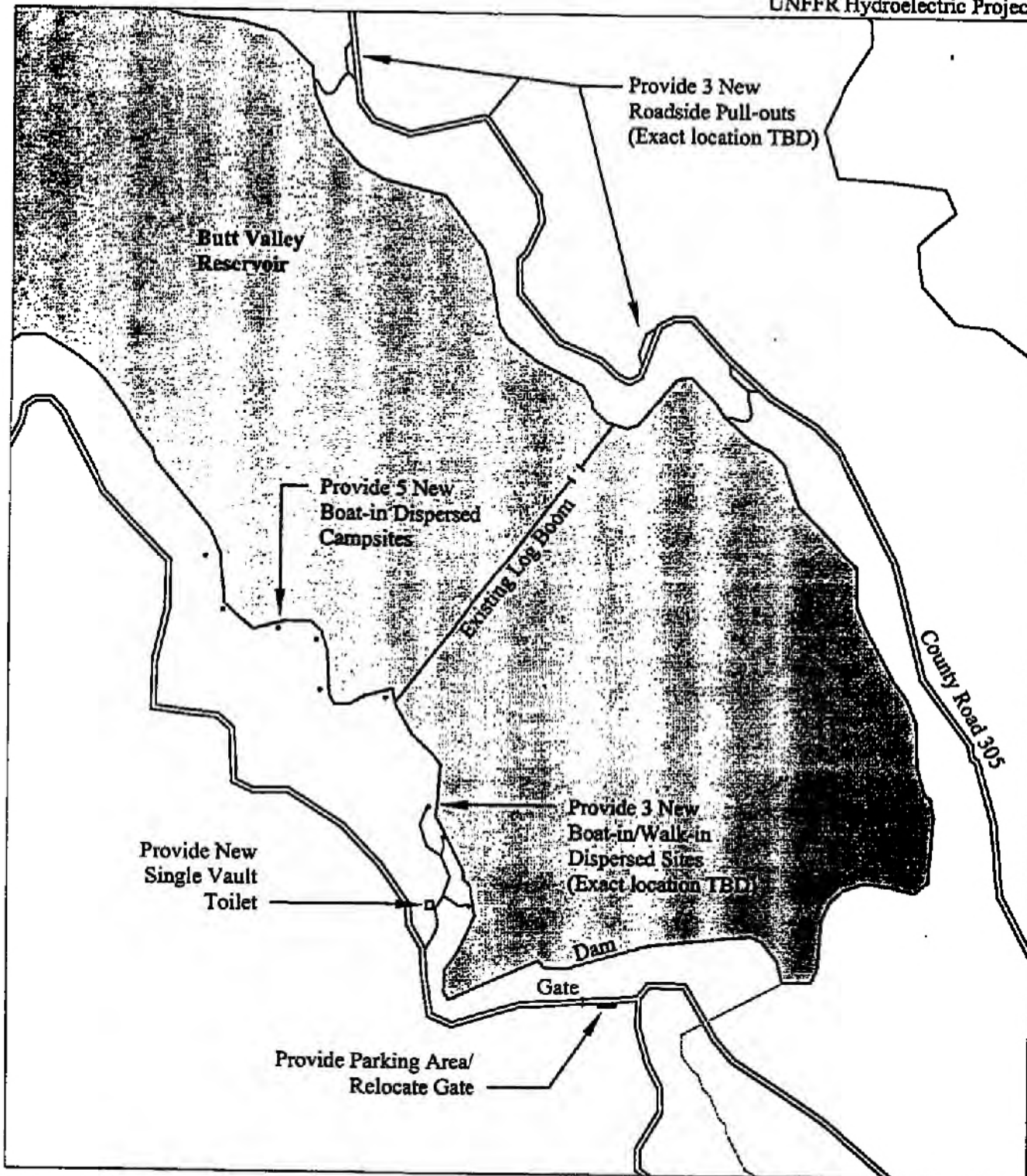


North



Cool Springs Campground

Site Plan 24



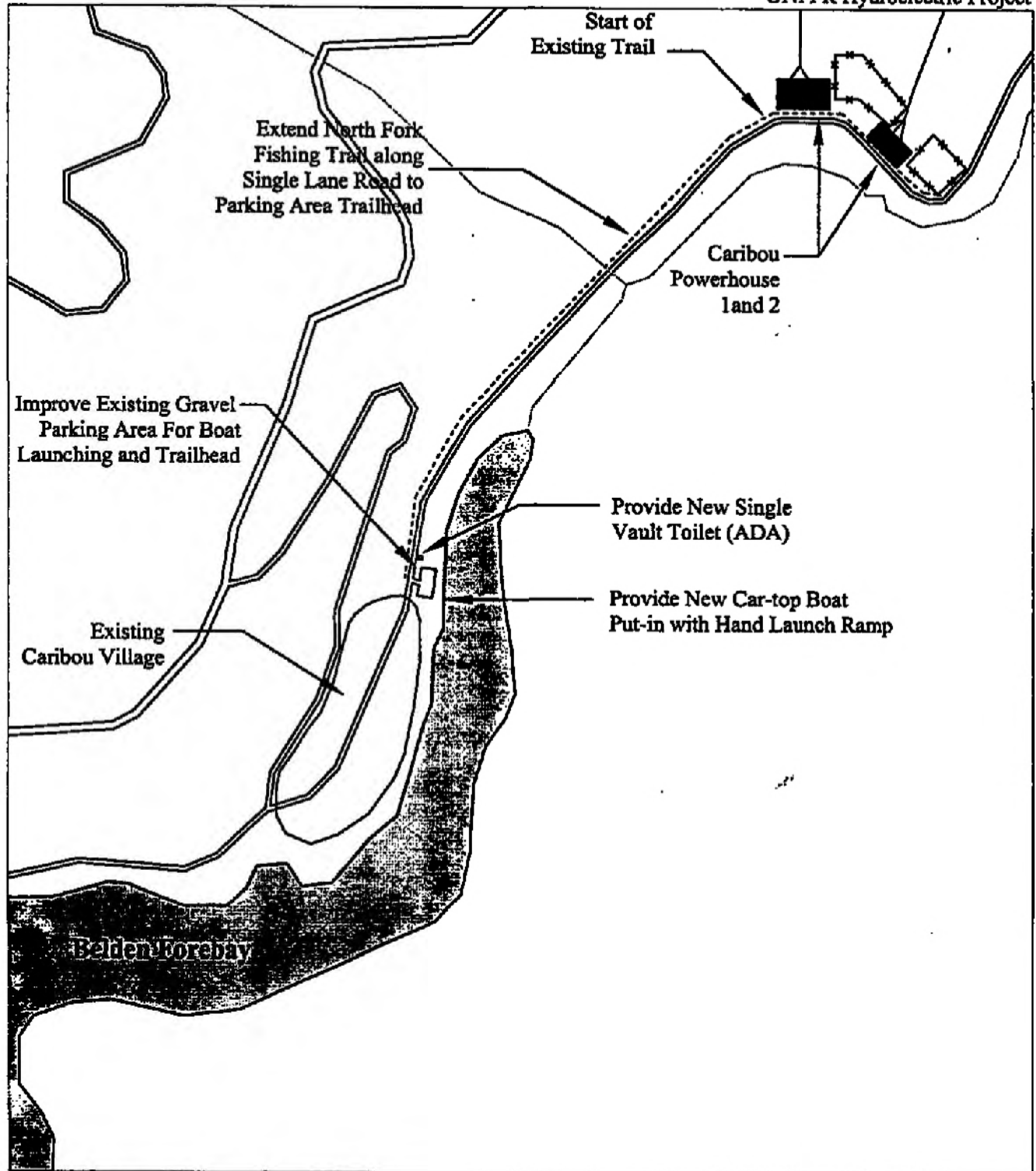
August 2002

SOURCE: PG&E GIS, EDAAW, Inc., 2000. p:\0e20006\Cad\unfr_rec-2.dwg

Site Modifications:

- Provide 5 boat-in shoreline dispersed campsites with tent pad, fire ring, and picnic table on the western shoreline of the reservoir near the dam
- Provide approximately 3 walk-in shoreline dispersed day use sites with picnic table near the dam on the western shoreline
- Provide a single vault toilet near the above sites with road access
- Provide 3 small roadside pull-outs with short trails along the eastern shoreline

**Butt Valley Reservoir
Boat-in/Walk-in Sites**



August 2002

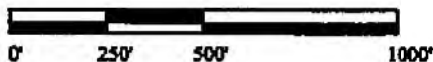
SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\De20006\Cad\unfir_rec-2.dwg

Site Modifications:

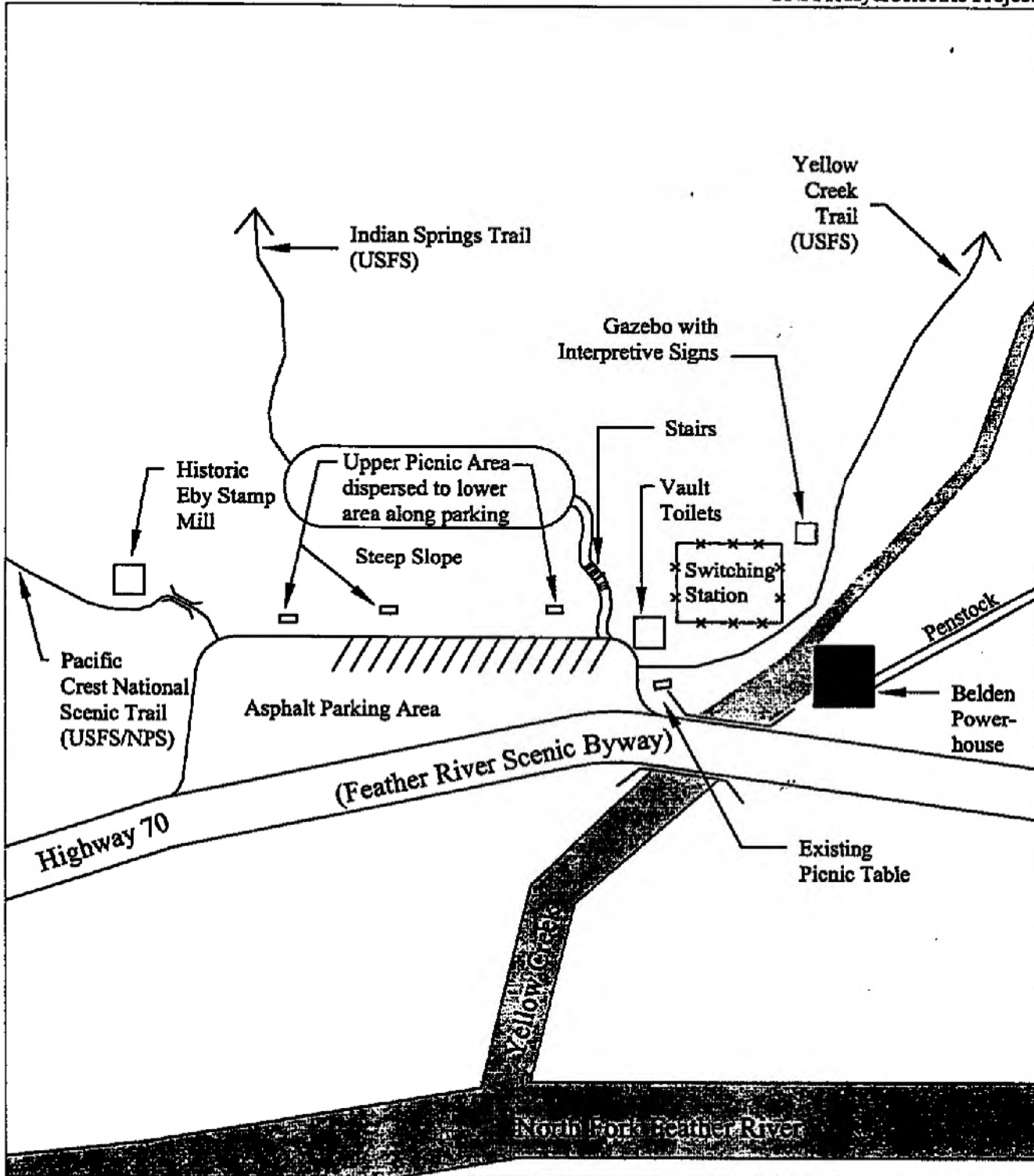
- Provide a car-top non-motorized boat launch and trailhead parking area at an existing gravel parking area next to the gate past the Caribou Village (parking for 10 vehicles)
- Modify the shoreline with small ramp at this site to provide improved access for launching small watercraft (kayaks, canoes, and rafts) at the Belden Forebay
- Provide a vault toilet (ADA)
- Provide informational signage including 5mph boating speed limit and less than 10 hp boats



North



Belden Forebay Cartop Boating Access



August 2002

SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unfpr_rec-2.dwg

Site Modifications:

- Provide 2 ADA-accessible picnic tables with access
- Provide accessible routes to the gazebo and overlook area next to the creek and to the Eby Stamp Mill historical features
- Provide erosion control on the slope between the parking lot and the picnic area
- Disperse the existing picnic area throughout the lower level between the Eby Stamp Mill and the creek



North



**Belden Rest Stop
 (Highway 70)**

Site Modification Plan 27

**2105 Committee Proposal
For Maintaining Lake Almanor Water Levels
Under the New Project 2105 FERC License
August 27, 2002**

Proposal

1. At the end of each calendar year PG&E would draw down Lake Almanor no lower than elevation 4480 feet.
2. During the first five months of each calendar year (Jan through) May PG&E would minimize power releases in order to obtain a maximum lake level at the end of May. If a seasonal runoff forecast made during the five month period indicates that the maximum lake level will exceed 4494 feet, then PG&E could make power releases to limit the lake level to no greater than 4494 feet.
3. During the summer recreation season (June, July, and August) PG&E could draw down the lake a maximum of 4 feet starting from whatever the lake level was at the end of May.

These requirements could be exceeded if the California Independent System Operator (ISO) or the Federal Energy Regulatory Commission (FERC) determined an extreme and unforeseen power shortage existed and drawing down Lake Almanor would alleviate the shortage. In addition, PG&E could draw down the lake below 4480 feet if required for substantial maintenance of its hydro electric facilities located at Lake Almanor, provided that PG&E endeavored to minimize impacts during the summer recreation season.

The above proposal is intended to become a license condition in the new Project 2105 FERC license. Hydro license conditions that restrict a hydro project's lake levels and summer draw downs to specified limits are not new and in fact are included in many FERC hydro licenses.

Impact of the Proposal on Lake Operations

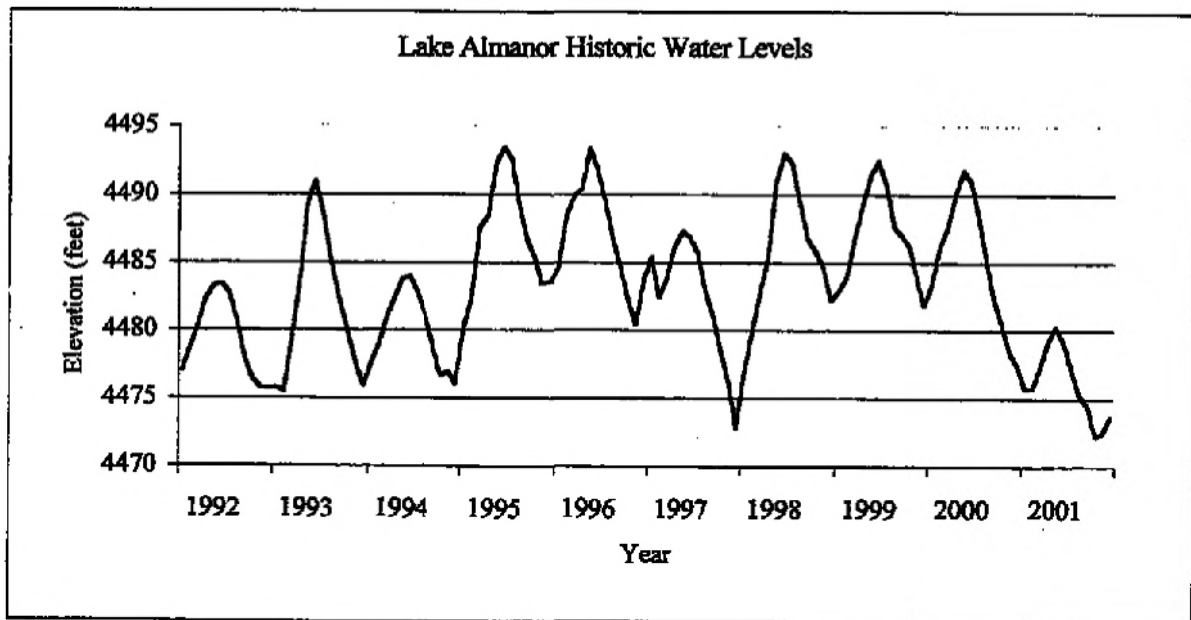
The proposed operating limits would require only minor changes in current operations. For the past 10 years¹, the average end of year lake level is 4478.3 feet which is only 1.7 feet lower than the proposed 4480 foot level. For the same 10 year period, the average June, July, and August lake draw down is 4.1 feet which is slightly more than the 4 foot draw down proposed.

Historically, PG&E has allowed Lake Almanor to fill between January and May (or even mid June) and has drawn down the lake between June and December. This pattern changes depending on whether a particular year is wet or dry, if maintenance is required on a downstream facility, and whether there is an unforeseen demand for electric power. Minimum lake levels generally occur in late December through mid January.

¹ Historic operation data available on the California Department of Water Resources website.

Historic 10 Year Lake Almanor Operation

Calendar Year	June, July, and August draw down (feet)	End of Year Lake Level (feet)
1992	2.7	4475.7
1993	4.3	4475.9
1994	2.9	4476.0
1995	3.0	4483.6
1996	6.6	4483.6
1997	4.4	4472.8
1998	1.6	4482.2
1999	3.9	4481.8
2000	6.8	4477.4
2001	5.0	4473.7
Average	4.1	4478.3



MEETING NOTES

**UNFFR PROJECT RELICENSING (FERC No. 2105)
Recreation, Land Use, and Aesthetics Work Group Meeting
August 28, 2002
9 A.M. to 12:00 P.M.
Chester Memorial Hall, Chester, CA**

Attendees:

Jerry Duffy	256-3227	dyermt@citilink.net
Mac Hinman	259-2014	hThinmaniii@yahoo.com
Gerry Stratford	596-3488	gs@sdaone.com
Chuck Warner	259-4490	
Janie Ackley	258-5162	jackley@fs.fed.us
Michael Condon	283-7820	mcondon@fs.fed.us
Aaron Seandel	259-4335	aseandel@psln.com
Mary Getz	925-455-5070	mgetz@reloaction.com
Joan Stewart	259-3643	
Jim Stewart	259-4309	
Sam Bossio	259-3226	
Ron Davey	259-2445	
Kirby Gilbert	425-482-7701	kgilbert@fwenc.com
Mark Sanford	530-894-4653	ams0@pge.com
Tim Schreiber	206-622-1176	schreibert@edaw.com
Chuck Everett	206-622-1176	everettca@edaw.com
John Mintz	415-973-5779	ism9@pge.com
Mike Willhoit	259-3647	mcwill@psln.com
Christi Goodman		
Bill Dennison	259-2058	dennison@citilink.net

John Mintz called day #2 of the meeting to order and provided a general overview of the intended focus of the day's meeting, topics included Chuck Everett finishing his presentation on recreation plans and Kirby Gilbert discussing erosion control and other shoreline issues.

Recreation Capacity

Chuck Everett handed out a table illustrating People-At-One-Time (PAOT) data for proposed new recreation development (added capacity). He explained that this is an estimated maximum instantaneous count of the number of people occupying a site. He summarized the results, stating that over the 20 sites that are to be improved, a maximum total of 1,460 additional people could occupy all sites. He also explained that this is an unlikely event, except perhaps on major summer holidays. The largest new sites would be the East Shore Campground, with 330 potential occupants, Catfish Beach 116, PSEA Swim Beach 121, and North Shore Campground Boat Launch 120 additional PAOT. The

new day use areas average 40-60 PAOT. John Mintz also indicated that new Lake Almanor Campground day use beach area would accommodate about 142 PAOT. This information does not include the proposed Southwest Shoreline Access Zone.

Southwest Shoreline Access Zone

Chuck Everett then passed around a handout on the Southwest Shoreline Access Zone. It included a site map and described four proposed access sites and routes that have been barricaded. A question was raised as to who placed the existing barricades. Chuck responded that the roads were on USFS land; presumably the barricades were placed by the Forest Service. Another member of the public commented that the peak time for access in this zone is from June 15th to July 15th. Chuck would be discussing this proposal with the USFS District Ranger later in the day.

Draft Recreation Resource Management Plan (Next Version for Review)

Chuck Everett then handed out copies of the next version of the draft Recreation Resource Management Plan (RRMP). He asked if there were comments on the previous draft that was handed out during the meetings in early August. No comments were provided. He explained that the Draft RRMP would be appended to the Final License Application. Typically FERC will ask the Licensee to finish the RRMP after the new license has been received, so the items in the Draft RRMP will continue to evolve in the future.

Monitoring: Chuck summarized the planning areas and monitoring indicators, methods, and actions. While it was acknowledged that this is a very good start towards a monitoring program, some members of the public expressed concern about water quality issues related to recreation use, primarily pollution caused by two-stroke engine use, such as personal water craft (PWC). Chuck Everett responded that PG&E does not have the authority to prohibit PWC use on the reservoirs. Bill Dennison added that PG&E is contributing financially to the water quality monitoring program. Michael Condon pointed out that the state enforces water quality issues, while the county enforces safety policies on the surface of the water. John Mintz indicated that the State is addressing the PWC pollution issue by requiring manufactures to convert to four stroke engines. John also mentioned that the issue of vehicles driving on the shoreline below the 4,500' elevation is another issue on which PG&E has a policy in place, but no legal enforcement capability. Plumas County could help maintain/improve water quality as well as minimize impacts to other shoreline resources (i.e. cultural resources) by adopting this PG&E policy as a County ordinance that the Sherrif Boat Patrol, who has a constant lake presence, could enforce.

In response to one of the monitoring indicators—25 acres/boat as an indicator of boating capacity—Bill Dennison asked what the response would be when this threshold is exceeded. Chuck Everett explained that possibly boat launch access (parking) would be limited in the area affected. This is a common response to this problem. Mary Getz then asked if PG&E would then start limiting boat launch permits to private citizens on the lake. This is a concern because boating access is an amenity that is part of the value of a home with waterfront property. John Mintz responded that the current boating level on

the lake is well below the threshold established, and that it is not prudent to conjecture the exact nature/characteristic of a future potential capacity problem and then, even more so, a solution to such a problem that may not even materialize. Per the DLA and RRMP, should boating approach capacity on Lake Almanor in some areas, the community will come together to provide input into a plan to address the issue. Aaron Seandel wanted reassurance that when this does become an issue that action is taken quickly and efficiently. Chuck Everett responded that under the new license, PG&E would report on capacity issues every 6 years, and that every 12 years the RRMP would be updated as needed.

A member of the public asked how the public will be notified that Form 80 and RRMP reporting has been sent to FERC so that it can be reviewed by the public. Chuck responded that public and agency notification could be added to the RRMP for this purpose.

Chuck Everett then continued discussing the RRMP, stating that annual meetings are proposed to discuss monitoring results and make decisions such as when to begin new construction.

At this point Bill Dennison asked that those who volunteer their time and efforts to attend these meetings be compensated financially. John Mintz indicated that this issue has come up before, and PG&E does not financially compensate volunteers. Kirby indicated he was aware of few instances where a Licensee covered a non-governmental organization (NGO) air travel costs were when the NGO had to travel a long distance.

Interpretation and Education Program (I&E): Chuck Everett explained that in the first five years of the license, the Licensee would consult stakeholders, resource groups and agencies to develop an I&E program, and that PG&E would likely be responsible for getting the initial program developed. Bill Dennison suggested that Cattlemen and Forest Products also be considered as potential themes in the I&E program. Mary Getz expressed a concern over how PG&E might allocate money for implementing these plans in the future. Her concern was that there is no value in spending time debating issues if PG&E does not have the money to move forward. John Mintz stated that PG&E would not agree to the license if it is determined to be uneconomical, so by agreeing to the FERC license, PG&E is committing to its conditions. Kirby indicated that there are examples of License conditions becoming so burdensome that it has made projects uneconomical. John is aware of several PG&E licenses that PG&E decided to sell because of uneconomical reasons. In addition, on one PG&E license, PG&E started the whole PM&E discussion process over because of changes in wholesale power values; the Project could not support the proposed PM&E measures.

Lake Level

The issue of lake level was revisited. Aaron Seandel asked that PG&E inform the 2105 Committee about the costs of operating the Project. The 2105 Committee cannot be expected to make an informed decision on the lake level issue without PG&E giving some details as to the actual costs they are incurring. Michael Condon also pointed out that the

issue involves not just the Lake Almanor community and the power generation, but also downstream issues such as fish habitat. It was requested that those at PG&E with the knowledge to decide the issue needed to be present a future lake level meeting. John Mintz indicated PG&E would be setting up such a meeting to discuss lake level and other interrelated issues.

Shoreline Erosion

Kirby Gilbert provided a handout describing the erosion situation at Lake Almanor and summarized the material. He stated that the study on water quality (Study 20) of the Draft License Application addressed erosion. Overall, erosion does not appear to be leading to aquatic or water quality impacts on the lake. The report concluded that high erosion is occurring in a relatively few areas the east shore and the peninsula shore. Most of these areas have the Clifford Deed that allows the Licensee to erode. Those areas that do not have the Clifford Deed have already generally been rip-rapped by PG&E.

Bill Dennison responded that some stakeholders do not believe that PG&E has the right to erode because the operating lake level has been raised since the deed was established. Also, environmental laws have changed since the deed was established, and he believes that it is poor stewardship for PG&E to continue to erode private properties. John Mintz indicated that relicensing studies have shown little resulting environmental affects from erosion and that lake level operation rights and erosion rights are totally separate. FERC and the California Department of Water Resources set the maximum operating level, which has been allowed to rise several times and is currently at the 4494foot elevation. PG&E has had the right to erode up to this elevation and beyond up to the 4500 foot elevation, since PG&E owns the land up to the 4500 elevation. In addition, in some areas with the Clifford Deed exists, PG&E has the right to erode above the 4500 foot elevation. Bill also inquired about homeowners obtaining riprap permits. Mark Sanford indicated that a landowner currently can obtain a permit for riprap without delay, assuming other agencies' approvals have been maintained. Stakeholders expressed that they had not been made aware of this. The issue of shoreline erosion was not agreed upon during the meeting.

Erosion Control Options

Kirby Gilbert then discussed erosion control options and provided a handout illustrating these options (riprap, bulkheads, bioengineering, and vegetation). Christi Goodman responded that Plumas County approves of all of these options, and in particular would like to see more bioengineering and vegetated rock walls permitted.

Bill Dennison expressed concern that the raising and lowering of the lake level may cause erosion. He also stated that the potential exists that PG&E will raise the operating level of the lake again in the future. He asked if it would be raised to 4,500 feet. Kirby Gilbert responded that it would likely not be raised to that level, as there is not sufficient buffer area around the lake. Mary Getz stated that the last time the operating level of the lake was raised, it was done so without giving landowners sufficient notice, and that the environmental review was performed after the fact.

The Clifford Deed was once again raised as an issue, with Aaron Seandel and Bill Dennison questioning the environmental stewardship of PG&E if it feels that it is okay to erode some property but not others. Mike Willhoit pointed out that the Clifford Deed is a two part deed; it allows PG&E to erode, but it also requires that PG&E mitigate erosion caused by the lake.

John Mintz responded that one of the intents of the shoreline management plan is to develop policies that respect existing property rights. PG&E is currently working on a statement that acknowledges the residences' Red River Lumber Deed, it only seems reasonable that PG&E's property rights are also acknowledged. Gerry Stratford indicated that the riprap that PG&E has installed (1970s) on his property is shifting significantly and needs to be better monitored and maintained. Mark Sanford indicated that under these situations, the shoreline resident should contact him, so PG&E can address the issue.

Septic Leach Fields

Christi Goodman raised the issue of private septic leach lines since some leach fields have failed and the lake level is higher now than when they were installed. In some cases there is no longer ample land available on some properties to build a new leach field. John Mintz indicated that this issue was just recently raised and PG&E is trying to collect background information on it. Christi stated that she has a map of failed septic leach fields around the lake and acknowledged that previous missteps on the part of Plumas County may have contributed to the problem. However, since 1978, the systems at Plumas County Environmental Health have been greatly improved. Christi is looking towards PG&E to help contribute in some form towards the solution to the east shore septic issues, since PG&E has in the past several times raised the high operating level of lake and apparently has contributed to the problem.

John Mintz initial assessment of the situation was that any water quality impact of raising the lake were mitigated in the 1976 California Department of Water Resources Environmental Impact Report (EIR) that addressed this issue. In addition, the current action before FERC is the proposed operation of the lake, which is to continue operating the lake up to the approved 4494 foot elevation, not the raising of the lake which was approved by the State and FERC in the past. To better assess the situation, PG&E will be reviewing the information submitted by Christi, the State EIR, and other information in the files.

The meeting was adjourned at 12:00 noon.

PRELIMINARY DRAFT RECREATION RESOURCE MANAGEMENT PLAN (8/26/02)

The Draft RRMP is currently in the process of being written. It is anticipated that as sections of the Draft RRMP are completed, they will be made available for public comment. The following schedule describes anticipated completion dates for the remaining sections of the Draft RRMP, as well as potential dates of future meetings at which public comments on the Draft RRMP will be addressed.

Draft RRMP Section	Distribution Date	Open Comment Period	Comments Due Date
Overview of the Plan Goals and Objectives	Aug. 9 (done)	Aug. 9 - 27	Aug. 28
Planning Areas Recreation Programs: Recreation Monitoring Resource Integration and Coordination Plan Review and Revision I&E	Aug. 27 (done)	Aug. 27 - Sept. 11	Sept. 12
Recreation Programs: Recreation Facility Development Recreation O&M Exhibits	Sept. 12	Sept. 12 - 25	Sept. 26
Recreation PM&Es	On-going		All scheduled meetings

**PRELIMINARY DRAFT
RECREATION RESOURCE MANAGEMENT PLAN**

**UPPER NORTH FORK FEATHER RIVER HYDROELECTRIC PROJECT
FERC Project No. 2105**

Prepared by:
EDAW, Inc.
Seattle, Washington
San Francisco, California

Prepared for:
Pacific Gas & Electric Company
San Francisco, California

August 26, 2002

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Add list here later

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ACRONYMS AND ABBREVIATIONS

This section will list all acronyms and abbreviations mentioned in the Recreation Resource Management Plan (RRMP) for the Upper North Fork Feather River Hydroelectric Project (Project). A partial listing is below.

ADA	Americans with Disabilities Act
ADAAG	Americans with Disabilities Act Accessibility Guidelines
FERC	Federal Energy Regulatory Commission
Forest Service	US Department of Agriculture Forest Service
I&E	interpretation and education
LAC	Limits of Acceptable Change
NEPA	National Environmental Policy Act
O&M	operations and maintenance
PG&E	Pacific Gas and Electric Company (Licensee)
PM&E	protection, mitigation and enhancement measures
ROS	Recreation Opportunity Spectrum
RRMP	Recreation Resource Management Plan
RV	recreational vehicle
RWG	Recreation, Land Use, and Aesthetics Work Group
UNFFR	Upper North Fork Feather River

A. INTRODUCTION

Pacific Gas and Electric Company (PG&E or Licensee) is relicensing the Upper North Fork Feather River Hydroelectric Project (Project No. 2105) with the Federal Energy Regulatory Commission (FERC). The Licensee has prepared this Draft Recreation Resource Management Plan (RRMP) as a product of relicensing. Project lands and waters provide a variety of recreation opportunities. The Licensee used a "traditional plus" relicensing process, which included various technical work groups, including the Recreation, Land Use, and Aesthetics Work Group (RWG). RWG stakeholders participated in the development of the technical studies and this Draft RRMP and included representatives from federal, state, and local agencies; adjacent land owners; shoreline homeowner and country club associations; and other stakeholders. A result of this consultation, the Draft RRMP defines a number of proposed recreation enhancement measures.

The Draft RRMP details the Licensee's involvement, role, and responsibilities in managing identified existing and future recreation resources associated with the Project over the term of the new license. Licensee-proposed measures include site-specific and programmatic measures. Programs presented in the Draft RRMP that implement these site-specific and programmatic measures were derived from RWG input, other agency and relicensing consultation, and from the technical studies (see Exhibit E5 of the Final License Application) conducted by the Licensee for relicensing.

The Draft RRMP is being submitted to the FERC as part of the Final License Application. Following issuance of a new license by the FERC, the Draft RRMP will be finalized as directed by the FERC.

B. OVERVIEW OF THE IMPLEMENTATION PLAN

1. Purpose and Intent

The purpose of the Draft RRMP is to guide and facilitate the management of existing and future recreation sources associated with the Upper North Fork Feather River (UNFFR) Project. The Draft RRMP provides a vision of the desired future condition for recreation resources in the Project area, establishes long-term goals and objectives for managing recreation resources in the Project area, and identifies both site-specific and programmatic recreation measures to be implemented over the term of the new license. Six programs are presented in the Draft RRMP that implement these proposed measures. The Draft RRMP also details estimated costs for development and operation, provides conceptual designs, and provides an implementation schedule for these proposed measures.

Taken as a whole, the Draft RRMP represents a single "umbrella" protection, mitigation, and enhancement (PM&E) measure for recreation resources. The Draft RRMP is intended to be specific to the Licensee's recreation resource roles and responsibilities for the term of the new FERC license. The Draft RRMP does not make management or resource commitments for other entities such as the US Department of Agriculture Forest Service (Forest Service), other

agencies, or tribes. However, the continued active involvement of these other recreation providers in the Project area is important in helping to meet the overall recreation needs of visitors and residents during the term of the new license.

2. Plan Vision

The Draft RRMP provides a long-term vision of how Project-related recreation resources should be managed in the Project area for the term of the new license. The Draft RRMP benefits from the cooperative nature of the relicensing process, which included input and advice from the RWG and other stakeholders. The plan vision includes:

- The Licensee and other recreation providers in the area have a shared responsibility to help meet the needs of visitors and residents over the term of the new license;
- The Licensee will be an active recreational provider in the Project area through implementation of the Draft RRMP;
- The Licensee recognizes the need to provide additional shoreline recreation opportunities for area residents surrounding Lake Almanor, particularly Chester;
- The Licensee will closely coordinate recreation resource needs with other recreation providers in the Project area, particularly the Forest Service and private resort operators;
- The Licensee will utilize appropriate coordination efforts aimed at balancing various resource needs to achieve the best outcome possible for the region's resources;
- The Licensee acknowledges that conditions will change over time and monitoring is an appropriate and necessary strategy to manage regional recreation resources in the future;
- The Licensee desires to maintain and/or improve the experience now enjoyed by residents and visitors to the Project area while providing appropriate developed recreation facilities in suitable locations to address visitor needs;
- The Licensee will maintain the unique outdoor experience found in the Project area by focusing more developed recreation uses at Lake Almanor and more primitive recreation uses at Butt Valley Reservoir and the Bypass Reaches; and
- The Licensee will employ Limits of Acceptable Change (LAC) and Recreation Opportunity Spectrum (ROS) recreation planning concepts as guidance for establishing an appropriate and suitable means of monitoring and managing recreation resources in the Project area.

3. Methodologies Used

The methodology used to develop the Draft RRMP involved four tasks: (1) conducting two years

of technical studies and reviewing the results with the RWG and others; (2) preparing proposed recreation facility and operations and maintenance enhancements in the Draft License Application; (3) refining proposed enhancements between the Draft and Final License Applications; and (4) integrating the refined proposed enhancements into the Draft RRMP including implementation programs and supporting exhibits. The Draft RRMP's six programs define the Licensee's responsibilities during the term of the new license.

4. Adaptive Management

Over time, the Draft RRMP will be guided by an adaptive management strategy based on a modified Limits of Acceptable Change (LAC) and Recreation Opportunity Spectrum (ROS) planning concepts and monitoring approaches. LAC is an established resource management and recreation planning methodology developed by the Forest Service (USFS 1985). While the methodology was originally developed for wilderness settings, it has been modified and adapted over the years for use in other resource and recreational settings. Therefore, the Draft RRMP will use a modified LAC approach.

Not all recreational experiences are alike and a mix of experiences over a large area such as the project is desirable. As a result, different monitoring variables (resource values, key indicators, management standards, management actions, and monitoring activities) are anticipated for different recreational settings. Specific areas or reaches of the project reservoirs may be defined for different recreational settings. A modified ROS (USFS 1990) approach is used to allow for stratifying and defining classes of outdoor environments, activities, and experience opportunities in the Project area.

No long-term plan can predict exactly what is needed or foresee all events, particularly for a 30 to 50 year license term. Actions taken will have to be adaptive. Adaptive management is an interactive approach to decision-making that incorporates LAC-type concepts and feedback loops to evaluate actions and incorporate new information as it becomes available. Adaptations are necessary as conditions change and more is learned about resource needs or how the resource is responding to planned activities or solutions. In general, the adaptive management strategy has two attributes: (1) it is a response to uncertainty about the resource being managed over time; and (2) future actions are dependent upon information acquired through monitoring the program or resource.

To implement this adaptive management strategy, three types of uncertainty are addressed: (1) ecological uncertainty—the dynamic nature of biological systems, such as changes in viability and distribution of wildlife habitats and wetlands, changes in water quality, and new species listings; (2) social uncertainty—changing social values and visitor attitudes/preferences over time; and (3) measurement of uncertainty—which refers to uncertainty in the estimation and use of parameters such as user densities, occupancy rates, theoretical capacities, and population growth rates and demand. Accordingly, it is important to consider how well the planned monitoring program can be expected to yield data necessary for informed decision-making. Additionally, there needs to be flexibility to make necessary changes over time, either in the monitoring program or in how these data are interpreted.

To address these types of uncertainty, the following adaptive management strategies will be used:

- The Draft RRMP will be reviewed and updated, if necessary, by the Licensee every 12 years from its implementation to address changing conditions (two FERC Form 80 cycles);
- Implementation plans at new or expanded recreation facilities will be developed by the Licensee based on the results of monitoring and identified recreation needs (see the Recreation Facility Development Program);
- A modified LAC methodology will be used for an overall monitoring framework. The basic concept of LAC is to define the type of visitor experience to be provided and to monitor conditions over time to assess whether acceptable conditions have been maintained. Monitoring is accomplished by collecting various data and then comparing results against performance standards and indicators;
- Draft LAC standards will be field-verified within 6 years of implementation of the Draft RRMP and may need to be modified based on results. The monitoring program will be reassessed periodically to ensure that the data being collected and analyzed are necessary and appropriate to decision-making (see the Recreation Monitoring Program);
- Periodic interaction with other resource groups or specialists will be used to address potential resource management conflicts and to balance competing resource goals and values. This will be accomplished through implementation of the Resource Integration and Coordination Program; and
- Licensee funding for proposed enhancement measures in this Draft RRMP may vary depending upon changing needs, but will not exceed the overall identified maximum budget.

5. Overview of the Six RRMP Programs

The Draft RRMP includes six programs that define the Licensee's roles and responsibilities for recreation resources in the Project area over the term of the new license. The six Draft RRMP programs include:

- **A Recreation Facility Development Program** that defines the Licensee's construction-related responsibilities to address existing and future Project-related recreation needs, identifies proposed recreation development projects, provides estimated costs for recreation measures, identifies locations and provides conceptual layouts of the development measures, and discusses general facility development standards and criteria to be used.

- **A Recreation Operations and Maintenance (O&M) Program** that defines the Licensee's existing and future O&M responsibilities. The program defines partnerships and agreements that will be entered into between the Licensee and other federal, state, or local agencies and private entities to provide for operation and maintenance at various recreation facilities. The program addresses existing and future Project-related O&M recreation needs, provides estimated costs for O&M, and discusses general facility and use area maintenance standards to be used.
- **A Recreation Monitoring Program** that defines how the Licensee will conduct recreation resource monitoring and how the monitoring information will be used in decision-making. This program discusses the use of LAC standards and indicators, defines monitoring needs, identifies periodic monitoring and reporting responsibilities, and identifies a decision-making framework related to when new facility construction (if any) would be triggered.
- **A Resource Integration and Coordination Program** that defines how the Licensee will integrate recreation resource needs with other resource management needs over time, such as cultural, wildlife, and aquatic resources. This program discusses how parallel resource management programs and actions will be coordinated.
- **A Plan Review and Revision Program** that defines how the Draft RRMP will be updated or revised over the term of the new license. Plan revisions may be based on results from LAC monitoring or the results of coordination meetings with other recreation providers in the Project area.
- **An Interpretation and Education (I&E) Program** that defines how hydroelectric energy production, environmental, cultural, and informational interpretation and education will be coordinated and conducted by the Licensee. This program involves several resource areas including recreation, aesthetics, fisheries, water quality, terrestrial, and cultural. A detailed I&E Program will be developed during the first 5 years of the new license, in consultation with the Forest Service, Plumas County, and others.

6. Issues and Assumptions

Based on technical recreation studies conducted during relicensing, and on RWG and other stakeholder consultation, several issues and assumptions were identified regarding the management of recreation resources in the Project area. These issues and assumptions are important to consider when revising or modifying the Draft RRMP over time and include:

- The Project has resulted in public recreation opportunities and needs along the shorelines of Lake Almanor, Butt Valley Reservoir, and the Bypass Reaches. These opportunities and needs are located principally within or directly adjacent to the FERC Project boundary.

- To satisfy public recreation needs, several recreation providers including the Licensee have developed, operated, and maintained various public recreation facilities, principally within or adjacent to the FERC Project boundary.
- New recreation development will be concentrated in suitable areas where it is compatible with existing and potential land uses.
- The need for public recreation facilities and programs is anticipated to increase in the future and these needs may change over time. New facility needs are likely to occur during the term of the new license and will result in the Licensee having to construct, operate, and maintain new recreation facilities and programs, as well as renovate and upgrade existing recreation facilities. Other recreation providers in the Project area will also be responsible for building, operating, and maintaining new recreational facilities, as well as renovating and upgrading their existing facilities.
- Recreation providers must comply with the federal Americans with Disabilities Act (ADA), and the ADA Accessibility Guidelines (ADAAG), as amended, which mandate the need to upgrade some existing recreation facilities when major maintenance is undertaken or when new facilities are constructed.
- Since additional recreation facilities are anticipated to be needed in the future, new construction will depend on future monitoring of recreation facility use levels and condition, and will rely upon LAC-type indicators and standards to justify new facilities.
- The potential exists for partnerships and/or cost sharing between the Licensee and other recreation providers to cooperatively fund some measures in the Project area that will benefit the general public and improve the overall recreation experience in the Project area.
- The Draft RRMP concentrates new recreation development in appropriate locations, thereby retaining as much of the natural open space as possible to protect a range of resource values, such as wildlife, aesthetics, and cultural resources.
- Private resort and residential areas on or near the Project shorelines have unique recreational needs. These needs should be accommodated while allowing for adequate and compatible public access and use of the Project shoreline.

7. Explanation of Terms

Key terms used throughout the Draft RRMP and relevant to recreation planning for the Project are defined below.

- **Project** - The Upper North Fork Feather River Hydroelectric Project, FERC Project No. 2105.

- **Project Boundary** - The FERC Project boundary.
- **Project-Related Recreation Needs** - The existing and future recreation needs that are associated with the lands and waters of the Project.
- **Project Area** - The Project area includes all waters and adjacent lands within the FERC Project boundary and all recreation resources within and adjacent to the Project boundary. The Project boundary includes Lake Almanor and Butt Valley Reservoir, Belden Forebay, and areas of the Belden and Seneca Reaches that are used for recreational purposes.
- **License** - The FERC license for the Upper North Fork Feather River Hydroelectric Project, FERC Project No. 2105.
- **Term of the New License** - The length of the new license to be issued by the FERC to the Licensee for the Project, ranging from 30 to 50 years.
- **Recreation, Land Use, and Aesthetics Work Group (RWG)** - A technical work group specifically established by the Licensee during relicensing to help develop recommendations for proposed recreation, land use, and aesthetics/visual resource protection, mitigation, and enhancement measures (PM&Es).

C. GOALS AND OBJECTIVES

The Draft RRMP satisfies FERC requirements to prepare a recreation plan and to define the responsibilities of parties when public recreation facilities are to be provided. To satisfy this need, the Draft RRMP has established goals and objectives for managing recreation resources. These goals and objectives are intended to guide the Licensee while managing, planning, designing, and constructing recreation resources and facilities in the Project area, and in making appropriate resource decisions during the term of the new FERC license. As questions arise regarding decisions about implementing the Draft RRMP and future PM&E measures, particularly those anticipated beyond 2010, resource managers may compare future actions against these goals and objectives to evaluate consistency with the original intent of the Draft RRMP.

Seven Draft RRMP goals and their respective objectives are outlined below including:

- Help meet existing recreation resource needs in the Project area
- Help meet future recreation resource needs in the Project area
- Provide adequate public access along the Project shorelines
- Preserve recreation resources
- Coordinate recreation planning and needs
- Provide cost-effective and diverse recreation opportunities

- Provide compatible recreation opportunities

Goal 1: Help Meet Existing Recreation Resource Needs in the Project Area

Help provide a diverse spectrum of public and private recreational facilities, use areas, and opportunities within the Project area that help meet existing Project-related recreation needs.

- Objective 1a: Help provide for the continued operation of existing public and private recreation facilities and use areas in the Project area.
- Objective 1b: Help provide public and private recreation facilities and use areas that respond to visitor facility preferences and needs as identified in visitor surveys conducted during relicensing.
- Objective 1c: Enhance existing recreation facilities, as needed, by making necessary facility repairs and modifications and/or changes to facility operations and maintenance practices.
- Objective 1d: Comply with federal ADA guidelines (ADAAG, as amended) and provide for the health and safety needs of all recreation visitors.
- Objective 1e: Establish monitoring indicators and standards for the Project area and manage existing recreation resources in accordance with the Recreation Monitoring Program.
- Objective 1f: Manage existing Project-related recreation resources in accordance with existing land and resource plans and policies in the Project area.
- Objective 1g: Develop an I&E Program and implement the program's actions to enhance the visitor experience, inform visitors of facility use options, educate boaters about potential boating hazards, better distribute use amongst facilities, and educate visitors about sensitive resources and appropriate behavior.

Goal 2: Help Meet Future Recreation Resource Needs in the Project Area

Help provide a diverse spectrum of public and private recreational facilities, use areas, and opportunities within the Project area that help meet future Project-related recreation needs.

- Objective 2a: In the future, continue to monitor future changes in recreation demand and help provide for recreation needs consistent with resource values and established monitoring indicators and standards. Changes may include the emergence of new recreation technologies, trends toward larger recreational vehicles (RVs) and shorter day use hiking opportunities, increasing demand for water-based recreation opportunities, increased desire for educational/interpretive recreation opportunities, or others.
- Objective 2b: In the future, help provide additional new public recreation facilities or use areas as justified by periodic monitoring of recreation facility and use area visitation.

condition, demand, and monitoring indicators and standards over time.

- Objective 2c: In the future, continue to implement the Recreation Monitoring Program using established monitoring indicators and standards; monitor recreation use levels as needed, and update the visitor needs and preference survey periodically.
- Objective 2d: In the future, help provide adequate funding to implement identified future recreation-related development projects and programs.
- Objective 2e: In the future, periodically update the Recreation Needs Analysis for the Project area (RRMP to be updated at least every 12 years, or two FERC Form 80 cycles).
- Objective 2f: In the future, periodically monitor dispersed shoreline recreational use in the Project area and address related site impacts as necessary. Close or harden sites as necessary.
- Objective 2g: In the future, continue to utilize the I&E Program to help distribute use amongst recreation facilities, if needed, and to educate the public about resource values, appropriate behavior, and potential boating hazards.

Goal 3: Provide Adequate Public Access Along Project Shorelines

Help provide adequate public access to, and use of, Project water bodies and shorelines in the Project area.

- Objective 3a: Help provide adequate public shoreline access and safe public recreation opportunities on Project lands and waters as identified in the Draft RRMP, including campgrounds, viewpoints, shoreline trails, boat launches, swimming areas, and day use areas.
- Objective 3b: Through the I&E Program, provide adequate informational signs and programs to alert boaters, swimmers, anglers, and other users about operational or natural hazards in and around Project reservoirs.
- Objective 3c: Support increased multi-use/non-motorized trail opportunities in the Project area by granting access rights (easements) across Project lands and exploring partnering and/or cost sharing options with other recreation providers in the areas.
- Objective 3d: Improve universal accessibility in the Project area by adhering to federal ADA guidelines (ADAAG as amended) at all existing and future Project recreation facilities.
- Objective 3e: Through the I&E Program, communicate to the public the range of recreation facilities and use areas that are available in the Project area.
- Objective 3f: Coordinate with local law enforcement agencies in the Project area and provide funding to supplement existing funding sources for Marine Patrols, including hazard identification and marking, and land-based patrols in the Project area.

Goal 4: Preserve Recreation Resources

Avoid, minimize, or mitigate existing and future Project-related impacts to recreation resources in the Project area and help preserve the resource base.

- Objective 4a: Allow for recreation use of the Project reservoirs and reaches by providing facilities that accommodate a range of reservoir pool levels.
- Objective 4b: Through the Recreation Monitoring Program, conduct periodic monitoring of recreation use at Project water bodies and the downstream reaches to assess potential impacts to recreation, natural, and cultural resources over time and take appropriate corrective measures as needed.
- Objective 4c: Through the I&E Program, provide environmental education opportunities in the Project area to foster a better understanding and stewardship of natural and man-made resources.
- Objective 4d: Allow for public access to appropriate Project open space lands to help meet the long-term recreation goals and objectives in the Project area and to maintain the existing recreational experience over time.
- Objective 4e: Focus future recreation development in suitable areas that do not significantly affect the existing recreation experience or sensitive resources in the Project area. Physical and cultural resource constraints will be considered in determining suitability in the adaptive management strategy.
- Objective 4f: In the I&E Program, help protect and interpret significant natural features and enhance the public's recreational experience in the Project area (e.g., through interpretation, trails, Watchable Wildlife programs, etc.).
- Objective 4g: Respect property interests and surrounding natural environments while addressing the need for additional recreation facilities and increased recreation use in the Project area over time.

Goal 5: Coordinate Recreation Planning and Needs

Coordinate future Licensee recreation planning efforts in the Project area with federal, state, and local resource management agencies, public recreation providers, and private recreation providers prior to making new recreation development decisions.

- Objective 5a: In the Recreation Monitoring Program, monitor recreation resources and visitation using monitoring indicators and standards and identify appropriate management actions and associated costs needed to address identified problems.

- Objective 5b: Provide adequate Licensee staffing and resources to address recreation resource planning and permitting in the Project area over the term of the new license.
- Objective 5c: Participate in comprehensive planning efforts in the Lake Almanor Basin to coordinate implementation of the Draft RRMP over the term of the new license.
- Objective 5d: Periodically consult with natural and cultural resource specialists to ensure that recreational planning, use, and facilities do not limit or unnecessarily infringe on the environmental characteristics necessary to sustain traditional cultural practices.
- Objective 5e: Review the RRMP every 12 years and update the RRMP programs, as appropriate, to address changing conditions over time.

Goal 6: Provide Cost-Effective and Diverse Recreation Opportunities

Help provide cost-effective recreation facilities and programs in the Project area to maximize on-the-ground recreation improvements using available dollars, minimize operational and maintenance costs where possible while meeting standards, and provide for compatible and desirable facilities that help meet the needs of visitors.

- Objective 6a: Help promote recreation facilities and programs that are cost-effective; and work with others on cost sharing of larger projects that benefit visitors to the Project area and area residents.
- Objective 6b: Help provide facilities that minimize, to the extent feasible, long-term O&M costs.
- Objective 6c: Help provide cost-effective recreation facilities that accommodate existing visitor facility preferences, but also allow for future modification if preferences change over time.
- Objective 6d: Help provide a range of recreation opportunities that include developed fee sites and undeveloped or dispersed non-fee sites to allow for a diversity of visitor choice and experience.
- Objective 6e: Allow for appropriate public and private recreation-related opportunities and facilities in the Project area.

Goal 7: Provide Compatible Recreation Opportunities

Help provide recreation resources that are compatible with adopted land and resource plans and policies and sensitive resources in the Project area.

- Objective 7a: Help provide recreation facilities and programs that are compatible with adopted land and resource plans and policies, as well as other Project-related resource needs, goals, and objectives including water quality, cultural, terrestrial, aesthetic/visual, and aquatic resources.
- Objective 7b: Through the I&E Program, help provide environmental education opportunities (e.g., through viewpoints, interpretive signs or kiosks, environmental education programs, and nature trails) that demonstrate compatibility with and stewardship of natural and cultural resources in the Project area.
- Objective 7c: Provide recreation facilities that are compatible with the Project operations in the new FERC license.
- Objective 7d: Provide recreation facilities and programs that are compatible with private shoreline resorts and residential communities.

D. PLANNING AREAS

Two planning areas have been defined for implementation of the Draft RRMP—Project Area and Management Units. These areas are referenced in the various implementation programs and described below.

1. Project Area

The Project Area (Figure 1—**add figure here**) includes all waters and lands within and adjacent to the FERC Project boundary and all recreation resources within and adjacent to the Project boundary. The Project area includes Lake Almanor, Butt Valley Reservoir, approximately 13 miles of the UNFFR (Seneca and Belden Reaches), and Belden Forebay, including the shoreline around each reservoir and developed and dispersed undeveloped recreation sites that adjoin the reservoirs irregardless of ownership.

2. Management Units

For purposes of long-term recreation planning and monitoring, the Project Area has been divided into Management Units (Figure 2— **add figure here**). Periodic data collection and analysis at the management unit level will allow for adequate decision making on a unit-by-unit basis. Draft RRMP Management Units include:

- Lake Almanor (land): Eastshore, Westshore, Northshore, North of Causeway, and Peninsula to Hamilton Branch.
- Lake Almanor (water): Segments A through D in the Reservoir Boating Study of the Draft License Application (north of the causeway, west of the peninsula, east of the peninsula and north of the point, and southeast of the peninsula and south of the point).

- Butt Valley Reservoir
- Belden Forebay/Caribou
- Belden Reach
- Seneca Reach

E. RECREATION MANAGEMENT PROGRAMS

This section describes the Draft RRMP's six programs:

1. Recreation Facility Development Program
2. Recreation Operations and Maintenance Program
3. Recreation Monitoring Program
4. Resource Integration and Coordination Program
5. Plan Review and Revision Program
6. Interpretation and Education Program

The six Draft RRMP programs specifically detail how the Licensee will meet the plan's goals and objectives and implement the proposed PM&E measures over the term of the new license. These programs are described below.

1. Recreation Facility Development Program (scheduled for Sept. 12)

This section will describe the Recreation Facility Development Program that is intended to describe Licensee's role in helping meet some of the existing and future recreation facility needs identified in the project area by the RWG or during agency consultation. The facility component of this program is intended to:

- Define the construction-related responsibilities of the Licensee and/or construction funding provided to others by the Licensee;
- Identify proposed recreation development projects and their estimated costs;
- Provide conceptual diagrams of anticipated improvements; and
- Discuss facility development standards and criteria to be used by the Licensee.

The operations and maintenance component will describe the Licensee's role in the operation and maintenance of existing and future recreation facilities in the project area. It is anticipated that periodic plans will be developed to guide O&M activities for particular timeframes. The timeframe for each set of planned O&M activities will be reconfirmed during annual planning and coordination meetings. The Licensee's role in funding annual O&M of Licensee and non-Licensee recreation facilities and use areas will be identified in a future exhibit. The O&M component will define facility and use-area maintenance standards.

a. **Recreation Facility Development and Upgrades**

This section will describe expanded and renovated recreation facilities that will be constructed through the new term of the license following periodic review, prioritization, and approval. These improvements will be funded and/or constructed by the Licensee.

b. **Recreation Development Locations**

This section will describe the locations of proposed recreation improvements that will be listed in a future exhibit and indicated in diagram format in a future exhibit. For Licensee-constructed and designed projects, construction documents (plans, specifications, and permit applications) will be prepared as required prior to construction for review and approval by the applicable jurisdiction.

c. **Recreation Facility Design Guidelines**

This section will discuss appropriate design guidelines, siting criteria, and other standards that should be consistently used to:

- Comply with public health and safety codes and regulations;
- Provide design continuity and consistency with the ROS class (or equivalent) where the site is located;
- Provide a high quality visitor experience and/or enhance visitor convenience;
- Minimize facility and site deterioration and operations and maintenance costs; and
- Protect the environment.

Recreation facilities constructed within federally managed lands should be designed and constructed to meet federal facility construction standards and other appropriate design guidelines for the appropriate ROS class (or equivalent). Project-related recreation facilities constructed on Licensee lands should also be designed and constructed to be consistent with the appropriate ROS-type class (or equivalent)

d. **Americans with Disabilities Act (ADA) Compliance and Facility Upgrades**

This section will describe ADA-related improvements that have been identified. Upgrades to campground and day-use facilities, when modified or constructed, should conform to Americans with Disabilities Act Accessibility Guidelines (ADAAG) and standards formally adopted at the

time of construction.

e. **NEPA Compliance and Environmental Project Review**

This section will describe environmental compliance for future recreation projects on federal lands. These projects will need to be reviewed by a lead federal agency, in compliance with the National Environmental Policy Act (NEPA) and other environmental and land use regulations and policies, including Forest Land and Resource Management Plans and appropriate Records of Decision. This section will describe who will prepare necessary environmental documentation and fund the costs of NEPA or other compliance. This section will also address future recreation projects on project lands that may involve the issuance of permits, licenses, authorizations, or other certifications.

f. **Agency and Public Review**

This section will address opportunities for agency, tribal, and public review of proposed recreation projects, programs, and improvements.

g. **Facility Construction Coordination, Scheduling, and Phasing**

Anticipated facility construction timeframes will be identified in exhibits. This section will discuss the development of periodic implementation plans to guide decision making for planned construction project periods. Construction project timeframes will be reconfirmed during annual planning and coordination meetings.

The Draft RRMP, with further consultation, will describe project selection and prioritization criteria to be used in developing implementation plans and in annual review of projects. The criteria to be developed should foster group consensus building and decision making and should include strategies to address:

- How, when, and if proposed projects move up or down the list of identified needs;
- How unexpected opportunities are addressed;
- How new cooperative or partnership funding sources are evaluated and addressed;
- How proposed projects are matched with available funding; and,
- How priority projects are addressed.

2. **Recreation Operations and Maintenance Program (scheduled for Sept. 12)**

This section will describe the Licensee's operation and maintenance responsibilities,

provide estimated costs for operations and maintenance, and discuss general facility and use area maintenance standards.

a. **Recreation Facility and Site Operations and Maintenance Program**

This section will identify the Licensee's responsibilities for recreation facility O&M.

b. **Operations and Maintenance Standards**

This section will describe how O&M standards for federal and private lands will be applied to recreation facilities and use areas, based on published recreation maintenance standards. The level of O&M should be consistent with the ROS class (or equivalent) where the facility or use area is located, as well as applicable federal health and safety codes, as appropriate.

c. **Shoreline Access**

This section will describe how public shoreline access will be provided, such as the maintenance of signs, trails and trailheads, swimming areas, and boating access sites.

3. **Recreation Monitoring Program**

The Recreation Monitoring Program defines the License's recreation-related monitoring activities in the Project area over the term of the new license. In many cases, new facility development is contingent upon reaching monitoring threshold levels before new construction may proceed. The monitoring of recreational use levels, impacts, and activities is an integral component of an adaptive management strategy and is necessary in determining when management changes (including new recreation facilities) are needed. Therefore, the Monitoring Program is integral to the implementation of the Draft RRMP. The Monitoring Program defines a number of actions including: start-up activities to test monitoring standards and indicators, annual monitoring activities, analyses of monitoring data every 6 years, other more detailed data gathering and/or survey requirements every 12 years, and decision-making related to new facility construction. The three primary components of the Monitoring Program include:

- **Recreation Monitoring Areas Framework**—Use of Management Units as the recreation monitoring area framework for future monitoring in the Project area;
- **Recreation Monitoring Indicators and Standards Framework**—Use of monitoring indicators and standards in each of the key recreation areas and sites; and
- **Recreation Monitoring Program Components**—Program components that make up the Draft RRMP Monitoring Program.

a. Recreation Monitoring Area Framework

For purposes of long-term recreation monitoring, the Project Area has been divided into several Management Units (see Figure 2). Periodic data collection and analysis at the Management Unit level will allow for decision making on a unit-by-unit and a Project-wide basis. Draft RRMP Management Units include:

- Lake Almanor (land): Eastshore, Westshore, Northshore, North of Causeway, and Peninsula to Hamilton Branch.
- Lake Almanor (water): Segments A through D in the Reservoir Boating Study of the Draft License Application (north of the causeway, west of the peninsula, east of the peninsula and north of the point, and southeast of the peninsula and south of the point).
- Butt Valley Reservoir
- Belden Forebay/Caribou
- Belden Reach
- Seneca Reach

b. Recreation Monitoring Indicators and Standards Framework

The monitoring framework is based on a modified approach of Limits-of-Acceptable Change (LAC)-type indicators and standards. The approach is to define the type of visitor experience to be provided in each area and to monitor conditions over time to assess whether acceptable conditions are being maintained. Two key elements in the monitoring process are indicators and standards that help define the desired experience and provide a framework for monitoring conditions over time. Monitoring indicators identify the key issues or variables to monitor over time and are the specific measurable variables use to define the experience. Monitoring standards define criteria for acceptability and help define the minimum acceptable condition for each indicator. These standards are also called "triggers" in that once these triggers are reached and a trend is identified, further actions are warranted that may include new construction or a range of lesser actions.

Key considerations related to monitoring indicators and standards are described below.

Monitoring Indicators

- Reflect important key issues that should be monitored;
- Specific variables are indicative and realistic of field conditions;
- Allows one to define desired conditions and assess effectiveness of management practices;
- Should be measurable and responsive to possible management actions; and
- Should be easily and economically measurable.

Monitoring Standards

- Should be refined based on field considerations prior to full implantation;
- May use a judgmental process;
- Should not be idealistic goals, but conditions that can be achieved over time;

- May be a statement of existing conditions desired or status quo; and
- May be expressed in terms of probabilities (allows for some variability).

In developing the monitoring indicators and standards, careful consideration should be given regarding how each indicator will actually be monitored in the field. This helps establish a program that can be effectively implemented over time.

Table 1 provides a list of the monitoring indicators for recreation use levels that were created for developed recreation facilities and dispersed undeveloped sites at the Project area. Additionally, Table 1 provides a description of how each indicator will be measured and a listing of potential management options for each indicator. The management options provided represent a continuum of management actions, ranging from minor, less management-intensive options to major, more management-intensive options. Decisions regarding future management actions would be made at the time that standards for each indicator are exceeded based on field conditions.

In all cases, the entire suite of indicators should be reviewed and examined before management actions are taken. Decisions should not be made based on one indicator alone.

Table 1. Recreation monitoring indicators, method of measurement, and management options for developed and dispersed recreation sites.

Key Indicators	Method of Measurement	Potential Management Options
Developed Recreation Facilities		
Visitor Use Levels at Day Use Sites	<ul style="list-style-type: none"> • Monitor facility use levels during the summer season and peak month (July-Aug.) timeframes based on user counts and vehicle counts conducted at selected sample sites during the summer recreation season (approximately Memorial Day to Labor Day). • Track data for each sample site, but also aggregate across sites to develop an overall average/indicator. • Assess annually if use levels are approaching threshold standards. If not, assess for Form 80 purposes every 6 years. 	<ul style="list-style-type: none"> • Redistribute use by providing visitors with information about alternative sites. • Expand facilities and parking.
Perceived Crowding at Developed Recreation Sites	<ul style="list-style-type: none"> • Monitor visitor perceptions of crowding using an established 9-point crowding scale to identify the percentage of users that feel crowded. • Focus on selected sample sites during the summer recreation season (Memorial to Labor Day weekends), particularly during the peak use months of July and August. • Indicators to be tracked for each sample site (rather than aggregating across sites). • Assess every 10 years or when visitor surveys are conducted. 	<ul style="list-style-type: none"> • Provide adequate buffer between user groups and sites. • Address user conflicts as needed. • Provide enforcement.

Key Indicators	Method of Measurement	Potential Management Options
Boating Use Levels	<ul style="list-style-type: none"> • Monitor boating use on-water and at selected launch sites during the months of July and August (count boats on-water and boat trailers in parking areas). • Also monitor trends in watercraft types. • Assess annually if use levels are approaching threshold standards. If not, assess for Form 80 purposes every 6 years. 	<ul style="list-style-type: none"> • Expand parking capacity. • Provide visitors with information about alternative boat launches.
Campground Capacity Utilization	<ul style="list-style-type: none"> • Monitor campground utilization by calculating the average capacity utilization of selected campgrounds during the summer season (primarily Memorial Day to Labor Day weekends) and during the peak months (July and August at most sites). • Assess annually if use levels are approaching threshold standards. If not, assess for Form 80 purposes every 6 years. 	<ul style="list-style-type: none"> • Increase campground capacity. • Develop alternative sites. • Institute a limited entry system. • Expand the reservation system (partial to full). • Provide visitors with information about alternative sites.
Dispersed Undeveloped Recreation Areas		
Site Creep	<ul style="list-style-type: none"> • Monitor dispersed recreation areas of concern (camping and day use) for possible expansion of the area of impact. • Document the baseline conditions and monitor for creep at sample sites in each area of concern. • Assess every 5 years or as needed in critical areas. 	<ul style="list-style-type: none"> • Erect natural barriers to better define site boundaries. • Harden sites including fire rings, picnic tables, and/or tent pads on a site by site basis. • Limit use to officially designated dispersed sites only (signed). • Site closures and rehabilitation. • Institute a reservation system. • Provide enforcement.
Site Pioneering	<ul style="list-style-type: none"> • Periodically survey dispersed recreation areas of concern and record the number and type of dispersed undeveloped sites. • Compare this information with baseline conditions (establish a more detailed baseline at sample sites). • Evidence of new informal use may include bare ground, accumulated litter, site erosion, new structures, sanitation problems, and/or vegetation damage. • Assess every 5 years or as needed in critical areas. 	<ul style="list-style-type: none"> • Provide visitors with information about location of appropriate dispersed sites. • Develop more sites. • Limit use to officially designated dispersed sites only (signed). • Institute a reservation system. • Provide enforcement.

Key Indicators	Method of Measurement	Potential Management Options
Dispersed Site Occupancy	<ul style="list-style-type: none"> • Monitor a representative sample of dispersed sites occupied during the 2 peak months (July and August). • Count every 5-10 years or as needed in sensitive areas 	<ul style="list-style-type: none"> • Provide visitors with information about alternative sites. • Develop alternative sites. • Institute a reservation system.

Provided by EDAW, Inc.

Monitoring standards for each key indicator are shown in Table 2 and vary by type of setting, resource experience, and developed and undeveloped recreation facilities. These standards fall into three types of settings (Resource, Social, and Managerial). Resource setting characteristics vary by area and include the visual character of the area, the number and distribution of man-made structures, and the type of access provided. Managerial setting characteristics also vary by area and include the design characteristics of recreation facilities and their maintenance, design characteristics of roadways and their maintenance, and whether motorized use is allowed or not. Social setting characteristics also vary by area and include the degree of interaction with other users, the evidence of human use and concentration of use, and the types of activities provided. These three settings range from more primitive experiences with solitude to more urban, resort-type experiences.

Within the Project area, three broad types of recreational experiences have been defined within a recreation opportunity spectrum or ROS. These three recreation experience areas are labeled Semi-Primitive, Roaded Natural, and Rural / Project Facility Areas and are defined below:

Semi-Primitive areas include:

- Predominately unmodified natural environment.
- Evidence of human activity including structures is rare.
- Motorized use is permitted.
- Road access is generally via infrequently maintained roads or four-wheel drive roads.
- Site development is primarily for resource protection not comfort.
- Lower levels of use and user interaction/encounters.
- High probability of experiencing solitude, closeness to nature, and tranquility.

Roaded Natural areas include:

- Predominately natural appearing areas.
- Moderate evidence of human activity, including occasional homes, docks, and other structures.
- Structures are visually subordinate from the water and/or primary travel routes.
- More rustic-type recreation facilities, but may include some modern site modifications.
- Regularly maintained, light-duty roads with some surfacing (gravel or asphalt).
- Low to moderate use levels.
- User interaction/encounters are common.
- Activities are more passive in nature and watercraft or vehicular noise is minimal.

Rural / Project Facility Area include:

- Substantially modified natural environment.
- Human activity is active and presence is highly evident.
- Man-made structures are a frequent and dominant feature of the landscape.
- Density of development is moderate to high.
- Recreation facilities are designed for user comfort.
- Roads are predominately paved with asphalt receiving moderate to heavy traffic.
- Moderate to high levels of use.
- User interactions/encounters are to be expected.
- Activities are more active in nature and watercraft or vehicular noise is to be expected.

Table 2. Recreation Monitoring Indicators and Standards by Recreation Opportunity Area.

Key Indicators	Standards by Recreation Opportunity Area		
	Semi-Primitive Areas	Roaded Natural Areas	Rural / Project Facilities
Developed Recreation Areas			
RESOURCE:			
None identified at this time.	None at this time (May develop standards at a later date if necessary)	None at this time (May develop standards at a later date if necessary)	None at this time (May develop standards at a later date if necessary)
SOCIAL:			
Perceived Crowding	N/A	Currently not a problem. Based on future survey (10-15 years out), average crowding score of 4.0 (Shelby and Heberlein 1986).	Currently not a problem. Based on future survey (10-15 years out), average crowding score of 4.7 (Shelby and Heberlein 1986).
MANAGERIAL:			
Public Boat Launch Capacity Utilization	N/A	Satisfy 1 of the following: up to 90% occupancy during weekends in peak months (July and August); up to 60% occupancy during weekends during the primary recreation season when the facility is open during May through October; or up to 15% of the season days at 90%. A minimum 3-5 year trend is needed.	Satisfy 1 of the following: up to 90% occupancy during weekends in peak months (July and August); up to 60% occupancy during weekends during the primary recreation season when the facility is open during May through October; or up to 15% of the season days at 90%. A minimum 3-5 year trend is needed.
Boat Use Levels – Reservoir Surface Water	25 acres/boat reservoir-wide (dependent on primary boating activity)	25 acres/boat reservoir-wide (dependent on primary boating activity)	25 acres/boat reservoir-wide (dependent on primary boating activity)

Key Indicators	Standards by Recreation Opportunity Area		
	Semi-Primitive Areas	Roaded Natural Areas	Rural / Project Facilities
Public Day Use Site Capacity Utilization	N/A	Satisfy 1 of the following: up to 80% occupancy during weekends in peak months (July and August); up to 60% occupancy during weekends during the primary recreation season when the facility is open during May through October; or up to 15% of the season days at 90%. A minimum 3-5 year trend is needed.	Satisfy 1 of the following: up to 80% occupancy during weekends in peak months (July and August); up to 60% occupancy during weekends during the primary recreation season when the facility is open during May through October; or up to 15% of the season days at 90%. A minimum 3-5 year trend is needed.
Public Campground Capacity Utilization	N/A	Satisfy 1 of the following: up to 90% occupancy during weekends in peak months (July and August); up to 60% occupancy during weekends during the primary recreation season when the facility is open during May through October; or up to 15% of the season days at 90%. A minimum 3-5 year trend is needed.	Satisfy 1 of the following: up to 90% occupancy during weekends in peak months (July and August); up to 60% occupancy during weekends during the primary recreation season when the facility is open during May through October; or up to 15% of the season days at 90%. A minimum 3-5 year trend is needed.
Dispersed Undeveloped Recreation Areas			
RESOURCE:			
Site Creep	10 percent expansion of area of impact 5 percent expansion into sensitive habitat	10 percent expansion of area of impact 5 percent expansion into sensitive habitat	10 percent expansion of area of impact 5 percent expansion into sensitive habitat
Site Pioneering	10 percent increase in total number of sites	10 percent increase in total number of sites	10 percent increase in total number of sites
SOCIAL:			
None identified at this time.	None required at this time (May develop standards at a later date if necessary)	None required at this time (May develop standards at a later date if necessary)	None required at this time (May develop standards at a later date if necessary)
MANAGERIAL:			
Dispersed Site Utilization	Up to 50 percent season long (summer)	Up to 50 percent season long (summer)	Up to 50 percent season long (summer)

Note: The recreation season is defined as when the facility is open from May through October, but is generally Memorial Day weekend to Labor Day weekend at many sites. Subject to revision based on on-the-ground testing. N/A = not applicable.

Provided by EDW, Inc.

Figure 3 (figure to be inserted here) defines the three Recreation Opportunity Areas in the Project area that are classified as Semi-Primitive, Roaded Natural, and Rural / Project Facility.

Table 3 provides a list of monitoring locations where monitoring activities will periodically occur.

Table 3. Monitoring Locations by Management Unit and Monitoring Area in the Project Area.

Management Unit	Monitoring Area	Selected Monitoring Sites/Areas
Lake Almanor (Land)	Eastshore	<ul style="list-style-type: none"> Westwood Beach, Stumpy Beach, New Eastshore Campground/DUA, Eastshore Group Camp (modified), and Almanor Scenic Overlook
	Westshore	<ul style="list-style-type: none"> Almanor Campground/Boat Launch/Swim Beach, Lake Almanor Campground/DUA, Canyon Dam Boat Launch/Picnic Area, Canyon Dam DUA, Camp Conery, PSEA Beach, and Southwest Shoreline Access Zone (identified access points).
	Northshore	<ul style="list-style-type: none"> North Shore Campground Boat Launch, Chester Shoreline Access (1st Ave. or Stover Ranch), Catfish Beach
	North of Causeway	<ul style="list-style-type: none"> Last Chance Campground
	Peninsula to Hamilton Branch	<ul style="list-style-type: none"> Hamilton Branch Fishing Access Site
Lake Almanor (Water)	Segment A – North of Causeway	<ul style="list-style-type: none"> Water area use by watercraft
	Segment B – West of Peninsula	<ul style="list-style-type: none"> Water area use by watercraft
	Segment C – East of Peninsula, north of the Point	<ul style="list-style-type: none"> Water area by watercraft
	Segment D – Southeast of Peninsula, south of Point	<ul style="list-style-type: none"> Water area by watercraft
Butt Valley Reservoir		<ul style="list-style-type: none"> Ponderosa Flat Campground
		<ul style="list-style-type: none"> Cool Springs Campground
		<ul style="list-style-type: none"> Alder Creek Boat Launch
		<ul style="list-style-type: none"> Butt Valley Powerhouse area angler access points
		<ul style="list-style-type: none"> Boat-in/walk-in sites (8) on the southwest shoreline
		<ul style="list-style-type: none"> Surface water use by watercraft
Belden Forebay		<ul style="list-style-type: none"> Belden Forebay Car-top Launch/Trailhead
		<ul style="list-style-type: none"> Surface water use by watercraft
Belden Reach		<ul style="list-style-type: none"> Belden Rest Stop (Hwy 70)
Seneca Reach		<ul style="list-style-type: none"> None

Provided by EDAW, Inc.

Data collected to monitor each indicator is derived from a combination of annual or periodic field observations and/or user contacts or surveys. During the first 5-year period of RRMP implementation following issuance of a new Project license, a pre-test or pilot program will occur to fine-tune the indicators, standards, and monitoring procedures. Input from users and resource managers regarding the monitoring standards themselves, and their views of acceptable conditions, will be built into this program. Once the Monitoring Program is tested and modified if needed, it will be implemented on a regular basis with periodic reviews.

c. **Recreation Monitoring Components**

The Recreation Monitoring Program defines the recreation-related monitoring needs of the Project area over the term of the new license. In many cases, new facility development is contingent upon reaching monitoring threshold levels and establishing trends (3 year minimum) before new construction may proceed. Therefore, the Monitoring Program is integral to the Draft RRMP and the maintenance of the desired recreation experience.

Monitoring Program components to be implemented by the Licensee include:

- **Start-up activities to test monitoring indicators and standards:** One of the initial tasks during the first 6 years of implementing the Draft RRMP will be field-testing the monitoring indicators and standards so that a baseline can be established. It is anticipated that some modifications to the monitoring indicators and standards will be needed. Once these are established as a baseline, follow-on monitoring analyses will be used to track changes over time.
- **Frequency of monitoring activities:** The Monitoring Program includes two levels of monitoring. These levels are:
 - (1) Ongoing regular monitoring of recreation sites and use areas using readily available monitoring data collected during normal routine management of recreation resources, such as paid fee receipts, camp host counts, observations made when trash is collected, road counts, etc.; and
 - (2) More in-depth recreation survey work conducted every 10 to 15 years, such as visitor and non-visitor surveys (mail, contact, windshield, etc.).

Some monitoring indicators, such as dispersed undeveloped site pioneering and creep, should be monitored more frequently (every 5 years for example) so that management actions can be taken before the standard is exceeded.

- **Monitoring management actions:** Based on the available data gathered during yearly and periodic monitoring, potential management actions for each management unit should be considered by the Licensee and others. Management options may include those listed in Table 1 and may include:
 - Plan, design, expand, renovate, and/or construct facilities in one or more phases;
 - Increase monitoring efforts as needed, such as collecting more detailed visitor counts at facilities in question;
 - Begin planning and designing new facilities or renovation;
 - Pursue or wait on new construction;
 - Modify monitoring indicators if conditions warrant;
 - Increase visitor information in order to redistribute use patterns; and
 - Consider a full or partial reservation system.

Other management actions may also be considered as appropriate in consultation with other recreation providers in the Project area.

- **Reporting Requirements:** Periodic assessment reports will be prepared by the Licensee management unit (per FERC Form 80 reporting requirements) and will document:
 - Statistical methods applied in analyzing monitoring data.
 - Success of developed recreation visitor management efforts.
 - Recreation facility use levels and counts.
 - Trends in recreation facility use.
 - Projected needs based on monitoring indicators and standards.

FERC Form 80 (required by FERC every 6 years) will be used as a reporting tool by the Licensee to assess visitor trends, whether monitoring thresholds have been exceeded, the success of visitor control measures, and to make plans for the next monitoring timeframe.

Detailed monitoring reporting requirements will be developed and funded by the Licensee for Project-related facilities and sites and their operations and maintenance. Standardized monitoring and reporting forms will be based on FERC Form 80 and may include facility condition inspection forms and recreation site use count forms.

Monitoring personnel will be qualified, either through education or experience, or be adequately trained on how to conduct the monitoring effort and complete the forms in a consistent manner. This and other available information will be compiled and analyzed annually by site and management unit. Updated reporting requirements will be considered over time.

- **Decision-making related to new facility construction:** The Licensee will participate in annual recreation planning and coordination meetings with other recreation providers in the Project area and other, as appropriate. At these annual meetings, it is expected that recreation resource management decisions for the Project area will be made or reaffirmed. Proposed PM&Es listed in Exhibits 1, 2 and 3 will be confirmed based on monitoring results. The estimated date of construction may move up or move back. Management actions to consider include: (1) plan, design, expand, renovate, and/or construct facilities in one or more phases, (2) modify monitoring efforts as needed, such as using volunteers to collect more detailed visitor counts at selected sites in question, (3) begin planning and designing new facilities or renovation, (4) pursue or wait on new construction, (5) modify monitoring indicators if conditions warrant, (6) increase visitor information about less crowded facilities and use areas in the Project area, (7) consider a full or partial reservation system, and (8) collectively participate in grant applications. Other management actions may also be considered.

4. Resource Integration and Coordination Program

The Resource Integration and Coordination Program is a formalized process whereby the

Licensee makes coordinated, timely, and informed decisions related to implementation of the Draft RRMP and other Project related plans. Because of simultaneous activities occurring by various resource groups and by other resource agencies, both formal and informal communication are necessary over the term of the new license. An important goal of this communication is to achieve a balanced integration of sometimes competing and sometimes complementary resource goals for Project lands and waters. This goal may be achieved when all interests and concerns have been adequately addressed or met to the fullest extent possible and no party has serious concerns about the resource decisions being made.

The Resource Integration and Coordination Program consists of the following four elements to be implemented by the Licensee:

- The Licensee will conduct ongoing and regular consultation and coordination meetings (at least annually) among necessary parties and resource groups over the term of the new license. Adequate Licensee staff time and resources will be provided to accomplish this task;
- The Licensee will share information use to make resource decisions, including geographic information system (GIS) data, on-the-ground knowledge, or other pertinent data;
- The Licensee will help clarify resource goals, objectives, and priorities per the new License Terms and Conditions as necessary; and
- The Licensee will help coordinate and conduct, as necessary, studies or consultation that help solve particular problems or resolves specific issues.

5. Plan Review and Revision Program

Recreation and resource conditions can be expected to change over time. It is likely that unforeseen recreation needs, changes in visitor preferences and attitudes, new recreation technologies, or other actions will arise over the course of the new license term. As a result, the RRMP may be updated and/or revised. Revision of the RRMP will require that changes be fully documented.

The frequency with which the RRMP is revised or updated will depend on significant changes to existing conditions, monitoring results, and management responses made over time. The Licensee will determine the frequency of RRMP updates in consultation with affected parties; however, the following guidelines should be considered over time for efficiency and continuity purposes:

- RRMP Sections 1 through 4 should be updated approximately every 12 years (two FERC Form 80 cycles) as conditions change;
- Proposed PM&E measures, estimated costs, and recreation site conceptual plans (Exhibits 1 through 3) should be updated every 12 years;
- Monitoring information should be updated after the first 5 years (one FERC Form 80 cycle)

based on initial testing of monitoring indicators and standards and then reviewed every 12 years thereafter, based on ongoing monitoring results; and

- Baseline recreation information (Exhibit 6) should be updated based on information from surveys conducted every 12 years, or as necessary.

6. Interpretation and Education Program

The Interpretation and Education (I&E) Program serves several purposes including providing enhanced experiences for residents and visitors, encouraging participation in resource protection measures by area visitors, and promoting cooperative, safe behaviors to benefit all Project area recreation resources and visitors. The Licensee, with input from other recreation providers and agency resource managers in the Project area, will develop an I&E Program for the Project area. The Program will involve input from various resource agencies and stakeholders in the Project area and vicinity.

To maintain the I&E Program over the term of the new license, the Licensee will provide long-term support for the program including annual operations and maintenance (O&M) funding such as repair of vandalism to signs and kiosks, and updates of signs over time per Exhibit 1.

In the first five years of the new license, the Licensee, in consultation with recreation stakeholders and other resource groups and agencies, will develop a plan for the I&E Program. Program development will likely include:

- Review and selection of appropriate themes. Potential themes may include fish and wildlife with possible Watchable Wildlife sites, volcanic history, hydropower, Native American cultures, pioneers, recreation activities available in the Project area, recreation facility locations, boating hazards, and others;
- Review and selection of appropriate interpretive media to be used, such as signs and kiosks (roadside and at key sites), brochures, pamphlets, audio tours, newsletters, and others;
- Review and selection of consistent media design, such as fonts, logos, and others;
- Review and selection of prioritized sites where the media will be located, such as at existing recreation sites; and
- Review and selection of services to be provided such as interpretive talks, campfire presentations, reservoir clean-up day events, and others.

The I&E Program will include detailed cost estimates for facilities, artwork, design costs, and other costs. Following development of the I&E Program, designs for signs, brochures, artwork, and other features will be developed by the Licensee and others. Once these designs are developed, the I&E facilities, such as signs and kiosks and the artwork to go into these signs and kiosks, will be created. Once constructed, the media will be sited and installed at selected sites per the I&E Program.

In Exhibit 1, the I&E Program includes a support component to help maintain the program over the term of the new license including implementation of appropriate maintenance procedures and practices, such as replacement of vandalized signs or changes in the messages of signs.

F. REFERENCES AND LITERATURE CITED

Draft RRMP references and literature cited include:

USFS 1990. U. S. Forest Service. Recreation Opportunity Spectrum Primer and Field Guide, General Technical Report R6-Rec-021-90. April 1990. Washington, D.C.

USFS 1985. U. S. Forest Service. The Limits of Acceptable Change (LAC) System for Wilderness Planning. General Technical Report INT-176. January 1985. Ogden, Utah.

EXHIBITS (in process)

1. **Exhibit 1 — Proposed Recreation Measures**

This future exhibit will provide a detailed listing of recreation measures that the Licensee would implement over the term of the new license.

2. **Exhibit 2 — Estimated Costs of Proposed Recreation Measures**

This future exhibit will provide a detailed cost breakout of recreation measures that the Licensee will be responsible for implementing over the term of the new license.

3. **Exhibit 3 — Locations of Proposed Recreation Measures and Conceptual Site Plans**

This future exhibit will provide conceptual diagrams of recreation measures that the Licensee will be responsible for implementing over the term of the new license.

4. **Exhibit 7 — Agreements Between the Licensee and Other Parties**

This future exhibit will provide all agreements between the Licensee and other parties, such as Forest Service Collection Agreements.

5. **Exhibit 8 — FERC License Terms and Conditions for Recreation Resources**

This future exhibit will provide the final FERC License Terms and Conditions following issuance of the new license.

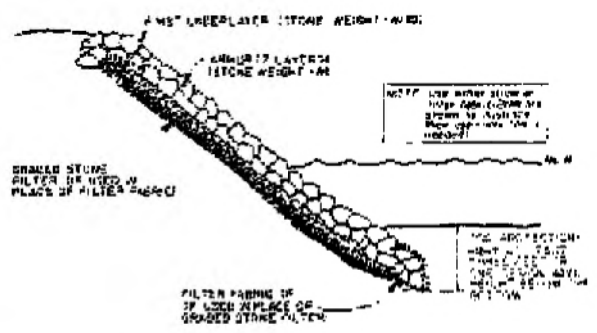
6. **Exhibit 9 — Baseline Recreation Studies Conducted During Relicensing**

This future exhibit will serve as a database for future reference and will include all recreation resource surveys, planning studies, and inventories conducted for relicensing by the Licensee. Additional study results from future studies may be added over time.

POSSIBLE SHORELINE PROTECTION METHODS
 (Discussion and Analysis Purposes Only)
 8/22/02

1. REVETMENTS (Rip Rap)

Revetments are structures placed on banks or bluffs such a way as to absorb the energy of incoming waves. They are usually built to preserve the existing uses of the shoreline and to protect the slope. Like bulkheads, revetments armor and protect the land behind them. They may be either watertight, covering the slope completely, or porous, to allow water to filter through after the wave energy has been dissipated. The require very little maintenance are the best long term solution to shoreline erosion.



2. Bulkheads

Bulkheads are retaining walls whose primary purpose is to hold or prevent sliding of the soil while providing some protection from wave action. If placed in the wetted zone of the reservoir, they can reflect wave energy onto adjoining properties increasing scour on those areas.



3. Bioengineering and Filtering Fabrics

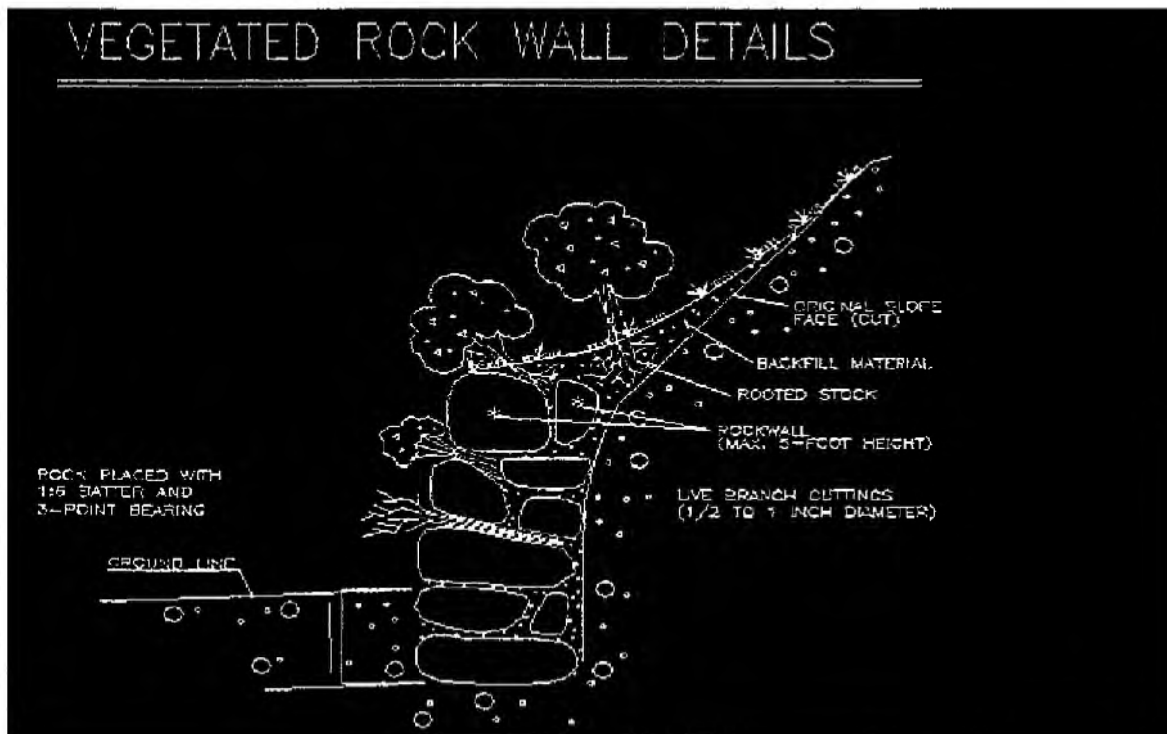
With bioengineering, the entire shoreline bank generally needs to be treated to furnish an array of plants to provide ground cover and root penetration for erosion protection, wildlife habitat, and water-quality improvement by providing water retention and potentially some pollution filtering services. Bioengineering is accomplished by creating zones to place plant material at various elevations on the bank based on the plants' ability to tolerate certain frequencies and durations of flooding and their attributes of dissipating current velocities and wave energies.

Other methods involve less vegetation manipulation and can be as simple as placing logs on the shoreline bank. Untreated large logs can be attached to vertical posts or optimally the landward side of vertical posts in areas like Lake Almanor where there is an abundance of logs. The logs should be backed by filter cloth or graded stone to prevent soil loss through cracks and riprap toe protection may also need to be provided.

There are also a variety of geotextile fabrics, fiber mats and brush matting that can be used on a temporary or sometimes permanent basis. There are both synthetic and natural woven and unwoven materials that have to be sized to ensure that the filter blocks the passage of soil particles while still allowing for hydrostatic pressure relief beneath the structure. When considering a soil bioengineering approach to shoreline stabilization, several factors in addition to selection of plant materials are important. Shores subject to wave erosion will usually require structures or beach nourishment to dampen wave energy. In

4. VEGETATION

Vegetation is an effective and inexpensive way to stabilize shorelines. It also enhances the natural beauty of the landscape, providing pleasing variety and contrast to the eye and attracting small animals to the food, nesting sites, and protective cover it affords. In undisturbed environments, vegetation is often one of the most important elements in the natural protection of the land. Roots and stems tend to trap fine sand and soil particles, forming an erosion resistant layer once the plants are well established. Vegetation does not protect against storms, however, and it is more fragile than other erosion control measures. Because shoreline plants are especially sensitive to human intervention, they should be protected, wherever possible, by restricting pedestrian and vehicular traffic. When vegetation is used as an erosion control device, careful selection is needed to match particular varieties of plants to local conditions of soil, wind, and water. Generally, native plants are more likely to thrive than imported vegetation, but some plants are hardy in a wide range of habitats. In many cases, the chances of successful planting are improved by using protective structures to reduce sand and water movement, at least until the plants are well established. Sand fences and low breakwaters are particularly useful for this purpose. Professional guidance in plant selection and design of supplementary control measures may improve the performance of the vegetation



Some of the best ways to control shoreline erosion is through preventive measures. Some basic preventive guidelines include:

- Preserve the rocks and vegetation which naturally occur along the shoreline.
- Prevent impervious surface (i.e. roofs, driveways) runoff from flowing to the shoreline, especially bluff areas.
- Avoid construction within 100 feet of the shoreline or the edge of nearshore bluffs.
- Limit the amount of foot traffic and other recreational activities in erosion prone areas. Regardless of preventive measures, the right combination of conditions (such as high water level, violent windstorms, drastic wave action, and certain shoreline configurations) may result in serious shoreline erosion.

SHORELINE EROSION ISSUE

8/28/02

Shoreline erosion takes place throughout the normal reservoir shoreline but in some areas is particularly noticeable and can result in loss of shoreline bank with resultant sloughing of upland bank areas. All shoreline erosion except in a very few steep locations occurs on Licensee property. Of the approximate 1,000 residential lots adjoining the Project boundary above the 4,500-foot contour line, 733 hold the Clifford Deed which allows the Licensee certain rights necessary for and incident to the raising of water in Lake Almanor. These rights include the stated right to flood or erode these lands by wave action, seepage or other actions of water.

Because the Project boundary is six feet elevation higher than the maximum operating reservoir level, most shoreline erosion is stopped well before reaching the project boundary. However, in a few locations the bank areas are steep and wind and wave erosion have cut back into the slopes near to the project boundary. Foot traffic and land development activities have in some cases worsened the local erosive conditions. In areas of high erosion potential where the Licensee does not have rights via the Clifford Deed, it has placed rip-rap on its shoreline to prevent the potential for erosion on upland areas above the 4,500-foot contour in the case of exacerbated erosion forces digging back into steep slopes.

Representatives of the 2105 Committee have concerns that continued erosion can lead to water quality problems in the lake and that the Licensee needs to undertake or more readily approve additional shoreline bank protection measures to slow the rate of erosion in certain steep bank areas currently experiencing noticeable erosion. Plumas County and the 2105 Committee contends the following:

- The Clifford Deed's property right provision allowing potential erosion are "in direct conflict with CEQA (California Environmental Quality Act) and Section 404 of the Clean Water Act" regulations.
- "Erosion based on 47-65 year old permits ignores the current standard of environmental stewardship"
- The Clifford Deed's erosion rights are not intended "to encourage erosion but to eliminate it when it incidentally occurred" and are intended to "limit erosion immediately" rather than let nature take its course in stabilizing eroding banks, and
- "FERC has indicated that higher standards for erosion control are in place – environmental erosion control in place of rip-rap".

Studies and Findings

Study 20 of Licensee's relicensing studies was the "Lake Almanor Shoreline Erosion Study", undertaken by WRECO in summer 2000. The study is located in Volume 8 of the DLA, Attachment E2-B

The WRECO study evaluated all shoreline areas adjacent to residential lots including all of LAW (all low erosion potential), the East Shore, Hamilton Branch area, Peninsula Village/Big Cove area and LACC on the peninsula. While the study did find areas of high erosion potential, the study found no water quality or other adverse biological or physical environmental effects from the ongoing erosion processes on Lake Almanor shorelines. The shoreline was categorized into low, medium, or high erosion potential based on field studies. The findings have been mapped and include:

- A total of 99 shoreline areas adjacent to residential lots found to have high erosion potential (about 10 % of all lot areas).
- Adjacent to the 99 high erosion potential areas, there are 71 residential parcels in the Clifford Deed and of those 19 property owners (or 27 %) have installed their own riprap (by permit).
- Along the remaining 28 high erosion potential areas, the adjacent lots are protected by Licensee installed riprap except two areas that adjoin undeveloped parcels.
- A total of 257 shoreline areas, mostly along the LACC peninsula (or about 25% of all areas adjacent to residential lots at Lake Almanor) were found to possess moderate erosion potential. All of these shoreline areas are adjacent to Clifford Deed parcels or have Licensee-installed riprap installed on the Licensee-owned shoreline below the 4,500-foot contour.

In addition to the shoreline areas adjacent to residential areas, several areas of high erosion potential were found adjacent to SR 147 along the East Shore. Importantly the study found no evidence that high erosion areas were leading to adverse environmental effects on water quality.

Summer 2002 Follow on Erosion survey work done by Sea Surveyor found:

- A total of 9 shoreline areas where erosion might be occurring at the 4,500-foot level with 4 of these locations having "erosion scars above 4,500 feet". All of these locations are adjacent to Clifford Deed parcels except 2 along SR 147 where there are no parcels and the roadway bed is close to the 4,500-foot line and the reservoir.

Clifford Deed

In the 1950s Edward A. Clifford started developing thousands of parcels of property surrounding Lake Almanor. In connection with his land development transactions with the Licensee, he executed a grant to the Licensee on August 15, 1957. This grant conveyed to the Licensee certain rights to fill with water and flood any property he owned or would later own contiguous to the 4,500-foot contour elevation line. From that grant these rights are stated as follows:

"Now therefore, first parties hereby grant to second part, in said lands now owned or hereafter acquired by first parties all rights necessary for and incident to (a) the raising at all times, or from time to time, of the water in second party's Lake Almanor Reservoir to, and maintaining the same at, the elevation of said contour line (the elevation of the water being measured on an undisturbed water surface) including, without limiting the generality of the foregoing, the right to flood or erode said lands now owned or hereafter acquired by first parties by wave action, seepage or other actions of the water, and (b) the flooding of said lands now owned or hereafter acquired by reason of said water elevation being raised above said contour line due to action of the forces of nature or other circumstances beyond the control of the second party, provided, however, that whenever said water elevation shall be raised above said contour line by any such natural action or circumstance beyond the control of second party, said water elevation shall as soon as practicable thereafter be lowered by second party to said contour lines."

The "said contour lines" as stated in the 1957 deed restriction are the 4,500-foot elevation project boundary/property line. The Licensee holds these rights to erode on 733 residential lots around Lake Almanor. On 267 additional properties where it does not hold the deeds it has placed riprap on Licensee property to prevent erosion from possibly extending above the 4,500-foot contour.

Adjacent to any residential lot, whether the Licensee owns these rights or not, it is possible and usually acceptable to undertake erosion control measures on Licensee property with the approval of the Licensee. The Licensee has granted at least 70 permits to individuals for riprap erosion controls at adjacent property owners request. Permits are issued for privately funded erosion control installations upon approval of site specific plans. This program is intended to be continued into the future.

SEPTEMBER 12, 2002

MEETING AGENDA

**Upper North Fork Feather River Hydroelectric Project
FERC Project No. 2105**

**Recreation, Land Use, and Aesthetics Work Group
September 12, 2002 Meetings
Chester Memorial Hall, Chester, CA**

Recreation Resources Only

9am to 4pm with lunch break

- Agenda review and comment
- Revised meeting minutes (Aug. 8)
- Meeting minutes (Aug. 27 and 28)
- Upcoming September meetings
- Action item list review
- Comments on the meeting with the USFS on 8/28
- Draft changes to PG&E's proposed recreation PMEs
- Issue status table
- Preliminary Draft RRMP – comments on previous sections that were distributed
- Preliminary Draft RRMP – next sections (Development and O&M)
- Adjourn

MEETING NOTES

**UNFFR PROJECT RELICENSING (FERC No. 2105)
Recreation, Land Use, and Aesthetics Work Group Meeting
September 12, 2002
9 A.M. to 4:00 P.M.
Chester Memorial Hall, Chester, CA**

Attendees:

Jannis Miller	596-3740	
John Miller	596-3740	jamham@thegrid.net
Rita & Carl Felts	284-7982	cefelts@earthlink.net
Chuck Warner	259-4490	
Bob Lambert	259-2272	ralambert@attbi.com
Aaron Seandel	259-4335	aseandel@psln.com
Bill Dennison	259-2058	demison@citlink.net
Bill Kerns	596-4530	almanor@onemain.com
Lisa Randle	894-4766	lara@pge.com
Marian Liddell	258-3115	chesterprogressive@hotmail.com
Michael Condon	283-7820	mcondon@fs.fed.us
Jane Goodwin	258-3509	jmgoodwin@fs.fed.us
Mike Taylor	534-6500	mftaylor@fs.fed.us
Harry Williamson	916-414-2355	harry_williamson@nps.gov
Mike Willhoit	259-3647	mcwill@psln.com
Jerry Duffy	256-3227	dvermt@citilink.net
Mark Sanford	530-894-4653	ams0@pge.com
Tim Schreiber	206-622-1176	schreibert@edaw.com
Chuck Everett	206-622-1176	everettca@edaw.com
John Mintz	415-973-5779	ism9@pge.com
Christi Goodman		
Bob Orange		

John Mintz called the meeting to order.

Bill Dennison commented that he did not approve of the way in which the meeting minutes from the August 8 meeting were amended; his comments were added at the end of the meeting minutes. He did not want the minutes to be used as a basis of agreement with FERC. John Mintz responded that that is not the intention of the minutes; they are merely a record of the public participation in the process.

Other comments on the previous minutes were then received and noted. The minutes from the previous meetings would be amended accordingly.

John Mintz announced that the inter-resource agency DLA comment/response meeting would be held in Sacramento on September 23-25. Mike Condon and John Mintz explained that the inter-

agency meeting is a legal requirement of the FERC relicensing process for the Licensee to receive comments from the agencies. Though it would be valuable for 2105 Committee representatives to attend, it is a different sort of meeting from the community meetings that have been held in Chester. The 2105 Committee members agreed that it would be all right for that meeting to occur in Sacramento if there would be another issue-related meeting in Chester at which Tom Jereb would attend in order to respond to comments from the 2105 Committee.

Christi Goodman pointed out that Plumas County was not on the non-confidential distribution list for the Cultural Resource Management Plan. She would like to be placed on that distribution list. John Mintz responded that he would see to it that this was done.

Michael Condon stated that it would be useful to the stakeholders if PG&E were to provide written responses to their input, so that the stakeholders would have a better understanding of PG&E's views of the issues. John Mintz responded that written responses to their comments would be provided.

Bill Dennison stated that Plumas County is hiring a consultant with a FERC background so that they are better able to participate in the process...

ACTION ITEM REVIEW

John Mintz then handed out a list of action items compiled from the previous meetings and proceeded to address each item and what resolution had been reached on each one, if any.

Recreation

1—Stover Ranch: Chuck Everett stated that lake level is not a problem at this site, though ownership might be an issue. Mark Sanford responded that parking and a trail could be provided on Chester PUD property, with a picnic site at the existing houses, which is PG&E land. Chester PUD's concern is liability and vandalism. John Mintz added that Tom Jereb is in support of providing access to the site, but does not want to provide new facilities if they are subject to vandalism. A management presence would be needed to protect any facilities built on the site.

2—Swim Beach at North Shore Campground: The 2105 Committee agreed to drop this as an issue as the site has too many constraints.

3—Fishing Access: Chuck Everett provided copies of the Almanor Fishing Association's fishing access map for Lake Almanor. All shore sites are now addressed in PG&E's plans. Bill Dennison asked whether PG&E would be involved in making improvements at the California Department of Fish and Game access site near the Hamilton Branch Powerhouse. John Mintz responded that that would be addressed in the Hamilton Branch UNFFR License amendment.

5—Bear Issues: Mark Sanford stated that Bob Orange had put in a formal request that bear-proof food cabinets be placed at PG&E campgrounds, and that they will cost about \$1,000 each, installed. John Mintz said that they would likely be installed at campgrounds where issues have arisen in a phased approach, and then would continue to be installed at additional sites should additional bear issues arise.

6—*Grant application participation for LART extension:* The Forest Service was interested in partnering with PG&E on future LART grant applications in the Chester area. For the southwest/southeast area, Bill Dennison pointed out that the meeting notes imply that the bike trail is to be built on the shore of the lake. He would like it made clear that the trail is not to be built on the shore, but would roughly follow Highway 147. Christi Goodman stated that the old county road Right Of Way still exists and could potentially be used in some places as a trail bed. Christi Goodman supplied a potential trail map along the Southeast Shore/Highway 147.

7—*Plumas National Forest interest in Caribou Clubhouse:* Peggy Gustavson was present from Plumas National Forest to discuss the Forest's interest in the potential of taking over the Caribou Clubhouse and perhaps offering it to a concessionaire. She stated that the Forest was not interested in taking on the clubhouse because it would be a very costly renovation, and there would also be issues with trying to establish 2 special use permits at the site; one for PG&E's use of the site, and a separate one for the clubhouse as a resort. Bill Dennison mentioned that Feather River College might be interested in the site for their culinary school. Susan Carol, president of Feather River College, should be contacted to discuss the matter further.

8—*Super Channel Site:* Chuck Everett described the potential site at the Super Channel south of Chester along SR 89. This site could be another trailhead option for an extended Lake Almanor Recreation Trail (LART), as well as a shoreline access site for wildlife viewing and swimming. The site is located on USFS land. The 2105 Committee voiced general approval of the plan. Tom Jereb also supported the site in concept, per John Mintz.

9—*PG&E role in new trails:* John Mintz pointed out that the agreement between PG&E and Plumas County was only for easements, not for construction of trails. Bill Dennison was unaware of this agreement clause.

Other: Bill Kerns of Almanor Associates raised the issue of potentially leasing PG&E land at the mouth of Bailey Creek. He would like the site to potentially build a public marina for approximately 100 boats, a swim area, and a day use area. John Mintz responded that the issue is worthy of further investigation. Almanor Associates is currently studying bald eagles near the site and working with CDFG to identify buffer zones.

Safety

1—*Prattville Fire Dept. approval of PSEA Camp fire protection capacity:* Mark Sanford is still waiting for a response from the Prattville Fire Department.

2—*Contact Dale Knutzen re: fuel load reduction & safety plan:* Mark Sanford reported that he had spoken with Dale Knutzen who addressed 3 areas of concern for fuel load reduction:

- PSEA Camp needs a more aggressive thinning;
- Camp Conery needs a fuel break around it; and
- The area along Highway 147 on east shore also needs thinning.

Mike Willhoit asked whether this would have to wait for the new license. Mark Sanford replied that it would not have to wait for the new license.

3—*Develop statement of agreement on Red River Deed:* John Mintz stated that a statement would be submitted to the 2105 Committee by the 24th of September.

4,5,6—*Annual helicopter flyover:* Mark Sanford stated that he recently participated in a flyover on the lake and found that it was difficult to spot floating debris. Since debris is floating, it is difficult to find again later. John Mintz also pointed out that FERC does not generally hold the Licensee responsible for floating debris. It was agreed that there was a need to receive input from the Plumas County Sheriff. Mike Willhoit and others disagreed and thought that flyovers were successful.

6—*Strobe light:* John Mintz agreed to send out a letter to local residents regarding the use of strobe lights on the lake in order to determine public perceptions of the issue. Concern was expressed by some on how the issue was worded. Research is needed first on the exact type of equipment needed and the shielding used. Aaron Seandel discussed the need for a broader "Safety Plan." The 2105 Committee would contact the County Sheriff to discuss a safety program for the lake.

Shoreline Issues

1—*Review WRECO Report on shoreline erosion:* The 2105 Committee has reviewed the report, but needs to have a discussion with Tom Jereb in order to reach resolution.

2—*Septic leachfields:* Christi Goodman supplied a GIS database and a handout containing information on septic leachfield issues around the lake. John Mintz agreed to respond to the information once PG&E has reviewed the information.

3—*PG&E tree removal policy:* Mark Sanford reported that he is still working on the written policy.

4—*Dust abatement proposals:* Kirby Gilbert provided this at the previous meeting in late August.

5—*Beetle tree damage:* Mark Sanford explained that PG&E will continue to remove the dead trees, but that not much could be done otherwise. Michael Condon responded that they have the same issue in Plumas National Forest, and agreed to continue to work with PG&E.

6—*Provide a new PG&E staff person at lake:* John Mintz reported that Tom Jereb is generally in support of this proposal. John and Mark will continue to look into the details of the position.

Hamilton Branch

1—*Involve Lake Almanor communities in Hamilton Branch amendment:* John Mintz stated that the communities would be involved and added to the email list for all Hamilton Branch public input.

Consultation and Study Issues

1,2—Specify studies and sites for 1 mile study area: Jane Goodwin stated that the Visitor Use Study, Public Use Impact Study, and Site Development Suitability Study would benefit from the increased study area. Her concern was that many of the sites selected for new or expanded recreation use might not pass NEPA or Heritage (Cultural Resource) analysis in the future. Adequate alternative sites may not be available within the ¼ mile study area. Michael Condon also pointed out that while the ¼ mile study area picks up many of the direct impacts for the NEPA analysis, many indirect and cumulative effects might not be caught with the ¼ mile study area.

3—Peer Review: After further discussion with John Baas, the Forest Service, National Park Service, and others agreed that the recreation surveys conducted by EDAW will not require a third party review. There are continued concerns with the characterization of the Chester subpopulation. However, proposed site improvements should help meet resident needs.

4—Projections of recreation impacts based on new residential developments: Chuck Everett provided new information and analysis regarding the potential impacts of new planned residential/resort development in the area on recreation use at the lake. Based on the assumption that day use areas would be the most significantly impacted areas, he surmised that the proposed recreation site improvements would be able to handle this growth. The one area that would fall short would likely be boating facilities. This need might be met by planned private boating facilities in the future. The marina that Bill Kerns proposed at the mouth of Bailey Creek is a good example. Bill Dennison pointed out that safety would also be an increasing issue with the increased use of the lake. Jerry Duffy discussed the need to also consider the workers at Dyer Mountain, of which there would be about 200.

5—Assess impact of using 80% peak month campground capacity trigger: Chuck Everett presented his findings based on using 80% peak month weekend statistics rather than 90% capacity. This resulted in moving up the date for the construction of new campsites including those planned on the southeast shore. Bill Dennison pointed out that once the campgrounds reach a certain capacity, people might stop going there because of the crowds, and thus the capacity trigger might never be reached, even though the need for new facilities exists.

Chuck Everett also provided a handout illustrating the effects of using a standardized season (mid-May to mid-September) on the existing use statistics. Michael Condon stated that the current low use numbers recorded at Butt Valley Reservoir may be a result of the current poorer fishing because of the dam repairs that were made a few years ago. Once the fish population recovers, use at those sites would likely increase. Chuck responded that ongoing monitoring would allow anomalies such as this to be addressed in the future.

Harry Williamson raised a question about the Draft RRMP Monitoring Program that he thought that it indicated that monitoring would be done every 6 years, with revisions made to the RRMP only every 12 years. Chuck Everett responded that some monitoring would occur annually and analyzed annually. Every 6 years, the information would be reported to the FERC. Potential RRMP revisions would occur every 12 years, if needed. Michael Condon pointed out that 12 years is a long planning cycle and that a shorter cycle may be better.

Jane Goodwin suggested that some sort of recreation "marketing plan" be developed to improve awareness of recreation facilities at the lake, and perhaps offering lower user fees during the shoulder season. Aaron Seandel proposed that some sort of inter-agency website be created listing recreation sites and availability. Chuck Everett pointed out that this could all be part of the proposed Interpretation and Education (I&E) Program being recommended in the RRMP for the license application.

Comments on Meeting with USFS District Ranger

Chuck Everett summarized the results of the meeting he had with Susan Matthews, District Ranger for the Lassen National Forest on August 28th. Jane Goodwin, Janie Ackley and biologist Mark Williams were also in attendance at the meeting.

Swim Beach Expansion: Chuck reported that Susan Matthews had positive comments about this concept, on the condition that PG&E pay for the expansion and take over the operation and management (O&M) of the site. John Mintz added that PG&E is on board with this proposal, though it may be a fee site. Bill Dennison stated that it would be unfortunate if they finally make a site for Chester residents and then make it too expensive for residents to use. Chuck Everett commented that perhaps low-cost resident passes may be possible.

Southwest Shoreline Access Zone: Chuck Everett stated that the District Ranger felt that creating near-shoreline parking areas and restricting vehicular access below 4,494' at several areas was a good concept. She indicated that PG&E should be the responsible party for this project. Bill Dennison pointed out that this plan would require enforcement, perhaps in the form of a financial contribution to the Plumas County to adequately staff the Sheriff's Department.

Super Channel: The USFS District Ranger agreed with the plan in concept; it has LART access potential.

Raptors/Bald Eagles: The USFS biologist did not raise any "red flags" at this time concerning the sites that PG&E is considering for improvements.

Draft Changes to RRMP

Chuck Everett handed out a summary of the next edition of the Preliminary Draft RRMP and went over its contents. This included the Facility Development Program and the O&M Program. A question was raised whether any of the sites being considered might be held up by Cultural Resource analysis. John Mintz responded that the new proposed East Shore Campground has not yet undergone cultural resource analysis, though the swim beach portion of it has. No constraints are known at this time.

Cost Share Enhancements: Chuck Everett questioned the USFS on potential cost share projects with PG&E. Michael Condon pointed out that the Forest Service has not staked out its position on this matter yet, but that it does not have a lot of funding for improvements. He stated that it would be helpful to the Forest Service if PG&E could provide a larger sum in cost share funding up front, and then decreased funding later. The USFS may target their requests of PG&E on non-boating facility needs since Cal Boating grants may cover some or all of these needs.

Agency and public review: John Mintz pointed out that the RRMP is a large document to be revising every 6 years. Michael Condon reiterated his statement that 12 years is a long planning cycle, and that the revisions should be able to occur earlier, if needed.

Coordinating, Scheduling, and Phasing: Chuck Everett went over the high, medium and low priority projects. Most day use areas are high priority (first 10 years). A definitive priority list is not yet complete. Mike Willhoit questioned whether these dates would change if the license were delayed. John Mintz responded that they would likely be pushed back if the new license were delayed.

Next Meeting Dates

Future meeting dates were proposed, with the 19th and 26th of September being considered. Chuck Everett stated that the meeting would probably be most valuable if it occurred after the inter-agency DLA comment/response meetings in Sacramento on September 23-25. Bill Dennison asked whether Tom Jereb would be present at this meeting. John Mintz indicated that it was his intent for the 2105 Committee to address its issues with Tom Jereb.

California Department of Fish and Game Issues

Bob Orange of the California Department of Fish & Game (CDFG) arrived and reported that a few years ago the CDFG estimated over 133,000 recreation user days on the Hamilton Branch. He also indicated that CDFG is interested in acquiring the existing houses at the Hamilton Branch Powerhouse as possible field offices and storage for CDFG and Almanor Fishing Association.

Bob Orange pointed out that the Tahoe National Forest has decided to bear-proof their campsites, including food lockers and trash receptacles. He confirmed Mark Sanford's statement that food lockers would cost about \$1,000 installed.

The meeting was adjourned.

Preliminary Draft RRMP #3 (9/12/02)

This is a summary handout on 2 new programs being developed in the Draft RRMP:

- Recreation Facility Development Program
- Recreation Operations and Maintenance Program

RECREATION FACILITY DEVELOPMENT PROGRAM

Recreation Facility Development and Upgrades

- There would be two types of recreation development actions taken by the Licensee:

Licensee-Responsible Enhancements (the Licensee pays 100% and constructs)

1. Last Chance Campground (expansion)
2. Chester Stover Ranch Shoreline Access (new)
3. Chester 1st Avenue Shoreline Access (new)
4. Chester Super Channel Shoreline Access (new)
5. North Shore Boat Launch (replacement and public)
6. Catfish Beach primitive DUA and Campground (new)
7. Westwood Beach Shoreline Access (new)
8. Stumpy Beach Shoreline Access (new)
9. Eastshore Campground and DUA/Swim Beach (new)
10. Eastshore Group RV Campsite (new, former picnic area)
11. Almanor Scenic Overlook (expansion)
12. Canyon Dam DUA (expansion)
13. Camp Conery Group RV Campsite (currently group cabins only)
14. Lake Almanor Campground DUA/Swim Beach (new) and campsites (expansion)
15. PSEA Swim Beach (public and expansion)
16. Almanor Campground Public Swim Beach (expansion)
17. Southwest Access Zone – shoreline vehicular access points and barriers (new)
18. Butt Valley Reservoir Recreation Trail
19. Ponderosa Flat Campground (expansion) and Group RV Campsite (new)
20. Alder Creek Boat Launch (expansion)
21. Cool Springs Campground (minor improvements)
22. Boat-in/Walk-in Sites on Western Shore of Butt Valley Reservoir
23. Belden Forebay Car-top Boat Launch/North Fork Fishing Trail Trailhead (new)
24. Belden Rest Stop (improvements)

Cost Share Enhancements With Other Recreation Providers (the Licensee provides a percentage of the funding/provides easements and others construct the project)

1. Almanor Campground Boat Launch ramp extension (cost share in USFS grant application)
2. Almanor Campground Renovation (cost share in 2006 Forest Service CIP project)
3. Canyon Dam Boat Launch ramp extension (cost share in USFS grant application)
4. LART extension from Chester (cost share in Chester Rec. District/USFS grant application, 3 Chester sites listed above are Licensee's participation)
5. LART reservoir-wide (provide easements on Licensee land if compatible)

Recreation Development Locations

- Refer to the wall map.

Recreation Facility Design Guidelines and Approvals

- On Licensee or private lands, new recreation development will:
 - Comply with state and local public health and safety codes and other development regulations.
 - Be consistent with the ROS-style recreation opportunity area (semi-primitive, roaded natural, and rural/project facilities). The Forest Service will recommend design guidelines to provide continuity with their facilities.
 - Protect natural and cultural resources.
 - Comply with ADAAG, as amended.
 - Be consistent with FERC license terms and conditions.
- On Forest Service lands, current Forest Service construction standards and design guidelines would apply. The Forest Service would be the approving entity.
- On State or County lands and ROWs, current CalTrans or Plumas County construction standards and design guidelines would apply. CalTrans or the County would be the approving entity.

ADA Compliance and Upgrades

- The Licensee will comply with ADAAG, as amended.
- The Licensee will move up the schedule to perform the ADA-related improvements faster and not wait for "major renovation" before the ADA-related improvements are made.

NEPA/CEQA Compliance and Environmental Project Review and Permitting

- Recreation projects will involve a number of new detailed site-specific studies, NEPA/CEQA compliance, permits, licenses, authorizations, etc.

- On Licensee, private, and state-owned lands or ROWs, the Licensee will be responsible for 100% of the cost on Licensee-responsible enhancements. The Licensee will seek approvals from various entities as needed.
- On Forest Service-owned lands, the Licensee will be responsible for a percentage of these construction-related costs based on the percentage of the Licensee's cost share. The Forest Service will be the approving entity on Forest Service lands.

Agency and Public Review of Planned Recreation Development

- The Licensee will hold annual review meetings with agencies and stakeholders to discuss planned or anticipated recreation development projects and coordination.
- In addition, every 6 years, the Licensee will hold and facilitate a review meeting of the 6-year report to FERC on recreation capacity, monitoring results, completed and planned new development, and FERC Form 80. A Draft report will be circulated for review and comment prior to filing with the FERC.
- Every 12 years, the RRMP may be updated if needed. At this time, the recreation development program may be updated to reflect current conditions, schedules, and needs.

Recreation Facility Construction Coordination, Scheduling, and Phasing

- Recreation facility construction coordination and grant application coordination will occur at annual review meetings with all recreation providers consulted. The Licensee will take the lead in facilitating the annual meeting. Other smaller meetings may occur if needed to work out details.
- For Licensee-responsible enhancements, recreation projects will be phased including:
 - High Priority (2005 to 2015) – meet high priority needs, ADA needs, ecological or cultural resource protection needs, safety concerns, and immediate capacity expansion needs. The priority will be expanding existing sites first before undeveloped sites are developed.
 - Moderate Priority (2016-2025) – meet moderate priority needs through expansion of facilities per the Monitoring Program and capacity triggers.
 - High Priority (2026-2035+) – meet lower priority needs through expansion of facilities per the Monitoring Program and capacity triggers.

RECREATION OPERATIONS AND MAINTENANCE PROGRAM

Recreation Operations and Maintenance Standards and Practices

- The Licensee, or its Leasees/Permittees, will assume 100% responsibility for all annual operations and maintenance (O&M) and longer-term facility renovations or replacements for the projects listed as Licensee-responsible Enhancements. Refer to the prior list for the sites.
- Other cost-share construction projects managed by other recreation providers will be operated and maintained by others and not the Licensee.
- The Licensee will utilize a concessionaire for most annual O&M activities. Annual reviews of O&M adequacy will be conducted.
- On Project lands leased or permitted to others by the Licensee, agreements (when they come up for renewal) will specify an adequate level of annual and recurring O&M of facilities on Project lands. The agreement will be enforced by the Licensee. Also see the Draft SMP.
- Recreation facilities will be maintained in a manner that is consistent with the ROS-type recreation opportunity area and the desired experience level.

Public Shoreline Access

- Reasonable and safe public shoreline access will be allowed on Project lands between the 4,494 ft. and 4,500 ft. elevation of Lake Almanor.
- The Licensee will periodically monitor dispersed shoreline access on Project lands per the Monitoring Program. If some shoreline dispersed sites become significant resource concerns, some sites may be hardened or closed to protect resources.
- Additional program details are included in the Draft SMP, particularly related to private recreation facilities.
- The Licensee will provide annual O&M of shoreline access sites and access roads in the Southwest Shoreline Access Zone where vehicular access has been focused and is now a management issue.

Public Safety and Law Enforcement

- Vehicular access below the 4,494 ft. elevation at Lake Almanor will be strongly discouraged for a number of reasons.
- The Licensee supports the development of a new Plumas County Ordinance that prohibits vehicular access below the 4,494 ft. elevation at Lake Almanor. This will allow the Sheriff's Dept. the authority to enforce a vehicular ban below this elevation. Currently, there is no

authority. The Licensee will work with the Sheriff's Dept. on enforcement of this policy if a new ordinance is adopted by the County.

- Reservoir bathymetry maps will be prepared by the Licensee and posted on signs at public boat launches and made available as pamphlets to be distributed to boaters at Lake Almanor.
- The Licensee will work with the Sheriff's Dept. to adequately identify and mark submerged boating hazards on Project reservoirs per a MOU that is being reviewed at this time. This will include the placement of buoys (the number changes at different pool levels) and possibly strobe lights (still being reviewed).
- If needed, the Licensee will support the adoption of a new Plumas County Ordinance that will limit watercraft boat speed, horsepower, and type at the Belden Forebay, consistent with the Licensee's plans to develop a new car-top boat launch at this forebay and the forebay's small size.
- Additional Sheriff's Dept. Marine Patrol service will be provided at Lake Almanor to help enforce existing boating regulations and no wake zone restrictions, as well as a prohibition of shoreline vehicular use at Lake Almanor below the 4,494 ft. elevation (if a new County ordinance is adopted). This new service will be funded through new user fees collected by the Licensee.

Recreation User Fees

- The Licensee will collect reasonable camping and day use fees as allowed by the FERC to help reduce the cost of operating and maintaining the Project's recreation facilities. User fees will also be collected for additional Marine Patrol law enforcement in the Project area.

Existing Capacity

Action Item: Standardized Seasonal Analysis (9/12/02)

Table x. Estimated Seasonal and Peak Capacity of Project Area Licensee- and Forest Service-Developed Recreation Sites

Recreation Sites	No. of Sites/ Spaces	Turnover Rate (DUAs Only) ³	SEASON ¹				PEAK MONTH/WEEKENDS ²			
			Maximum Visitor Capacity ⁴	Estimated Average No. of Daily Occupied Sites/Space ⁵	Estimated Current Visitor Use ⁴	Current Seasonal Weekend Occupancy (percent)	Maximum Visitor Capacity ⁴	Estimated Average No. of Daily Occupied Sites/Space	Estimated Current Visitor Use ⁴	Current Peak Month Weekend Occupancy (percent)
Developed Campgrounds										
Lake Almanor										
Last Chance Campground	12	—	1,987	5	758	38 percent	1,123	7	664	59 percent
Almanor Campground	102	—	16,891	40	9,439	56 percent	9,547	73	6,850	72 percent
Lake Almanor Campground	131	—	21,694	60	9,936	46 percent	12,262	118	11,045	90 percent
Camp Conery Group Camp ⁶	—	—	2,250	—	1,950	87 percent	500	—	500	100 percent
Subtotal ⁷	—	—	38,585	—	19,375	50 percent	21,809	—	17,895	82 percent
Butt Valley Reservoir										
Ponderosa Flat Campground	61	—	10,102	27	4,471	44 percent	5,710	48	4,533	79 percent
Cool Springs Campground	30	—	4,968	10	1,820	37 percent	2,808	19	1,778	63 percent
Subtotal	—	—	15,070	—	6,291	42 percent	8,518	—	6,311	74 percent
Bypass Reaches										
Queen Lily Campground	12	—	1,987	6	994	50 percent	1,123	9	842	75 percent
North Fork Campground	20	—	3,312	9	1,490	45 percent	1,872	15	1,404	75 percent
Gansner Bar Campground	14	—	2,318	8	1,325	57 percent	1,310	12	1,123	86 percent
Subtotal	—	—	7,617	—	3,809	50 percent	4,305	—	3,369	78 percent
Subtotal (All campgrounds)	382	—	65,509	—	32,183	49 percent	36,255	—	28,739	79 percent

Revised Season = mid May to mid Sept.

* Camping - Lake Almanor hits 80% Peak Month Weekend trigger. Treat as a system.

Recreation Sites	No. of Sites/ Spaces	Turnover Rate (DUAs Only) ²	SEASON ¹			PEAK MONTH WEEKENDS ²				
			Maximum Visitor Capacity ⁴	Estimated Average No. of Daily Occupied Sites/Space ⁵	Estimated Current Visitor Use ⁴	Current Seasonal Weekend Occupancy (percent)	Maximum Visitor Capacity ⁴	Estimated Average No. of Daily Occupied Sites/Space	Estimated Current Visitor Use ⁴	Current Peak Month Weekend Occupancy (percent)
Developed Day Use Sites³										
Boat Launches										
Lake Almanor										
Almanor Boat Launch	Parking	2	11,215	78	8,252	74 percent	6,339	76	4,545	72 percent
Canyon Dam Boat Launch		4	27,085	270	28,566	105 percent	15,309	284	16,983	111 percent
Subtotal			38,300		36,818	96 percent	21,648		21,528	99 percent
Plelke/Rest Areas										
Lake Almanor										
Almanor Rest Area		2	3,174	6	635	20 percent	1,794	6	359	20 percent
Almanor Picnic Beach		5	22,218	175	18,515	83 percent	12,558	183	10,943	87 percent
Dyer View DUA		2	2,751	12	1,270	46 percent	1,555	16	957	62 percent
East Shore DUA		1	2,116	7	741	35 percent	1,196	5	299	25 percent
Almanor Scenic Overlook		1	3,174	5	529	17 percent	1,174	5	299	17 percent
Canyon Dam DUA		3	14,283	132	13,966	98 percent	8,073	111	6,638	82 percent
Subtotal			47,716		35,656	73 percent	26,970		19,495	74 percent
Butt Valley Reservoir										
Alder Creek DUA / B.L.		5	10,580	90	9,522	90 percent	5,980	87	5,203	87 percent
Bypass Reaches										
Balden Rest Stop		12	19,044	25	2,645	14 percent	10,764	88	5,262	49 percent
Subtotal (All DUAs)			115,639		84,640	73 percent	65,361		51,488	79 percent
GRAND TOTAL⁷			181,148		116,823	64 percent	101,616		80,227	79 percent

** All boat launches hit seasonal (60%)

and peak month (80%) criteria. Treat as system.

*** Day Use Areas vary site by site. Treat individually.

Canyon Dam DUA and Almanor Swim Beach highest.

¹ Season defined as weekends from mid-May until mid-September.

² Peak months defined as weekends in July and August.

³ Turnover rates for DULAs based on traffic counter data and professional judgement. For maximum capacity purposes, turnover rates were used for all DULAs to calculate Theoretical Seasonal and Peak Month Weekend Capacity. A turnover rate is defined as the number of times during a day that new vehicles replace ones that have left a parking area.

⁴ Assumes an average of 3.6 persons per campsite and 2.3 persons per vehicle per day per 2001 survey results. Number of visitors are in recreation days (any length of stay per day) per FERC Form 80 requirements.

⁵ Estimated average number of sites occupied at campgrounds were provided by the Licensee, Forest Service, or based on user counts taken during 2001 by EDAW. Estimated average number of spaces occupied at DULAs was derived from traffic counter readings and manual traffic counts. In 2001, pool levels at Lake Alhambra were lower than normal and may have contributed to lower recreation days at the Alhambra Boat Launch and higher recreation days at Canyon Dam Boat Launch.

⁶ Camp Conery is a group facility, which can accommodate up to 50 people at one time. It is rented primarily on weekends. In 2001, Camp Conery was rented 13 out of 15 (87%) weekends that it was open to the public and all weekends during the peak season.

⁷ Last Chance Campground and Camp Conery Group Camp not included.

⁸ Traffic counter data was used for the following sites: Alhambra Boat Launch, Alhambra Picnic Beach, Canyon Dam Boat Launch, and Canyon Dam DUA. Manual counts were used as a basis for all other DULAs.

Source: EDAW, Inc.

? add in residential dev. factor here

Future Capacity Projections

Table x. Projected Increase in Season Weekend and Peak Month Weekend Occupancy at Campgrounds (2001-2035)

Project Area Campgrounds	2001 Seasonal (Peak Month Weekend) Percent Occupancy ¹	Projected Annual Percent Increase in Occupancy ²	Projected Seasonal (Peak Month Weekend) Percent Occupancy				Projected Date that 60 (80) Percent Seasonal (Peak Month Weekend) Capacity is Reached ³	Projected Date that 100 Percent Seasonal (Peak Month Weekend) Capacity is Reached ³
			2005	2015	2025	2035		
Lake Almanor								
Last Chance Campground	38 (59)	1.0662	40 (62)	44 (69)	49 (77)	55 (86)	— (2028)	—
Almanor Campground	56 (72)	1.0662	58 (75)	65 (84)	72 (93)	80 (104)	2007 (2011)	— (2031)
Lake Almanor Campground	46 (90)	1.0662	48 (94)	53 (105)	59 (117)	66 (131)	2026 (Present)	— (2011)
Camp Conery Group Camp ⁴	87 (100)	1.0662	—	—	—	—	Present (Present)	— (Present)
Subtotal⁵	50 (82)		52 (86)	58 (96)	65 (107)	72 (119)	2017 (Present)	— (2020)
Butt Valley Reservoir								
Ponderosa Flat Campground	44 (79)	1.0662	46 (83)	51 (93)	57 (103)	63 (116)	2029 (2002)	— (2022)
Cool Springs Campground	33 (63)	1.0662	35 (66)	39 (74)	43 (83)	48 (92)	— (2022)	—
Subtotal	41 (74)		42 (77)	47 (86)	52 (96)	58 (107)	— (2008)	— (2028)
Bypass Reaches								
Queen Lily Campground	50 (75)	1.0662	52 (78)	58 (88)	64 (98)	72 (109)	2018 (2007)	— (2027)
North Fork Campground	45 (75)	1.0662	47 (78)	52 (88)	58 (98)	65 (109)	2028 (2007)	— (2027)
Gansner Bar Campground	57 (86)	1.0662	60 (90)	66 (100)	74 (112)	82 (125)	2005 (Present)	— (2015)
Subtotal	50 (78)		52 (82)	58 (91)	64 (102)	72 (114)	2018 (2003)	— (2023)
Total⁵	48 (80)		50 (82)	55 (92)	62 (103)	69 (115)	2022 (Present)	— (2022)

¹ Annual recreation days were provided by the Licensee, Forest Service, or based on user counts taken during 2001 by EDAW. Values not in parentheses represent the season or timeframe that the facility is open. Values in parentheses represent average weekend occupancy during the peak months of July and August only.

² Projected increase based on projected trends in camping participation included in Table E5.2.4-6.

³ Based on the assumption that capacity (number of sites available) will not increase or decrease.

⁴ Camp Conery is a group facility, which can accommodate up to 50 people at one time. It is rented primarily on weekends. In 2001, Camp Conery was rented 13 out of 15 (87%) weekends in the recreation season (mid-May to mid-September) and all weekends in the peak months (July and August). Demand for this type of group activity is projected to increase by 1.07% annually (Cornell 1999). Because the 60%/80% occupancy thresholds have already been reached at this site and because projected demand is high for group camping, projected occupancies were not calculated for this site.

⁵ Subtotal and total do not include Camp Conery Group Camp or Last Chance Campground.

Source: EDAW, Inc.

80% criteria
 impact = 5 more sites to new Southeast Campground (95)

= 13 more sites to Ponderosa Campground (25)
 = 1 more site to Last Chance (6)

Projected Increase in Season Weekend and Peak Month Weekend Occupancy at DUAs in 10-Year Increments (2001-2035)

Project Area Sites	2001 Seasonal (Peak Month Weekend) Percent Occupancy ¹	Projected Annual Percent Increase in Occupancy ²	Projected Seasonal (Peak Month Weekend) Percent Occupancy					Projected Date that 60 (80) Percent Capacity is Reached ³	Projected Date that 100 Percent Seasonal (Peak Month Weekend) Capacity is Reached ³
			2005	2015	2025	2035			
Lake Almanor									
Boat Launches									
Almanor Boat Launch	74 (72)	1.005932%	73 (73)	80 (78)	85 (83)	90 (88)	Present (2019)	—	
Canyon Dam Boat Launch	105 (111)	1.012036%	111 (116)	125 (131)	141 (148)	158 (167)	Present (Present)	Present (Present)	
Subtotal	96 (99)		100 (104)	112 (116)	124 (129)	138 (144)	Present (Present)	2005 (2002)	
Picnic/Rest Areas									
Almanor Rest Area (SR 89)	20 (20)	1.013157%	21 (21)	24 (24)	27 (27)	31 (31)	—	—	
Almanor Picnic Beach	83 (87)	1.010473%	87 (91)	96 (101)	107 (112)	119 (124)	Present (Present)	2019 (2014)	
Dyer View DUA	46 (62)	1.010473%	48 (64)	53 (71)	59 (79)	66 (88)	2026 (2026)	—	
East Shore DUA	35 (25)	1.010473%	36 (26)	40 (29)	45 (32)	50 (36)	—	—	
Almanor Scenic Overlook	17 (17)	1.013157%	18 (18)	20 (20)	23 (23)	26 (26)	—	—	
Canyon Dam DUA	98 (82)	1.005932%	100 (84)	106 (89)	113 (95)	120 (101)	Present (Present)	2004 (2034)	
Subtotal	75 (72)		77 (75)	84 (82)	92 (90)	101 (98)	Present (2012)	(2034) —	
Butt Valley Reservoir									
Alder Creek DUA/Boat Launch	90 (87)	1.005932%	92 (89)	98 (95)	104 (100)	110 (106)	Present (Present)	2018 (2024)	
Bypass Reaches									
Belden Rest Stop (SR 70)	14 (49)	1.013157%	15 (52)	17 (59)	19 (67)	22 (76)	—	—	
Total	73 (79)		76 (82)	84 (90)	92 (100)	101 (110)	Present (2002)	2034 (2025)	

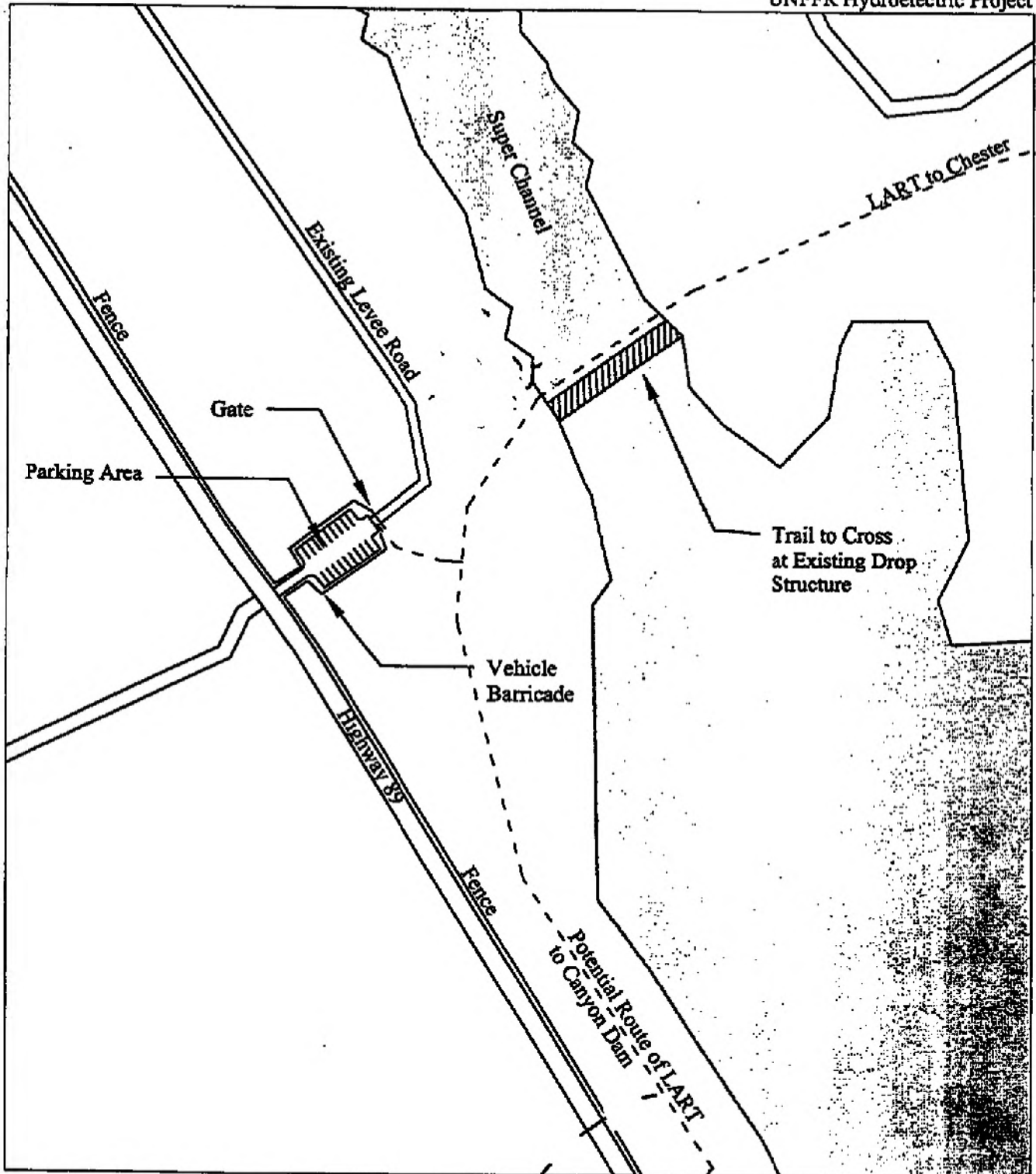
Impact = additional parking spaces (TBD) at day use sites/boat launches

¹ Based on traffic counter data or manual counts conducted in 2001. In 2001, pool levels at Lake Almanor were lower than normal and may have contributed to lower recreation days at the Almanor Boat Launch and higher recreation days at Canyon Dam Boat Launch.

² Based on projected trends in the primary activity at each site.

³ Based on the assumption that capacity (number of sites available) does not increase or decrease.

Source: EDAW, Inc.

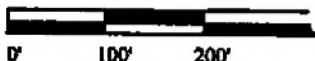


September 2002

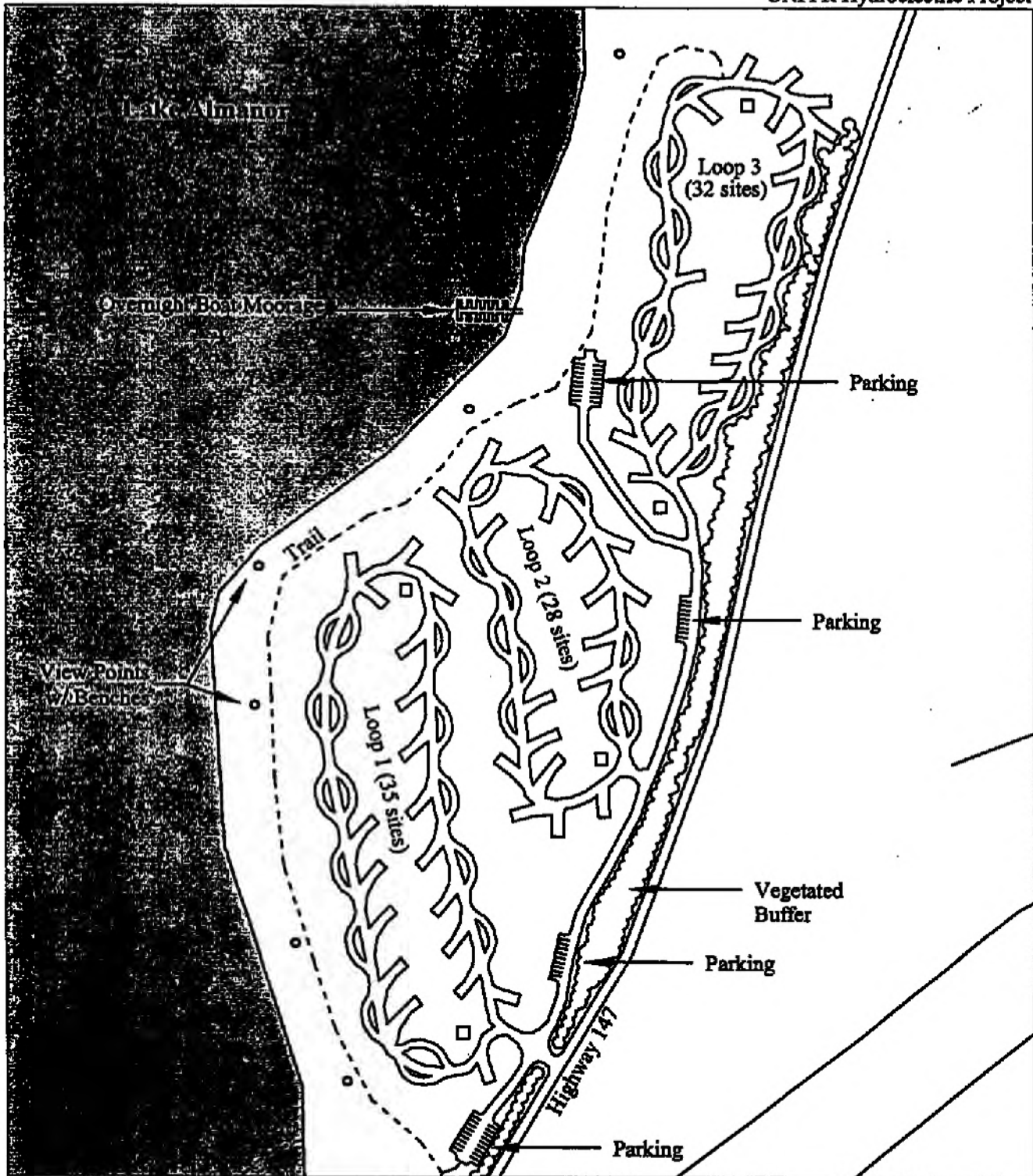
SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\De20006\Cad\unfr_rec-1.dwg

Site Modifications:

- Provide gravel parking area (20 spaces)
- Provide access to potential LART extension
- Provide gates and barricades to limit vehicular access to shoreline



400'



August 2002

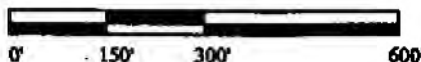
SOURCE: PG&E GIS, EDAAW, Inc., 2000. p:\0e20006\Cad\unfr_rec-1.dwg

Site Modifications:

- Provide up to 95 tent and RV campsites and restroom/showers in multiple phases
- Provide a day use swim beach
- Provide view areas with benches, connected by interior trails along the shoreline
- Provide overnight boat moorage for campers

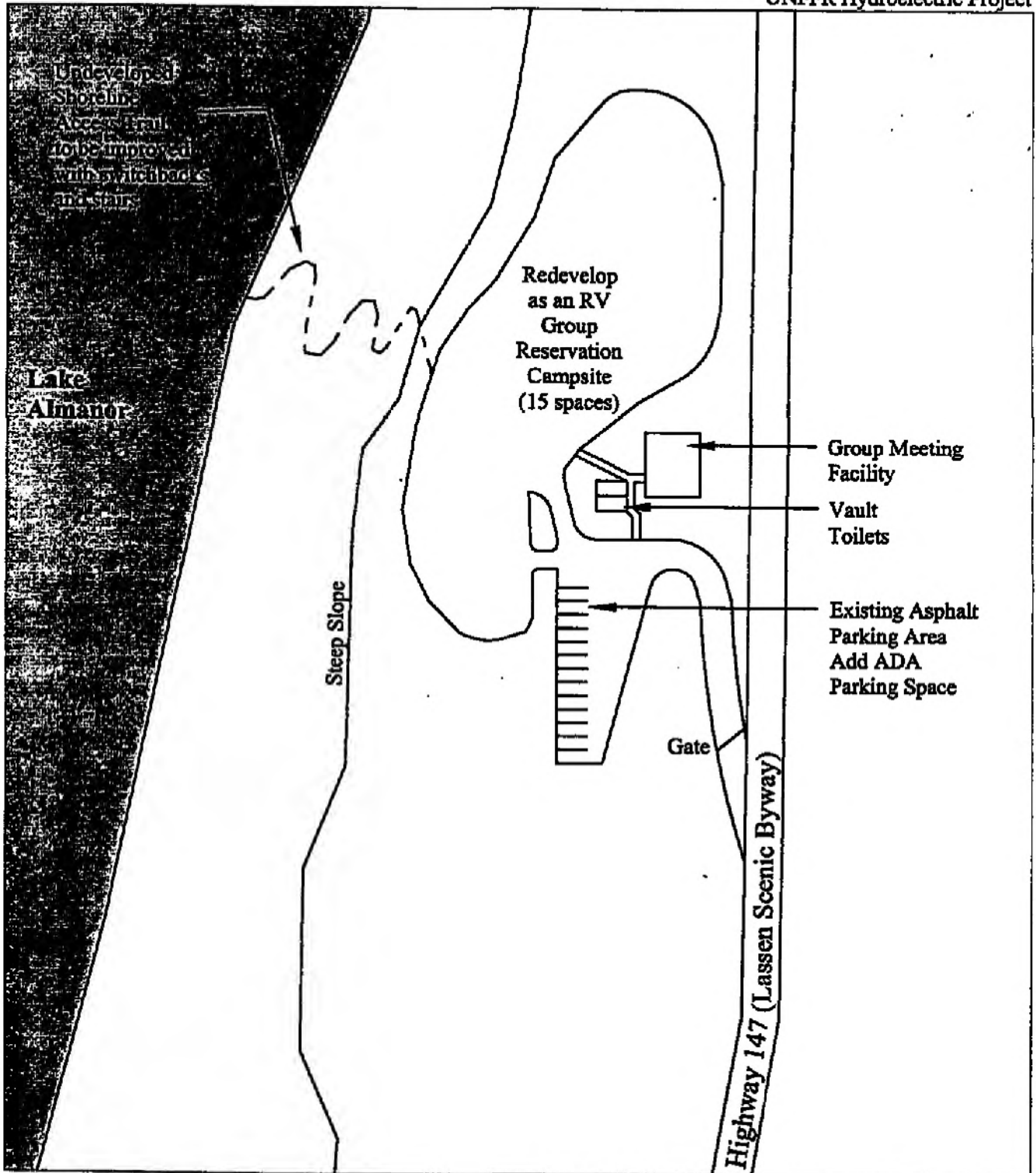


North



**East Shore Campground
Campsites and Boat Moorage**

Site Plan 8



August 2002

SOURCE: PG&E GIS, EDAW, Inc., 2000. p:\0e20006\Cad\unffr_rec-1.dwg

Site Modifications:

- Convert existing picnic area to an RV group reservation campsite (15 spaces)
- Provide 1 ADA-accessible parking space near toilets
- Provide ADA-accessible routes to trash receptacles
- Provide improved trail to shoreline with switchbacks and erosion control on hillside
- Provide a new group shelter

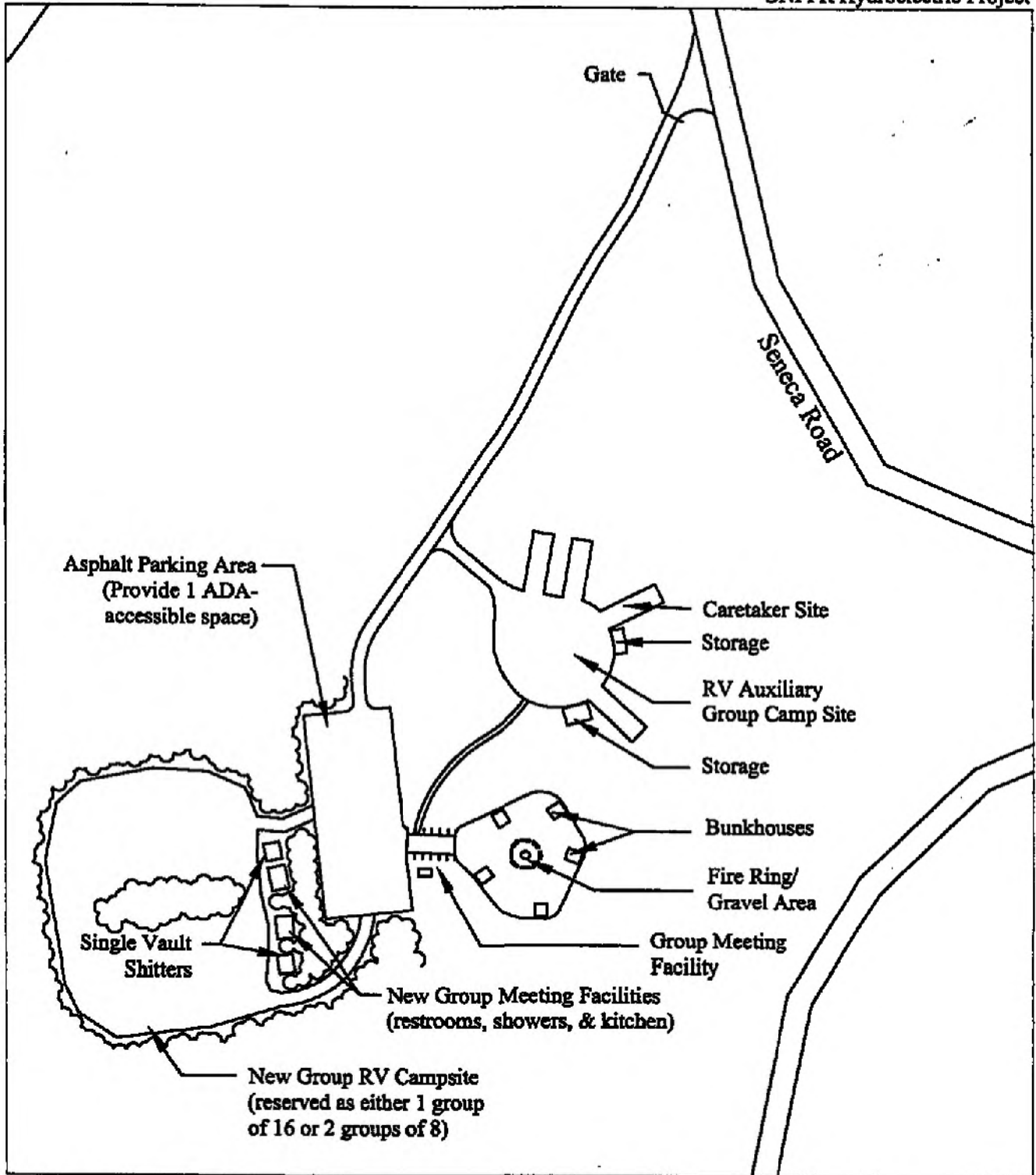


North



**Eastshore Day Use Area/
Group Campsite Conversion**

Site Plan 10



August 2002

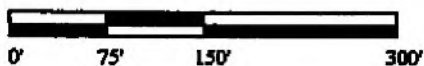
SOURCE: PG&E GIS, EDAW, Inc., 2000. pr:\0e20006\Cad\unifr_rec-1.dwg

Site Modifications:

- Provide 1 ADA-accessible parking space
- Provide 1 new ADA-accessible cabin with accessible restroom
- Reposition telephone in group meeting facility to meet ADAAG
- Provide additional group reservation area at existing volleyball court
- Repair and resurface access road
- Provide 2 showers
- Retrofit water faucets near accessible elements to meet ADAAG



North



SEPTEMBER 27, 2002

MEETING NOTES

UNFFR PROJECT RELICENSING (FERC No. 2105)
Recreation, Land Use, and Aesthetics Work Group Meeting
September 27, 2002
9:30 A.M. to 4:00 P.M.
Chester Memorial Hall, Chester, CA

Attendees/Distribution List:

Rita & Carl Felts	284-7982	cefelts@earthlink.net
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Bob Lambert	259-2272	ralambert@attbi.com
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Ralph C Homberger	258-2916	
Bev Masson	258-2916	
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Bruce McGurk	415-973-4420	bjmd@pge.com
Tom Jereb	415 973-9250	taj3@pge.com

Discussion

PG&E called the meeting to order and provided a general overview of the intended focus of the day's meeting. The primary objectives of this meeting were to provide a summary of PG&E responses to Plumas County comments regarding the UNFFR draft license application (DLA), address lake level issues, and establish agreement status on Plumas County's relicensing goals and objectives. Since PG&E's response to Plumas comments would be contained in the final license application (FLA), which people can read, this item was skipped.

Final License Application Recreation Proposals

PG&E provided a handout and map that summarized the current FLA's recreation proposals. These proposals were scheduled to be implemented in ten year increments based on anticipated recreation demand/need during the license period. High priority proposals are scheduled to be implemented in first ten years (0 to 10 years) from license issuance, moderate priority proposals in 10 to 20 years, and low priority in 20 to 30 years. Many of the 0-10 year proposals were identified as immediately needed and are scheduled as initial items to start to be implemented soon after FERC issuance of the license. PG&E is proposing to invest over \$21 million dollars toward recreation improvements over the license term. About 2/3 third of capital expenditures are scheduled to occur during first ten year period and the majority of these, which were primarily shoreline day use facilities, are scheduled as initial issuance items. PG&E indicated that given the large amount of facilities planned to be constructed in the first ten years and the length of environmental and other permitting process, actual completion of the projects may run into the next ten year period. PG&E asked the attendees to look over this list and offer suggestions for any improvements. No improvements were suggested. The attendees generally were supportive of the recreation proposals.

The topic of recreation use triggers was discussed including their effects on the timing of new recreation developments areas. Some attendees indicated that they did not completely understand how PG&E developed the "triggers" for specified recreational areas. PG&E indicated triggers were in part based on information provided by the Forest Service. The Forest Service noted in the meeting that they were still in the process of researching their own triggers and would share their findings upon the end of their assessment.

Another concern of the attendees was that they wanted it noted somewhere in the FERC final license application that alternative sites would be investigated in case proposed areas that were designated for "new facilities" could not be used due to unforeseen causes (such as species listings or EIR/planning problems). For the proposed east shore campground, some attendees suggested an alternative site could be across Highway 147 (if necessary), whether it was on PG&E property or not. PG&E indicated that the site selection process included analysis of sensitive environmental information such as endangered species, wetlands, and cultural resources and they did not anticipate that such concerns would stop the construction of a particular proposal. The proposed location for

the east shore campground, though, since the location is outside of the existing project boundary, did not have a cultural resurvey conducted. PG&E suggested that, if needed, an alternative site across the highway was not out of the question; but an alternative site along the shore of the lake on PG&E lands would be a more desirable recreation location.

Another issue was that due to inflation, potentially PG&E would not have the money to implement a measure planned in the future. PG&E commented that although PM&E costs, even those in the future, are represented 2002 dollars, per FERC regulations, PG&E's internal financial review and approval, though, of PM&E costs factors in inflation. Once part of the FERC license, PG&E is responsible to appropriately financing current and future recreation facilities.

Lake Level

PG&E's senior hydrologist (Bruce McGurk) addressed lake level issues and competing demands for water at the Project and downstream. He is the area water forecaster for PG&E.

To begin the discussion of lake level, the senior hydrologist provided some background information on the lake for meeting attendees. He explained that 50% of the water in the lake comes from springs and underground sources. Of the average annual inflow of 650,000-acre feet, only half of it is from the local streams. About 100,000-acre feet of water evaporates annually. This evaporation mainly occurs in the summer months. The senior hydrologist showed many different overhead slides on the historical lake levels from 1971 to the present. He showed the direct correlation of lake levels to the dynamic weather cycles of the region.

The senior hydrologist presented four operating principles that he uses to make recommendations to energy managers while forecasting and scheduling that affect lake level. These principles include:

1. Recreational effects: This is a very important objective for PG&E. He minimizes withdrawals from the lake from January through June to reach a high lake level and thereby support recreation activities and access. This results in generally high lake levels in June to support the community and their recreational needs. Lake Almanor had hardly any water drafted from it this year (January to June). PG&E started drafting water out of Lake Almanor in July of this year.
2. Hydroelectric power: He tries to operate the project in an efficient manner and provide flows at the right time. His goals are to create power, store water, and use water when needed. Hydroelectric power is best used when the need and use of electricity is highest (i.e. daylight, summer days).
3. Irrigation: PG&E must meet certain downstream contractual irrigation requirements. For example, PG&E must deliver 145,000-acre feet of water to Lake Oroville by

October 31. Because of evaporation losses from Lake Oroville and inflow, PG&E must release approximately 200,000 acre-feet.

4. Flood Control: PG&E has 99 reservoirs that have seasonal storage capability. Lake Almanor is the only reservoir that is able to store water from one year to the next. He explained that the lake level must be dropped when heavy winters are forecasted, such as the El Nino winter of 1998.

Lake Almanor is ten times larger than the next largest PG&E reservoir, so it is hard to spread the burden of providing summer time electricity to these other reservoirs, which are also generally used for recreation purposes.

The 2105 Committee indicated that they are pursuing written lake level requirements in the next FERC license. The hydrologist indicated that PG&E was already implementing certain elements of the 2105 Committee's lake level request, provided at a previous meeting. In particular, the provision to minimize drafting water out during the spring, to maximize the water level for the beginning of the summer recreation season. The minimum water level proposal requested by the 2105 Committee, though, was not physically possible for many reasons. The main constraints to a new, high minimum lake level requirement are water rights and climatic variations from year to year. The senior hydrologist explained that PG&E must initiate and use its water rights as required by state law or face losing these rights. If their water rights are not used and initiated and they are lost to others, then everyone will lose.

PG&E explained that high lake levels must be balanced with other competing demands for the water. The senior hydrologist explained in great detail that a higher lake level cannot be consistently maintained from year to year because of variable climatic conditions. He discussed details about dry and wet seasons, and how flexibility to draft the lake to low levels by December 31 is necessary to meet generation, irrigation, and flood control purposes. Three handouts were given to attendees to represent pool levels and discharge flows under differing weather conditions. The maximum storage capacities of California reservoirs were also presented along with average annual draw downs at other California reservoirs. Considering other CA reservoirs, not much was being drawn from Lake Almanor by comparison. Relative to other California reservoirs, recreation users and shoreline residents at Lake Almanor experience much less variation in pool level and draw down. It was suggested by the 2105 Committee that perhaps PG&E and the 2105 Committee sit down and use the 1986 operating guideline as a starting point for lake level discussion. PG&E agreed, but also indicated that other stakeholders also influence this issue.

Plumas County Goals and Objectives

PG&E handed out an agreement status table identifying Plumas County 2105 Committee's Goals and Objectives and an indication of which PM&E's in the FLA addressed these goals and objectives or a reason why not. The group reviewed this table and decided on which goals and objectives there was agreement between PG&E and the

2015 Committee and which ones there was not agreement. The agreement status table is attached.

Sacramento Meetings

PG&E went over the results from the September 23-25, 2002 meetings held in Sacramento. The purposes of these meeting were to review and respond to the comments from resource agencies on the draft license application (DLA). PG&E received about 150 pages of comments from all different types of agencies and stakeholders. These meetings included discussions on aquatic/wildlife, water quality, land use, and recreation issues.

Whitewater Boating Flows

The final segment of the meeting included discussion between PG&E, a whitewater boating representative (Dave Steindorf), and other stakeholders. Potential flow releases in the Belden and Seneca Reaches were discussed. PG&E summarized the tradeoffs and concerns about increasing flows in these two reaches. This included impacts to existing anglers, electric users, and riverine resources. The whitewater boating representative commented that they still want to take advantage higher flows in the both reaches that occur seasonally and naturally, but that they were not intending to pursue whitewater boating releases on the Seneca Reach. There was a lot of discussion on whether or not commercial whitewater rafting could be viable on the Belden Reach if flows were provided. Some attendees commented that there are many potential resource impacts and concerns that would need to be assessed if flows were provided in these reaches. Bramble (Himalayan blackberry) was identified as an issue that limits the whitewater boating opportunity in the Belden Reach. PG&E indicate that they would be conducting some test in the Belden Reach on removing bramble to improve river access. The test involved mechanical removal and shading methods. PG&E commented that there is no proposal for release whitewater boating flows in the FLA, since there are many unresolved issues about such a release.

The meeting was adjourned. .

**Plumas County's 2105 Committee's Goals and Objectives
Agreement Status - 8/27/02**

2105 Committee's Goals and Objectives	Final License Application Proposals or Response to Goal/Objective	Agreement Status/Comment
<p>Goal 1 Implement Recreation Resource Management and Shoreline Management Elements incrementally, if the license is delayed beyond the 2004 renewal date.</p> <p><u>Objective</u> To avoid the long delays in implementing needed improvements to 2105 that other relicensing projects, like Rock Creek-Cresta, have experienced</p>	<p>It is not prudent for Licensee to implement recreation proposals prior to FERC approval.</p>	<p align="center">No Agreement</p>
<p>Goal 2 Manage Water Level for Optimum Recreation Opportunities</p>	<p>Licensee cannot operate lake to optimize any particular resource, but must operate lake to balance resource needs, meet contract requirements, and exercise water rights.</p>	<p>No Agreement. 1986 operating guideline to be used as a base for future discussion.</p>
<p>Objectives Maintain a minimum water level of 4485' elevation during the recreation season – Memorial Day through Labor Day – when precipitation conditions allow</p>	<p>This is too stringent of criteria. In approximately a quarter of the last 25 years the lake level did not even start of the season at the 4485' elevation.</p>	<p align="center">Agreement</p>
<p>Continued the practice of the past 15 years, during which the Water Level Committee and Licensee met at least annually to discuss the manageable conditions of the water level for the coming season</p>	<p>Proposal included in the FLA.</p>	<p>Agreement. Licensee to determine if information presented at these meetings can be made publicly available.</p>

**Plumas County's 2105 Committee's Goals and Objectives
Agreement Status - 8/27/02**

2105 Committee's Goals and Objectives	Final License Application Proposals or Response to Goal/Objective	Agreement Status/Comment
<p>Goal 3 Improve access to Lake Almanor</p>	<p>The FLA contains</p> <p>Improved Day Use Access at:</p> <ul style="list-style-type: none"> - Westwood Beach, - Stumpy/Bird Rock Beach - North Shore Campground public boat ramp, Cattfish Beach, - Lake Almanor Campground - Southeast shoreline - Southwest Shore - Canyon Dam Boat Ramp Extension - Almanor Beach - Flood Channel - Stover Camp <p>Improved Camping Opportunities at</p> <ul style="list-style-type: none"> - Southeast Shore (group and Family) - Lake Almanor Campground - Camp Conurey Campground - Cattfish Beach 	<p align="center">Agreement</p>
<p>Objectives</p> <p>Embody the agreement points of the "Red River Deed" into the license and all management plans</p>	<p>The Red River Deed recreation access rights will be acknowledge in the FLA Land Use Exhibit and Shoreline Management Plan.</p>	<p align="center">2105 Committee wants to see verbiage of letter to be provided by Licensee.</p>
<p>Construct a lake access point in close proximity to Chester</p>	<p>The FLA contains proposals for:</p> <ul style="list-style-type: none"> - Stover Camp Day Use Area - Improved Public Boat Ramp at Northshore Campground - Trail Easement and Co-grant application for a trail connecting Chester to the LART. 	<p align="center">Agreement</p>
<p>Allow public agencies to utilize environmentally acceptable corridors for public use on Licensee lands including</p>	<p>On a case-by-case basis, Licensee will consider public agencies proposals to use of Licensee lands between the 4494' and 4500' elevations for public recreation use.</p>	<p align="center">Agreement</p>

**Plumas County's 2105 Committee's Goals and Objectives
Agreement Status - 8/27/02**

2105 Committee's Goals and Objectives between 4494' and 4500' public recreation use	Final License Application Proposals or Response to Goal/Objective	Agreement Status/Comment
<p>Inventory and recommend and finance improvements to ramps (including private ramps) in order to make all ramps usable during increased variations in the lake brought about by drought and generation supply problems</p>	<p>During June of 2002 Licensee inventoried all public and commercial ramps that are available for public use on Lake Almanor.</p> <p>As a policy, Licensee does not use its own finances or ratepayers' money to finance private or for-profit commercial ventures. Licensee, as a general rule, permits extensions of private ramps as long as they meet permit requirements.</p> <p>Plumas Pines and Lake Haven resorts currently provide the public boat launching opportunities to lower water levels (4462' and 4474' elevations, respectively) and most other public and commercial ramps provide boat-launching opportunities during typical end of summer lake levels.</p> <p>Licensee is proposing to co-fund the extension of the Canyon Dam Boat Ramp to the 4466.7' elevation.</p>	<p>Agreement.</p> <p>Agreed to not lower lake level just to install ramp. Instead will install ramp in at least 10 foot segments when lake reaches lower levels.</p>
<p>Improve cooperation with property owners for permitting for such needs as tree trimming and modifications to shoreline and establish procedures for the same which will be clear, fair and applied equally to all applicants</p>	<p>The SMP is proposing an improved public outreach program that will hopefully improve communication and cooperation better cooperation with property owners. Proposals include:</p> <ul style="list-style-type: none"> - Periodic mailings to shoreline owners - A Shoreline Management Plan and Permitting Web Site - A Lake Almanor permitting office with a seasonal permitting specialist. 	<p>2015 Committee wants to see written tree removal policy. Agrees to other FLA proposals.</p>
<p>Goal 4 Improve Recreation Facilities</p>	<p>See 8/26/02 FLA Recreation proposal.</p>	<p>Agreement, as long as Licensee agrees to include verbiage that alternative sites will be used if proposed sites run into environmental issues.</p>

**Plumas County's 2105 Committee's Goals and Objectives
Agreement Status - 8/27/02**

2105 Committee's Goals and Objectives	Final License Application Proposals or Response to Goal/Objective	Agreement Status/Comment
Objectives Construct three additional recreation facilities of approximately 40 acres each; one providing Chester access to Lake Almanor, one the East Shore and one at Butt Lake.	See 8/26/02 FLA Recreation proposal. These proposals include - at least one Chester Access - at least one Butt Lake Access Recreation facilities are sized according to available suitable land area and recreation demand.	Agreement on facilities. Still need to reach agreement on triggers.
Recreation facilities would include: - ADA accessibility at one site on Lake Almanor and at Butt Lake site	The FLA proposes include: - Bringing all existing Licensee recreation facilities into compliance with proposed draft ADA requirements - Constructing new facilities to comply with ADA requirements	Agreement
- Parking and public launch ramps with low water capabilities	As previously noted, Plumas Pines and Lake Haven resorts currently offer the public boat launching opportunities to lower water levels (4466' and 4474' elevations, respectively). The FLA proposes to: - Co-fund with Forest Service the extension of Canyon Dam Boat Ramp to accommodate launching at the 4466.7' elevation. - Expand the parking capacity of the Alder Creek Boat Ramp	Agreement
- Convert Canyon Dam trailer park to public recreational vehicle facility	The FLA proposes to: - Provide two new RV group camp loops to Camp Conery at the Canyon Dam area.	Agreement. 2105 Committee would like additional discussion on the timing of this proposal.

**Plumas County's 2105 Committee's Goals and Objectives
Agreement Status - 8/27/02**

2105 Committee's Goals and Objectives	Final License Application Proposals or Response to Goal/Objective	Agreement Status/Comment
<ul style="list-style-type: none"> - Rehabilitate Caribou Clubhouse for operation as a conference center/lodging operation for the economic benefit of Plumas County. 	<p>The FLA proposes to:</p> <ul style="list-style-type: none"> - Establish an interpretive and education location at the Clubhouse whose exterior will be painted and maintained. 	<p align="center">Agreement</p>
<ul style="list-style-type: none"> - Participate, using PG&E land where needed, in the multi-agency project to complete a bicycle trail around Lake Almanor (From Canyon Dam to Highway 89 on the West Shore of Lake Almanor 	<p>The FLA proposes to:</p> <ul style="list-style-type: none"> - Provide a trail easement, when appropriate, on Licensee's lands around the lake to allow government agencies who can raise funds to construct and maintain trails. 	<p align="center">No Agreement. 2015 Committee interested in PG&E paying for east shore trail construction costs.</p>
<ul style="list-style-type: none"> - Designated Swim Area 	<p>The FLA Proposes improved swimbeach areas at:</p> <ul style="list-style-type: none"> - Almanor Beach - Lake Almanor Campground - Canyon Dam Day Use Area - Southeast Shore Campground 	<p align="center">Agreement</p>
<ul style="list-style-type: none"> - Shoreline fishing access with 1000' of "no wake" boating restrictions - ADA accessible fish cleaning stations 	<p>The authority to designate "no wake" boating restrictions for shoreline fishing resides with Plumas County.</p> <p>The FLA proposes to:</p> <ul style="list-style-type: none"> - Place signs at public boat ramps recommending anglers to take fish home to clean. 	<p align="center">Agreement</p>
<p>Establish a cultural interpretive center including local Native American role in the area</p>	<p>Mary already exist in the region.</p>	<p align="center">Refer to cultural resource interests</p>
<p>Consult with Maidu interest groups</p>	<p>Maidu interest groups have been consulted with during the relicensing process.</p>	<p align="center">Refer to cultural resource interests</p>

**Plumas County's 2105 Committee's Goals and Objectives
Agreement Status - 8/27/02**

2105 Committee's Goals and Objectives	Final License Application Proposals or Response to Goal/Objective	Agreement Status/Comment
Native plants and harvesting areas	Maidu interest groups and individuals have been interviewed regarding traditional plant gathering and other important areas.	Refer to cultural resource interests
Cultural learning center/museum	See "cultural interpretive center" above.	Refer to cultural resource interests
Repatriation of artifacts to families	The Licensee has been investigating the status of artifacts previously recovered from the Project area and currently housed at CSU Chico and will continue to do so. However, repatriation of these materials is the responsibility of CSU Chico and not the Licensee. It is our understanding that CSU Chico has been consulting with the Maidu on this matter.	Refer to cultural resource interests
Withdraw from disposing any Licensee land in the project area until the license renewal is complete.	Under Licensee's plan for reorganization (POR), lands necessary for Project operations (Project lands) will be kept with the generation company that will own and operate the Project and watershed lands (not necessary for Project operations) will stay with utility (PG&E). Lands necessary to implement proposed Project mitigation and enhancement measures (including recreation and land use measures) are being kept with the Project.	Agreement
Goal 5 Develop, implement and effectively manage a comprehensive recreation safety plan	See safety proposals below -- hazard markings, bathymetry map, and fire prevention	
Objectives Conduct annual helicopter fly-over to locate and map floating and submerged hazards. Regular removal of floating and anchored hazards.	The MOU between the Sheriff Department and Licensee address the roles and responsibilities in regular removal of floating and anchored hazards as well as the placement of highly visible marker buoys for identifying immovable hazards.	2105 committee requests a joint trial flight to determine effectiveness of helicopter

**Plumas County's 2105 Committee's Goals and Objectives
Agreement Status - 8/27/02**

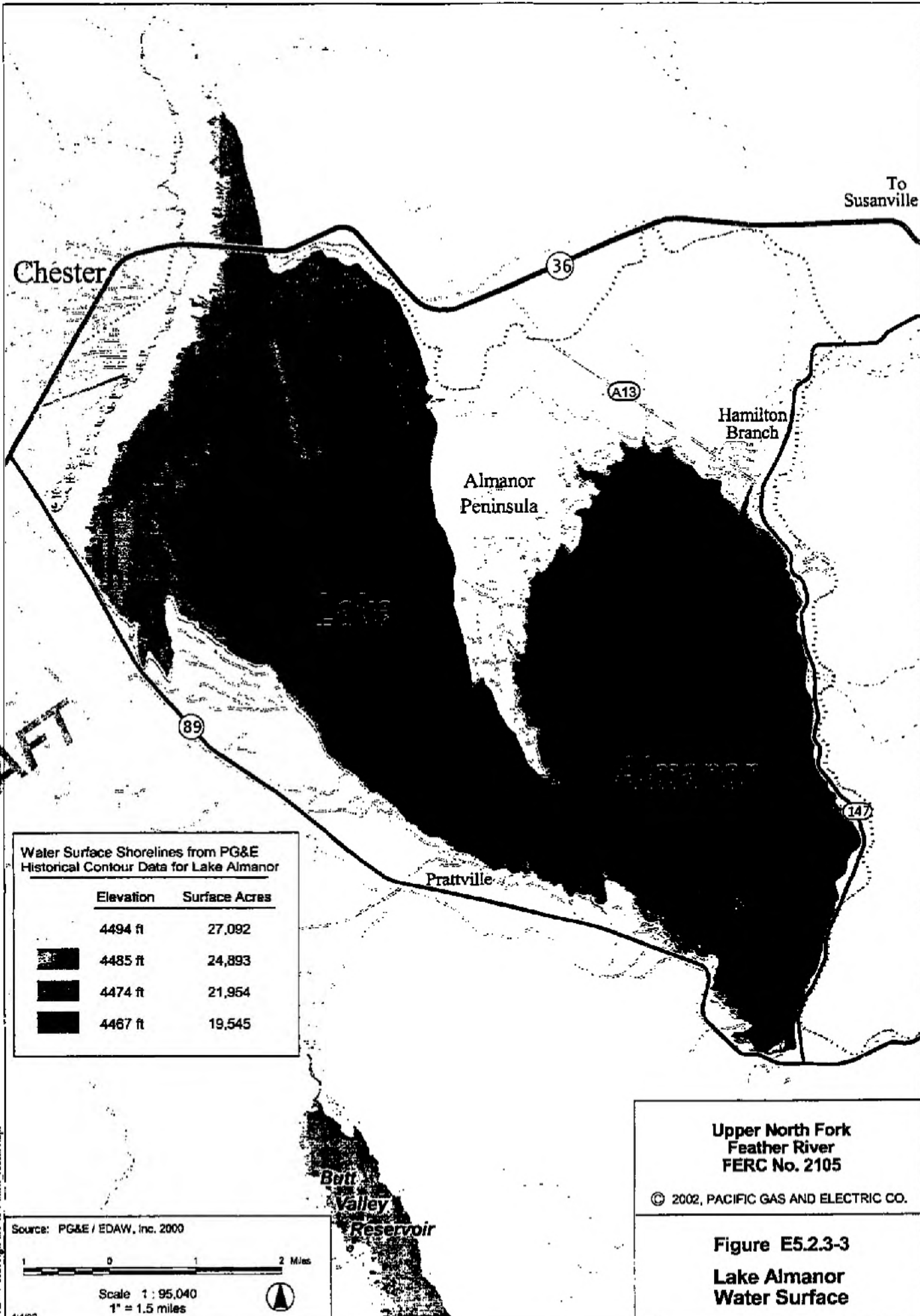
2105 Committee's Goals and Objectives	Final License Application Proposals or Response to Goal/Objective	Agreement Status/Comment
Provide <u>highly visible</u> marker buoys for identifying hazards that cannot be removed.		Agreement Status/Comment
Develop complete underwater charts for the lake, showing hazards that will emerge at various lake levels. Provide supplies of the "variable-water-level" charts at primary locations throughout the project boundary.	<p>The FLA proposes:</p> <ul style="list-style-type: none"> - A Lake Almanor bathymetry map for interpretation of the lake's bottom profile. This proposal includes making the map publicly available in pamphlet form as well as posted at public boat ramps. 	Agreement
Install and maintain strobe lights at islands and tip of the Peninsula and other hazardous locations.	Licensee feels the Sheriff's Department and Licensee's MOU addresses appropriate markings on islands and other hazards.	2105 Committee review MOU and discuss issue with Sheriff Department.
Maintain all Licensee Forest lands within one mile of the shoreline to USFS/CDP fuel break standards.	For Project lands, FLA proposes to continue practice of working with USFS/CDP to manage fuel loads and firebreaks around the project. This issue can be discussed at annual stakeholder/agency meetings proposed in the FLA.	Agreement
Provide increased fires protection capacity (additional emergency water tank, well and hydrants) at the hill above Prattville hydro facilities to protect Licensee buildings and property and adjacent structures and property.	<p>The water tank and hydrants at the PSEA Camp in Prattville are of generally of sufficient capacity to protect Licensee and PSEA Camp buildings and property in the area.</p> <p>The PSEA Camp has installed a fire hydrant along Almanor Drive West for the use of by the local community fire department.</p> <p>Licensee agrees to allow the local fire department to install pump and pipe to lake across licensee lands to increase the firewater capacity in the Prattville area.</p>	Agreement

**Plumas County's 2105 Committee's Goals and Objectives
Agreement Status - 8/27/02**

2105 Committee's Goals and Objectives	Final License Application Proposals or Response to Goal/Objective	Agreement Status/Comment
<p>Goal 6 Improve Erosion Management</p>	<p>Licensee has mapped Lake Almanor erosion above and below the 4500-foot elevation, existing rip-rap, and erosion rights.</p> <p>The FLA contains a erosion management plan that:</p> <ul style="list-style-type: none"> - Identifies property areas subject to significant erosion and that contain the Clifford Deed - The plan calls for sending letters to these owners, letting them know the shoreline permits are available and providing Licensee approved options to protect their shorelines. - Licensee will continue maintaining Licensee installed rip-rap in areas that do not contain the Clifford Deed. 	<p>No agreement.</p>
<p>Licensee to justify under CEQA, the continuing erosion of private and public property under "permissible erosion agreements"</p>	<p>The "permissible erosion agreements" between Licensee and some adjacent Lake Almanor property parcels are private property deed rights that Licensee holds as a purchased real property agreement (referred to as the Clifford Deed).</p> <p>Relicensing studies have identified that shoreline erosion is not creating water or other environmental degradation that would invoke CEQA.</p>	<p>No agreement.</p>
<p>Licensee to assist NRCS to publish soil survey</p>	<p>Publication of the NRCS soil survey is not related to a project use or mitigation or enhancement related to continued operation of the Project. Using Licensee funds for this purpose is an inappropriate use of Licensee or ratepayers' money.</p>	<p>Agreement</p>
<p>Reduce the spillway height at Canyon Dam to the maximum allowable water level - 4494' elevation.</p>	<p>Licensee has been able to operate the Project since inception without ever having to raise the lake elevation over the 4494-foot elevation, even during the worst to date flood events.</p> <p>In addition, Licensee, as described in Exhibit F of the DLA, determined that the spillway and Canyon Dam could handle</p>	<p>No Agreement.</p>

**Plumas County's 2105 Committee's Goals and Objectives
Agreement Status - 8/27/02**

2105 Committee's Goals and Objectives	Final License Application Proposals or Response to Goal/Objective	Agreement Status/Comment
<p>Implement the use of environmental erosion controls, suggested by FERC in 1997, in place of riprap.</p>	<p>Licensee's is proposing to allow several erosion protection options under the permitting program, when appropriate, to be used by shoreline homeowners to protect their properties.</p>	<p align="center">Agreement.</p>
<p>Goal 7 Manage Water Quality</p>	<p>The water quality of Lake Almanor is very good and the Project minimally affects its water quality.</p>	
<p>Maintain the water quality-monitoring program for Lake Almanor.</p> <p>Be a lead participant in exploring sewage treatment for the communities of the Lake Basin.</p>	<p>Licensee has agreed, as co-funding, to provide \$25,000 annually to monitor Lake Almanor water quality</p> <p>Licensee, outside of relicensing, will consider a proposal from Plumas County to purchase land on the East Shore.</p>	<p align="center">No Agreement</p>
<p>Provide Licensee land on the East Shore for a sewage treatment plant.</p> <p>Provide the funding and leadership for instituting a Lake Almanor watershed management program which equals the management the Licensee has historically demonstrated for the dam and downstream water conveyance facilities.</p>	<p>Licensee agrees to participate in a Lake Almanor Watershed program commensurate with the Project's affect to the lake's water quality.</p>	



To
Susanville

Chester

36

A13

Hamilton
Branch

Almanor
Peninsula

89

147

Prattville

Butt
Valley
Reservoir

DRAFT

Water Surface Shorelines from PG&E
Historical Contour Data for Lake Almanor

Elevation	Surface Acres
4494 ft	27,092
4485 ft	24,893
4474 ft	21,954
4467 ft	19,545

Upper North Fork
Feather River
FERC No. 2105

© 2002, PACIFIC GAS AND ELECTRIC CO.

Figure E5.2.3-3
Lake Almanor
Water Surface

Source: PG&E / EDAW, Inc. 2000



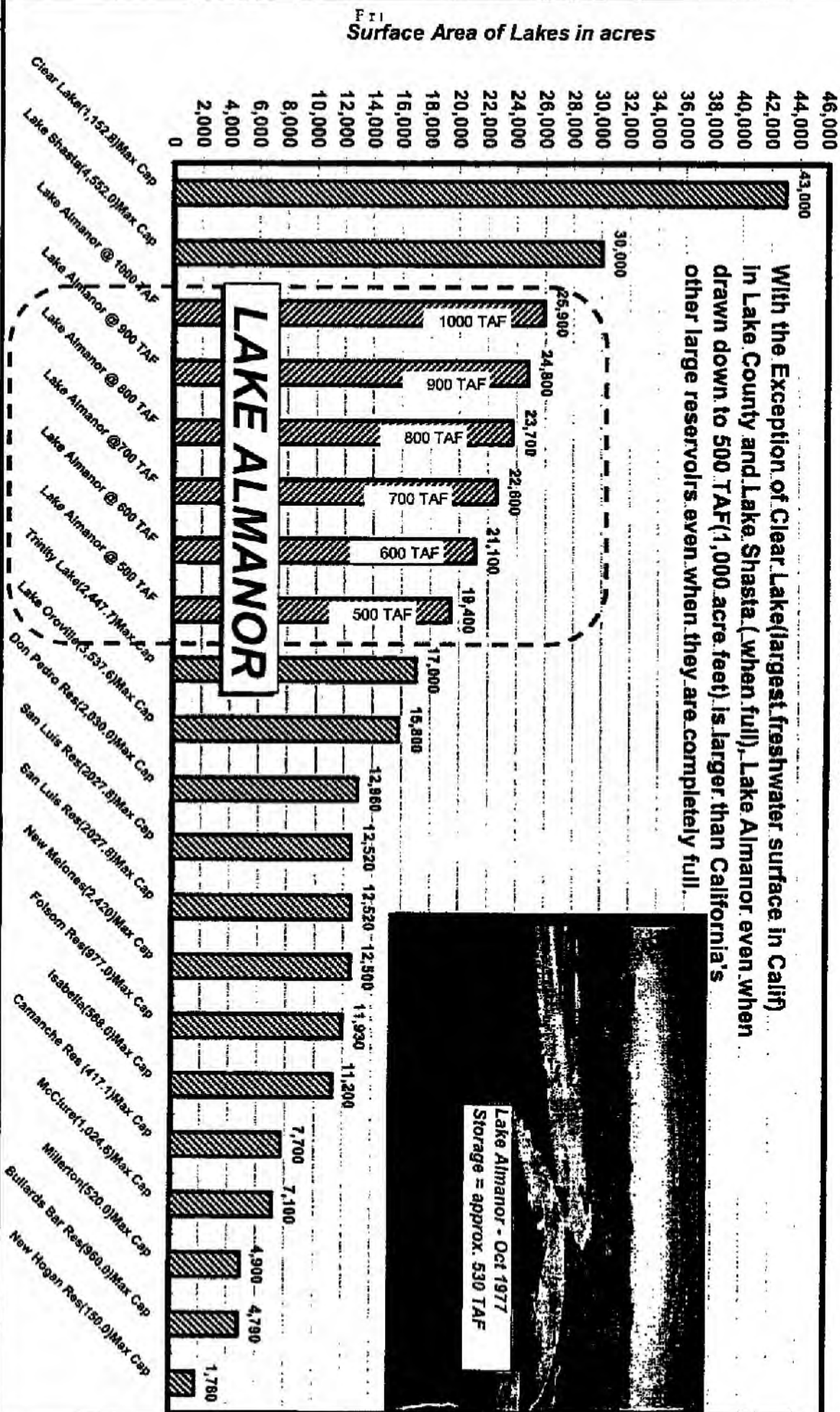
Scale 1 : 95,040
1" = 1.5 miles



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4/4/02

Surface Area In Acres at Maximum Storage Capacity for Some of California's Largest Reservoirs Compared With Lake Almanor at Various Stages of Drawdown

With the exception of Clear Lake (largest freshwater surface in Calif) in Lake County and Lake Shasta (when full), Lake Almanor even when drawn down to 500 TAF (1,000 acre feet) is larger than California's other large reservoirs even when they are completely full.



**AVERAGE ANNUAL DRAWDOWN AT
OTHER LARGE CALIFORNIA RESERVOIRS**

Reservoir	Surface Area Change	Drawdown (ft)
Oroville	30% reduction	80'
Folsom	18% reduction	35'
Don Pedro	15% reduction	40'
Shasta	15% reduction	50'
Trinity	13% reduction	45'
Almanor	9% reduction	10'

**UPPER NORTH FORK FEATHER RIVER PROJECT
FERC NO. 2105**

EXHIBIT F

GENERAL DESIGN DRAWINGS

PACIFIC GAS AND ELECTRIC COMPANY

Exhibit F

Upper North Fork Feather River Project, FERC No. 2105
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UPPER NORTH FORK FEATHER RIVER PROJECT FERC NO. 2105

EXHIBIT F

GENERAL DESIGN DRAWINGS

18 CFR § 4.51 (g). Exhibit F consists of general design drawings of the principal project works described under paragraph (b) of this section (Exhibit A) and supporting information used to demonstrate that existing project structures are safe and adequate to fulfill their stated functions.

(1) The drawings must show all major project structures in sufficient detail to provide a full understanding of the project, including:

- (i) Plans (overhead view);*
- (ii) Elevations (front view); and*
- (iii) Sections (side view).*

(2) Supporting design report. The applicant must furnish, at a minimum, the following supporting information to demonstrate that existing structures are safe and adequate to fulfill their stated functions, and must submit such information in a separate report at the time the application is filed. The report must include:

- (i) A description of the physical condition or state of maintenance and repair of any existing and proposed structures or equipment; and*
- (ii) Information relating to composition and competency of foundations and other structures, gradation of filter and riprap material, design strength and ultimate strength of concrete and steel, stress and stability analysis, spillway rating curves, water levels, and other appropriate data.*

(3) The applicant must submit two copies of the supporting design report as described in paragraph (g)(2) of this section at the time general design drawings are submitted to the Commission for review.

**UPPER NORTH FORK FEATHER RIVER PROJECT
FERC NO. 2105**

EXHIBIT F

GENERAL DESIGN DRAWINGS

<u>Title</u>	<u>Description</u>
Exhibit F-1	Almanor Dam
Exhibit F-2	Almanor Spillway and Outlet Tunnel
Exhibit F-3	Butt Valley Intake and Tunnel Sections
Exhibit F-4	Butt Valley Surge Chamber and Penstock Profile
Exhibit F-5	Butt Valley Powerhouse
Exhibit F-6	Butt Valley Dam and Spillway
Exhibit F-7	Butt Valley Dam and Spillway
Exhibit F-8	Caribou Intakes and Tunnel Sections
Exhibit F-9	Caribou Surge Chambers
Exhibit F-10	Caribou Penstock Profiles
Exhibit F-11	Caribou No. 1 Powerhouse
Exhibit F-12	Caribou No. 2 Powerhouse
Exhibit F-13	Belden Forebay Dam and Spillway
Exhibit F-14	Oak Flat Powerhouse
Exhibit F-15	Belden Intake, Tunnel Sections and Siphon
Exhibit F-16	Belden Surge Chamber and Penstock Profile
Exhibit F-17	Belden Powerhouse

SUPPORTING DESIGN REPORT

Two copies of the Supporting Design Report will be submitted to the FERC separately with the final Application for New Application.

NOTICE

Statement Pursuant to FERC Docket No. RM02-4

The Exhibit F drawings and Supporting Design Report have been removed pursuant to the intent of the Federal Energy Regulatory Commission's Docket No. RM02-4, "Rules Regarding Critical Energy Infrastructure Information" (CEII). As FERC explains in its January 16, 2002 "Notice of Inquiry and Guidance for Filings in the Interim" ("January 16 NOP"), under this docket FERC is now "considering whether to revise its rules to address public availability of [CEII]", due to "the need to protect the safety and well-being of American citizens from attacks on our nation's energy infrastructure ... [that may arise from] easy public access [to CEII]."

FERC has not yet issued revised rules pursuant to Docket No. RM02-4. The licensee will comply with the revised rules with respect to the removed documents, when such revised rules are issued by FERC.

In the interim, the removed documents may be viewed by contacting the licensee's Project Manager, Tom Jereb at (415) 973-9320. Persons wishing to view or copy the removed documents may be asked to first sign a non-disclosure agreement restricting their use of the documents.

**UPPER NORTH FORK FEATHER RIVER PROJECT
FERC NO. 2105**

EXHIBIT G

MAPS OF THE PROJECT

PACIFIC GAS AND ELECTRIC COMPANY

**UPPER NORTH FORK FEATHER RIVER PROJECT
FERC NO. 2105**

EXHIBIT G

MAPS OF THE PROJECT

18 CFR § 4.51 (h). Exhibit G is a map of the project. The map must conform to the specifications of § 4.39. If more than one sheet is used, the sheets must be numbered consecutively and each sheet must bear a small inset sketch showing the entire project (or development) and indicating the portion depicted on the sheet.

<u>MAP</u>	<u>TITLE</u>
Exhibit G-1	General Map
Exhibit G-2	General Map
Exhibit G-3	Lake Almanor
Exhibit G-4	Lake Almanor
Exhibit G-5	Lake Almanor
Exhibit G-6	Lake Almanor
Exhibit G-7	Project Acquisition Units in Prattville
Exhibit G-8	General Map Project Boundary Lake Almanor
Exhibit G-9	General Map Project Boundary Lake Almanor
Exhibit G-10	General Map Project Boundary Lake Almanor
Exhibit G-11	General Map Project Boundary Lake Almanor
Exhibit G-12	General Map Project Boundary Lake Almanor
Exhibit G-13	General Map Project Boundary Lake Almanor
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Exhibit G-15	General Map Project Boundary Lake Almanor
Exhibit G-16	General Map Project Boundary Lake Almanor
Exhibit G-17	General Map Project Boundary Lake Almanor
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Exhibit G-22	General Map Project Boundary Lake Almanor
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Exhibit G-24	General Map Project Boundary Lake Almanor
Exhibit G-25	General Map Project Boundary Lake Almanor
Exhibit G-26	General Map Project Boundary Lake Almanor
Exhibit G-27	General Map Project Boundary Lake Almanor

**UPPER NORTH FORK FEATHER RIVER PROJECT
FERC NO. 2105**

EXHIBIT G

MAPS OF THE PROJECT

<u>MAP</u>	<u>TITLE</u>
Exhibit G-28	General Map Project Boundary Lake Almanor
Exhibit G-29	General Map Project Boundary Lake Almanor
Exhibit G-30	Plan and Profile of Butt Valley Tunnel
Exhibit G-31	Upper Part of Butt Valley Reservoir & Transmission Line
Exhibit G-32	Lower Part of Butt Valley Reservoir and Transmission Line
Exhibit G-33	Plan of Caribou Tunnels, Road and Transmission Line
Exhibit G-34	Profile of Caribou Tunnels
Exhibit G-35	Belden Reservoir and Oak Flat Powerhouse
Exhibit G-36	Plan of Belden Tunnel and Transmission Line
Exhibit G-37	Plan of Belden Tunnel, Roads and Transmission Line
Exhibit G-38	Plan of Belden Tunnel
Exhibit G-39	Transmission Line
Exhibit G-40	Transmission Line
Exhibit G-41	Transmission Line

LARGE-SIZED IMAGES –NOT YET AVAILABLE

One or more large-sized images go here. These pages aren't yet available in FERRIS.

If you have an urgent need for this information, please contact:

- **for the public – the Public Reference Room (PRR) by phone (at 202-502-8371, from 8:30 a.m.-5 p.m. Eastern time, Monday through Friday) or e-mail (at public.referenceroom@ferc.gov)**
- **for the FERC staff – the Help Desk by phone (at 202-502-8423, from 8:30 a.m.-5 p.m. Eastern time Monday through Friday) or e-mail**

Accession No.: 200210300032

Set No.: 1 of 1

Number of pages in set: 41

UPPER NORTH FORK FEATHER RIVER PROJECT

FERC NO. 2105

EXHIBIT H

GENERAL INFORMATION

Exhibit H

Upper North Fork Feather River Project, FERC 2105
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**EXHIBIT H
GENERAL INFORMATION**

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Proposed Customer Energy Efficiency Program Detail

Exhibit H
GENERAL INFORMATION

§16.10 Information to be provided by an applicant for new license.

(a) *Information to be supplied by all applicants.* All applicants for a new license under this part must file the following information with the Commission:

(1) A discussion of the plans and ability of the applicant to operate and maintain the project in a manner most likely to provide efficient and reliable electric service, including efforts and plans to:

(i) Increase capacity or generation at the project;

(ii) Coordinate the operation of the project with any upstream or downstream water resource projects; and

(iii) Coordinate the operation of the project with the applicant's or other electrical systems to minimize the cost of production.

(2) A discussion of the need of the applicant over the short and long term for the electricity generated by the project, including:

(i) The reasonable costs and reasonable availability of alternative sources of power that would be needed by the applicant or its customers, including wholesale customers, if the applicant is not granted a license for the project;

(ii) A discussion of the increase in fuel, capital, and any other costs that would be incurred by the applicant or its customers to purchase or generate power necessary to replace the output of the licensed project, if the applicant is not granted a license for the project;

(iii) The effect of each alternative source of power on:

(A) The applicant's customers, including wholesale customers;

(B) The applicant's operating and load characteristics; and

(C) The communities served or to be served, including any reallocation of costs associated with the transfer of a license from the existing licensee.

(3) The following data showing need and the reasonable cost and availability of alternative sources of power:

(i) The average annual cost of the power produced by the project, including the basis for that calculation;

(ii) The projected resources required by the applicant to meet the applicant's capacity and energy requirements over the short and long term including:

(A) Energy and capacity resources, including the contributions from the applicant's generation, purchases, and load modification measures (such as conservation, if considered as a resource), as separate components of the total resources required;

(B) A resource analysis, including a statement of system reserve margins to be maintained for energy and capacity; and

(C) If load management measures are not viewed as resources, the effects of such measures on the projected capacity and energy requirements indicated separately;

(iii) For alternative sources of power, including generation of additional power at existing facilities, restarting deactivated units, the purchase of power

off-system, the construction or purchase and operation of a new power plant, and load management measures such as conservation:

(A) The total annual cost of each alternative source of power to replace project power;

(3) The basis for the determination of projected annual costs, including the issues of the period of availability and dependability of purchased power, average life of alternatives, relative equivalent availability of generating alternatives, and relative impacts on the applicant's power system reliability and other system operating characteristics; and

(iv) The effect on the direct providers (and their immediate customers) of alternate sources of power.

(4) If an applicant uses power for its own industrial facility and related operations, the effect of obtaining or losing electricity from the project on the operation and efficiency of such facility or related operations, its workers, and the related community.

(5) If an applicant is an Indian tribe applying for a license for a project located on the tribal reservation, a statement of the need of such tribe for electricity generated by the project to foster the purposes of the reservation.

(6) A comparison of the impact on the operations and planning of the applicant's transmission system of receiving or not receiving the project license, including:

(i) An analysis of the effects of any resulting redistribution of power flows on line loading (with respect to applicable thermal, voltage, or stability limits), line losses, and necessary new construction of transmission facilities or upgrading of existing facilities, together with the cost impact of these effects;

(ii) An analysis of the advantages that the applicant's transmission system would provide in the distribution of the project's power; and

(iii) Detailed single-line diagrams, including existing system facilities identified by name and circuit number, that show system transmission elements in relation to the project and other principal interconnected system elements. Power flow and loss data that represent system operating conditions may be appended if applicants believe such data would be useful to show that the operating impacts described would be beneficial.

(7) If the applicant has plans to modify existing project facilities or operations, a statement of the need for, or usefulness of, the modifications, including at least a reconnaissance-level study of the effect and projected costs of the proposed plans and any alternate plans, which in conjunction with other developments in the area would conform with a comprehensive plan for improving or developing the waterway and for other beneficial public uses as defined in section 10(a)(1) of the Federal Power Act.

(8) If the applicant has no plans to modify existing project facilities or operations, at least

a reconnaissance-level study to show that the project facilities or operations in conjunction with other developments in the area would conform with a comprehensive plan for improving or developing the waterway and for other beneficial public uses as defined in section 10(a)(1) of the Federal Power Act.

(9) A statement describing the applicant's financial and personnel resources to meet its obligations under a new license, including specific information to demonstrate that the applicant's personnel are adequate in number and training to operate and maintain the project in accordance with the provisions of the license.

(10) If an applicant proposes to expand the project to encompass additional lands, a statement that the applicant has notified, by certified mail, property owners on the additional lands to be encompassed by the project and governmental agencies and subdivisions likely to be interested in or affected by the proposed expansion.

(11) The applicant's electricity consumption efficiency improvement program, as defined under section 10(a)(2)(C) of the Federal Power Act, including:

(i) A statement of the applicant's record of encouraging or assisting its customers to conserve electricity and a description of its plans and capabilities for promoting electricity conservation to its customers, and the compliance of the applicant's energy conservation programs with any applicable regulatory requirements.

(12) The names and mailing addresses of every Indian tribe with land on which any part of the proposed project would be located or which the applicant reasonably believes would otherwise be affected by the proposed project.

(b) *Information to be provided by an applicant who is an existing licensee.* An existing licensee that applies for a new license must provide:

(1) The information specified in paragraph (a).

(2) A statement of measures taken or planned by the licensee to ensure safe management, operation, and maintenance of the project, including:

(i) A description of existing and planned operation of the project during flood conditions;

(ii) A discussion of any warning devices used to ensure downstream public safety;

(iii) A discussion of any proposed changes to the operation of the project or downstream development that might affect the existing Emergency Action Plan, as described in Subpart C of Part 12 of this chapter, on file with the Commission;

(iv) A description of existing and planned monitoring devices to detect structural movement or stress, seepage, uplift, equipment failure, or water conduit failure, including a description of the maintenance and monitoring programs used or planned in conjunction with the devices; and

(v) A discussion of the project's employee safety and public safety record, including the number of lost-time accidents involving employees and the record of injury or death to the public within the project boundary.

(3) A description of the current operation of the project, including any constraints that might affect the manner in which the project is operated.

(4) A discussion of the history of the project and record of programs to upgrade the operation and maintenance of the project.

(5) A summary of any generation lost at the project over the last five years because of unscheduled outages, including the cause, duration, and corrective action taken.

(6) A discussion of the licensee's record of compliance with the terms and conditions of the existing license, including a list of all incidents of noncompliance, their disposition, and any documentation relating to each incident.

(7) A discussion of any actions taken by the existing licensee related to the project which affect the public.

(8) A summary of the ownership and operating expenses that would be reduced if the project license were transferred from the existing licensee.

(9) A statement of annual fees paid under Part I of the Federal Power Act for the use of any Federal or Indian lands included within the project boundary.

H.1 EFFICIENT AND RELIABLE ELECTRIC SERVICE

H.1.1 Efficiency and Reliability

The Licensee has extensive experience operating and maintaining its vast hydro systems in an efficient and reliable manner. The Licensee-owned hydroelectric capacity in 2002 was almost 3,900 MW, including 68 hydroelectric powerhouses and one pumped storage hydroelectric facility.

The Licensee has been operating and maintaining a large, complex hydroelectric system to help meet its electric customers' load for decades. Pacific Gas and Electric Company (Licensee) has historically had responsibility for generating, purchasing, transmitting and distributing reliable, economic electricity to its customers. While electricity industry restructuring has changed the wholesale electricity market, the Licensee continues to deliver electricity to its customers. The Licensee is confident that its hydro resources, including the this Project, will continue to be critical to providing efficient and reliable electric service to consumers in California.

H.1.2 Increase in Capacity or Generation

The Licensee has studied the existing Project facilities, operation, and utilization of flows, and has concluded that the Project is developed to its optimal capacity. The Licensee evaluated the potential to increase the capacity of the Project. This potential is not economically justified at this time. The Licensee has no current plans to increase the output of the UNFFR Project.

H.1.3 Coordination of Operation with Other Water Resources Projects

The Upper North Fork Feather River Project (Project, or UNFFR Project) is located in Plumas County on lands owned by Licensee and the U. S. Forest Service. The Project is the first in a chain of major hydroelectric generation projects that develop the power resources of the North Fork Feather River (NFFR) and its tributaries commonly referred to as the North Fork Feather River Hydroelectric System (System) (See Figure H-1). The UNFFR Project is an integral part of this comprehensive development. The Project includes Lake Almanor, Butt Valley Reservoir and Butt Valley, Caribou No. 1, Caribou No.2, Oak Flat and Belden powerhouses. The currently unlicensed Hamilton Branch Project is located upstream of Lake Almanor and includes a small powerhouse on the eastern shore of Lake Almanor that uses water taken from Mountain Meadows Reservoir. (As a part of the amended POR, the Licensee proposes to file an application to include the Hamilton Branch Project as a Project 2105 facility.) Downstream of the Project are the Rock Creek, Cresta, and Poe powerhouses owned by Licensee and the Oroville Project (FERC No. 2100) owned by the State of California Department of Water Resources (DWR). Delivering water to the NFFR downstream of Licensee's Rock Creek Dam is the Licensee's Bucks Creek Powerhouse.

The integrated operation of all ten of Licensee's powerhouses in the System plus the City of Santa Clara's Grizzly Powerhouse is essential in order to make optimum use of this water resource. Lake Almanor and Lake Oroville are the two largest reservoirs in the watershed. Lake Oroville is a very large water storage reservoir with 3,538,000 acre-feet

of storage capacity. Licensee cooperates with DWR in the exchange of water data and information but the coordination of power operations of Licensee and DWR is not required due to the large storage volume of Lake Oroville.

H.1.4 Coordination of Operation with Electrical Systems

The UNFFR Project, along with the other hydro facilities on the Feather River, is operated in conjunction with the Licensee's other electrical resources to minimize the overall cost of production. Most of the Project powerhouses, with the exception of Oak Flat powerhouse, and the other hydroelectric powerhouses in the Feather River basin are operated on a load-following peaking basis. Oak Flat powerhouse is operated as a base-loaded resource off of the Belden Forebay dam instream flow releases. The predominately peaking operation of these powerhouses minimize the operation of the more expensive thermal plants.

The Licensee has historically had responsibility for generating, purchasing, transmitting and distributing reliable, economic electricity to its customers. The Licensee's generation and transmission facilities were designed and constructed in a coordinated fashion to help minimize the cost of electricity. However, with the start of the California competitive generation market in March 1998, the California Power Exchange (CalPX) and Independent System Operator (CAISO) have been responsible for conducting a competitive bidding process for procuring electricity resources and for operating the

transmission system throughout the state of California on a non-discriminatory basis to provide reliable electricity service at minimum cost.

In 2000, the price for energy in the CalPX market skyrocketed, and the Licensee requirement to buy and sell all energy from the CalPX was rescinded. In early 2001, the CalPX stopped functioning. Soon thereafter, the California Department of Water Resources (CDWR) began purchasing power for the state's electricity consumers. The state electricity utilities are scheduled to resume the power purchasing obligations starting in January 2003.

Since December 2000, the Licensee is using its generation resources, including hydro, to help meet the needs of customers within its service territory. The Licensee no longer bids its hydro resources into the CalPX electricity market; however, it still schedules its power with the CAISO. The CAISO and CDWR are currently purchasing energy and ancillary services, on the spot market and through long-term contracts, to help meet the remaining electricity demands of the Licensee's customers and the State.

The CAISO service area has had peak power demands of nearly 45,000 MW during hot summer periods. Figure H-2 shows historic CAISO system loads. The daily load swing, or the difference between the minimum and maximum power demand on any given day, commonly averages about 10,000 MW. During hot summer periods, the daily load swing has historically exceeded 20,000 MW. The CAISO system ramp-up requirement can

exceed 1,000 MW per hour in the morning and drop by more than 2,000 MW per hour in the evenings. Figure H-3 shows the daily CAISO load curve for a summer and winter day in 2000.

FIGURE H-2 - Historic CAISO System Monthly Demands

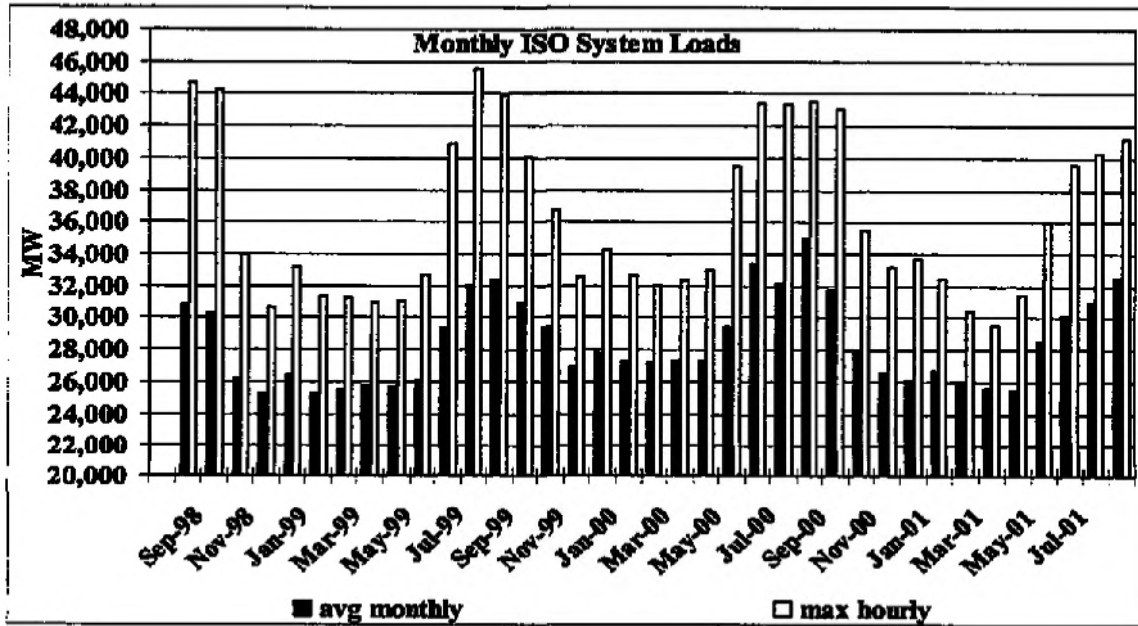
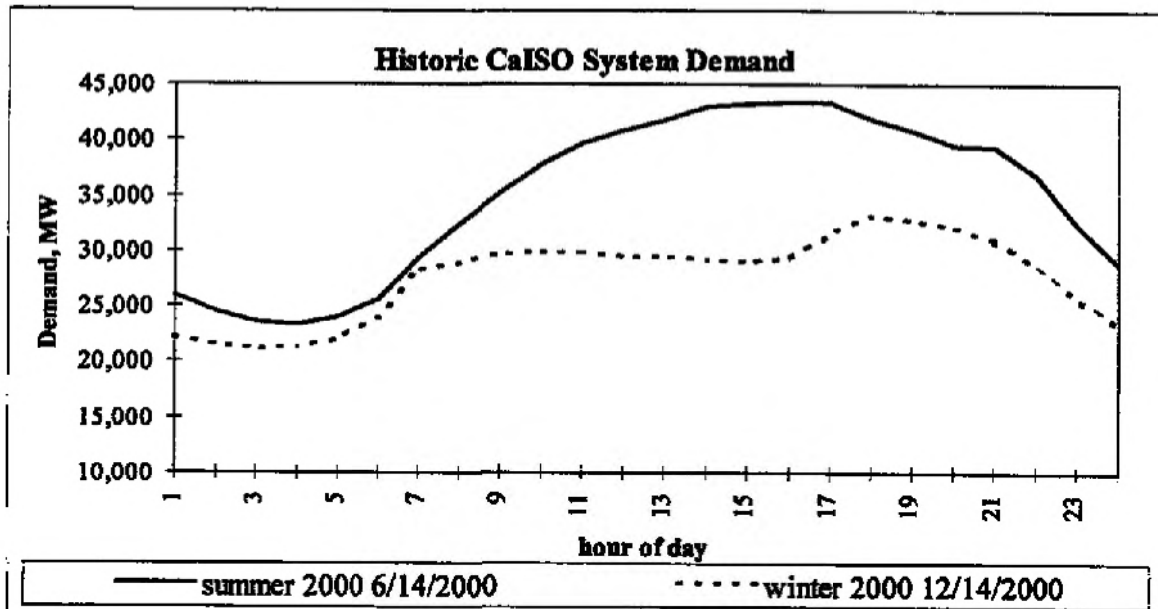


FIGURE H-3 - Historic CAISO System Hourly Demands



The UNFFR Project is operated in conjunction with the Licensee's other hydroelectric resources to help meet the electricity demands and ancillary service needs of the Licensee's electricity customers. The Project's peaking powerhouses help minimize the operation of non-renewable, higher cost thermal electric generating plants. Generation from the Project's powerhouse also reduces purchased power costs from the wholesale electricity market.

H.2 NEED FOR PROJECT ELECTRICITY

The need for Project power is based on the fact that the Project is a low cost, air emission-free, renewable generation resource, which contributes to system reliability and a diversified generation mix. If the electric generating capacity of the Project were

replaced with fossil-fueled resources, green house gas emissions could potentially increase by about 100,000 metric tons of carbon per year.¹

H.2.1 Costs and Availability of Alternative Sources of Power

Due to the relatively small capacity output of UNFFR relative to the Californian electric generation resource mix and load, (the UNFFR Project represents less than one percent of California's peak load), alternative sources of power are expected to be available in the short and long term if the License is not granted. However, the cost of power from an alternative source is expected to be higher than the cost of production from the Project.

Alternative sources of power are expected to be available in the short and long term to replace the foregone generation if the License is not granted. However, alternative sources of power are less certain in the mid-term.

The California energy crisis of 2000-2001 appears to be over. During that time, the CAISO-called for load shedding of California firm customers 9 times in the first half of 2001, and 31 times for non-firm loads during the same time period. The ISO issued almost continuous system alerts and warnings until July 5, 2001. However, few alerts and no load shedding in California have occurred since that time. Also, the non-firm electricity prices have greatly fallen throughout the summer-fall of 2001 and continued falling throughout 2002.

¹ Source of conversion factor 155 kilograms of carbon emissions per megawatt-hour: FERC Environmental Assessment for Hydropower License – Rock Creek Cresta Hydroelectric Project, Project No. 1962 dated

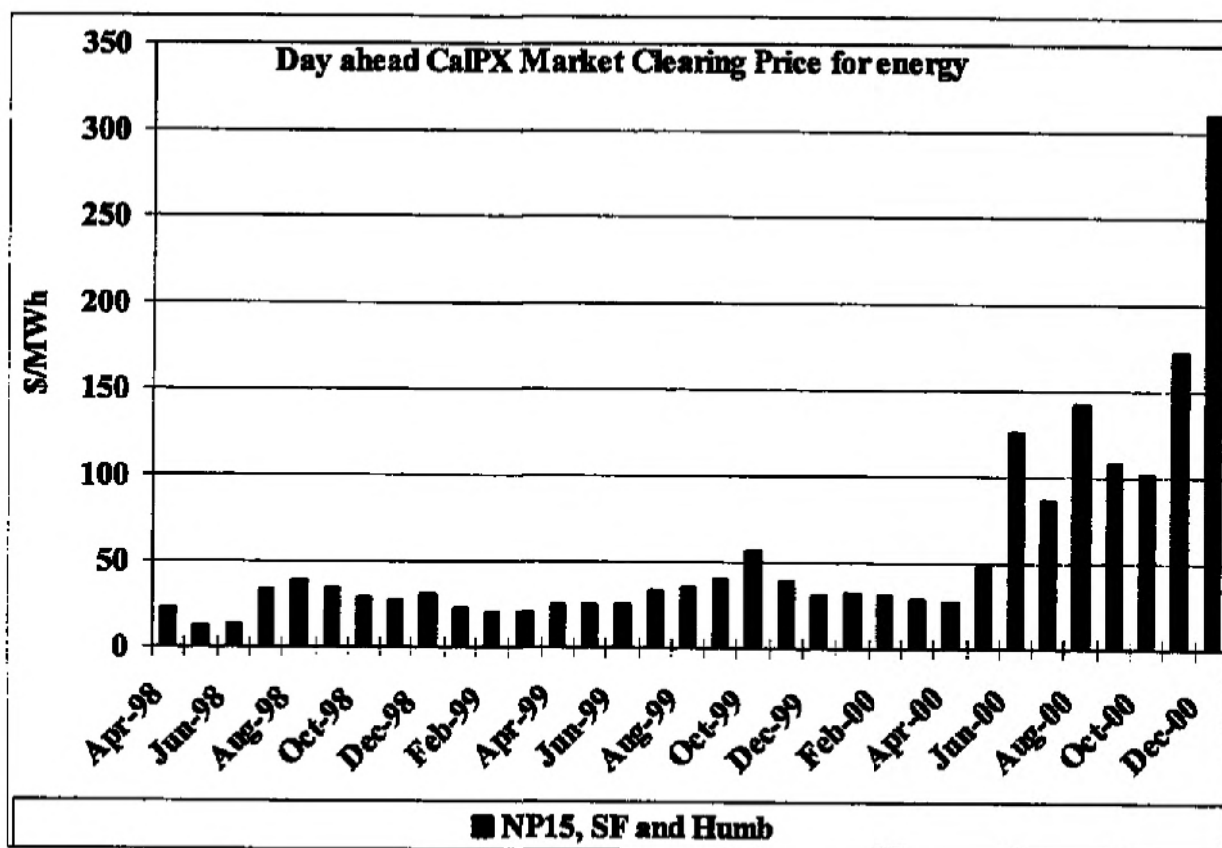
While the California energy market was tight in 2000-2001, increased conservation, reduction in natural gas prices, depressed economic output, and new generating resources coming online in 2001 alleviated the electricity crisis. During the period of high wholesale electricity prices in 2000-2001, numerous electricity resource development plans were being pursued throughout the State. However, with the steep decline in wholesale electricity prices in late 2001 and 2002, many of these development plans have been deferred or eliminated. Concerns are being raised that a repeat of the electricity supply imbalance could occur as early as 2005 if the economy rebounds as hoped and if new resources are not on-line in time.

The cost of power from an alternative source is expected to be significantly higher than the cost of power from the Project. Replacement power costs, over the term of a new FERC license term, are very difficult to predict with any certainty. Future gas prices, industry restructuring, level of competition in the electricity market, load management (e.g. conservation gains) and future generating technology advancements are a few of the more significant issues that can impact future generation resources and costs. FERC's "current cost method" of economics will be used in the final application Economic Summary to simplify the analyses in light of these uncertainties. The FERC current cost method assumes the cost to produce or buy electricity will not escalate over the length of a new license term.

May 30, 2001.

Even with FERC's simplified current cost method, it is not clear what the appropriate alternative cost of power should be given the recent volatility in the California energy and ancillary services markets. For example, the alternative cost of energy from the less volatile 1999 CalPX day-ahead, north of path 15 (NP15) market averaged 3.0 cents per kWh, while the cost of energy in CalPX day-ahead, NP15 market averaged over 10 cents per kWh in 2000. (NP15 pertains to the northern California electricity market). Figure H-4 shows the CalPX average monthly day ahead, NP15 energy prices, since the start of California's competitive electricity market through the end of 2000.

FIGURE H-4 - Historic CalPX Energy Prices



In early 2001, the CDWR began purchasing power on the spot market and negotiating long-term power purchase contracts for California's electricity consumers. CDWR began making spot energy purchases on January 17, 2001. In January 2001, the cost averaged 32 cents per kWh. CDWR spot energy purchases averaged 31, 27, 33 and 27 cents per kWh in February, March, April and May 2001, respectively. In late June 2001, California released some of the contract terms for CDWR's long-term power purchases. These power purchase contracts were often take-or-pay contracts with high capacity rates, front-loaded costs along with energy payments for up to 20-year contract terms. The July 23, 2001 update to the CDWR Revenue Requirement filing with the CPUC listed the total

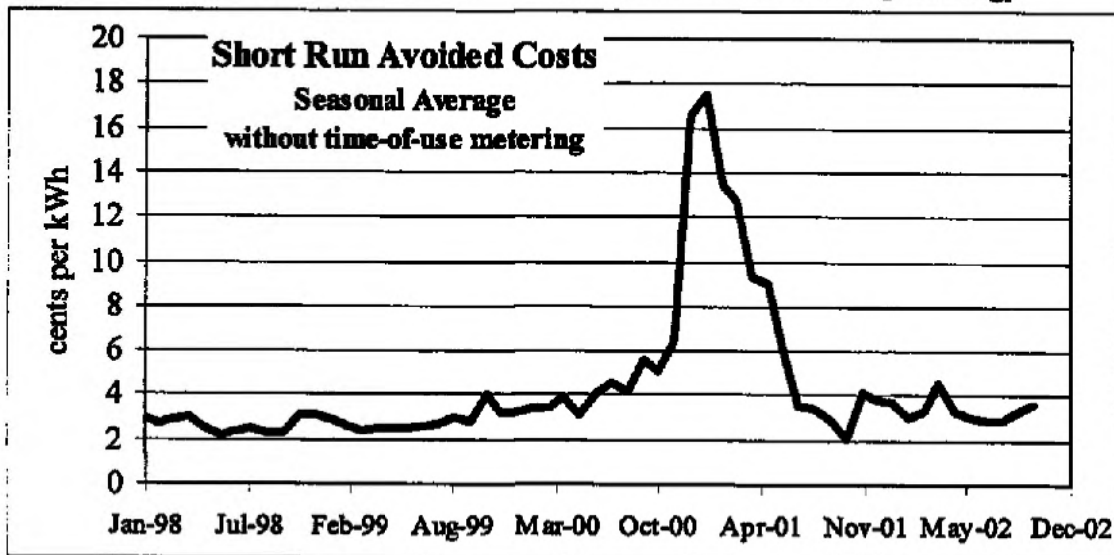
average cost of purchased power to range from about 27 cents per kWh in the first quarter of 2001 down to a minimum of about 6 cents per kWh in 2010. The following table summarizes the CDWR purchase power costs data from this CPUC filing.

Summary of Forecasted Net Short Purchases							
Source: CDWR July 23, 2001 update to the Revenue Requirement filing to the CPUC							
		GWh 1,000's	Average Price \$/MWh		GWh 1,000's	Average Price \$/MWh	
2001	Q1	13	269	2006	Q1	21	59
	Q2	20	222		Q2	22	58
	Q3	20	134		Q3	27	58
	Q4	17	115		Q4	23	59
2002	Q1	15	96	2007	Q1	22	59
	Q2	16	90		Q2	22	59
	Q3	22	103		Q3	27	59
	Q4	18	90		Q4	24	60
2003	Q1	19	76	2008	Q1	23	61
	Q2	20	73		Q2	24	54
	Q3	25	78		Q3	29	60
	Q4	22	75		Q4	26	60
2004	Q1	23	68	2009	Q1	24	58
	Q2	23	67		Q2	24	58
	Q3	28	65		Q3	30	62
	Q4	26	66		Q4	26	60
2005	Q1	22	62	2010	Q1	25	58
	Q2	24	60		Q2	26	58
	Q3	28	60		Q3	33	66
	Q4	24	60		Q4	28	60

Even after the demise of CalPX, electricity continues to be traded on the spot market. By the end of August 2001, non-firm, spot energy prices in California returned to "pre-crisis" levels of 2 to 4.5 cents per kWh for non-peak and peak periods, respectively. Energy purchase from the spot market can be a source of replacement energy, however, these spot energy prices do not include any value for capacity nor ancillary services.

Qualifying Facilities (QFs) are another source of replacement energy. Figure H-5 shows the published short run avoided costs (SRACs) paid to California's QFs for energy 1998 through October 2002.

FIGURE H-5 - Historic Short-Run Avoided Costs for QF Energy



The average SRAC for the past 12-months - November 2001 through October 2002 - was 3.5 cents per kWh for facilities without time-of-use metering. These historic SRACs follow the same energy price trends as the now defunct CalPX prices and current spot market price indices. For these reasons the current average SRAC of 3.5 cents will be deemed the current replacement energy cost. Again, these indices do not include capacity nor ancillary services value. The Project provides ancillary services (i.e., spinning reserves, regulation) in addition to energy production. Ancillary services accounts for about 10% of the Project's market revenues. Based on this, a ten percent adder, or 0.35

cents per kWh, will be applied to the value of energy to account for ancillary services. A capacity value of about \$75/kW-yr, or equivalent to about 2.3 cents per kWh (at about 37% capacity factor), is added to the energy and ancillary service values to develop the total replacement power costs. A replacement power cost of 6.15 cents per kWh will be used in the economic analyses for this Project.

H.2.2 Increased Costs to Replace the Project

If the Licensee is not granted a license, the amount of purchased power would increase. An estimate of the replacement power costs under the "no action" case is about \$70 million per year.

H.2.3 Effects of Alternative Sources of Power

Effects on Customers. Use of these alternative sources of power would have a small impact on customers, including wholesale customers, by replacing this low-cost, must take source of energy with higher priced energy. Replacing the Project's average annual energy output of 1,153.6 GWh with an alternative source of power would increase the price paid for power.

Effects on Operating and Load Characteristics: The Licensee's operating and load characteristics would be minimally impacted by increasing the use of existing less-efficient thermal resources and/or increased purchases of power.

Effects on the Communities Served: As noted in Exhibit B, the Licensee delivers power to a service area that includes all or a portion of 47 of California's 58 counties and encompasses nearly 94,000 square miles of northern and central California. In this large and diversified region, commerce, industry, and agriculture play vital economic roles. Commercial and industrial activities are centered in the San Francisco Bay Area, with its major cities and large population centers. Power provided by the Licensee is vital to the economic well being of this metropolitan community as well as the multitude of smaller cities and towns throughout the service area.

The area served by the Licensee also includes California's Central Valley, lying between the Pacific Coast Range and the Sierra Nevada and extending nearly 450 miles from north to south. The Central Valley is the economic heartland of California agriculture and one of the premier agricultural regions in the world. The Licensee also serves other significant agricultural districts in California, including the Napa Valley and the Salinas Valley. California agriculture's heavy dependence on irrigation, with surface and subsurface water supplies pumped by electricity, has had an important influence on the historical development of power sources, including the UNFFR Project. California's agriculture continues to depend heavily on the Licensee's system for power to meet its needs.

The area in which the Project's electrical and economic benefits will be utilized had a 1990 population of approximately 12 million people. This customer population is as

diverse as the area it inhabits. The Project will be comprehensively utilized to the general benefit of the population within the Licensee's service territory.

The foregone generation if the Licensee is not granted a new license could theoretically increase the wholesale energy prices by a small amount. It is not clear what regulatory conditions will be imposed to end the rate freeze; however, it is possible that any purchased power increases would be allocated to all California customer classes equally. Note, the electricity market in California is currently in flux and as a result utility regulations are rapidly changing. These need for power and alternative sources of power discussions are therefore subject to change.

H3 COST OF PRODUCTION AND ALTERNATIVE SOURCES OF POWER

H3.1 Average Annual Cost of Power

Assumptions and Methods

The economic analyses provided in the final Relicensing application will estimate the average annual cost of power produced by the Project using FERC's current cost method. This method will use current California electricity market conditions and current costs of owning and operating the Project, plus the costs of implementing anticipated new FERC license conditions. Future inflation and escalation of prices and costs are not considered.² As noted in another project's DEA, "By using current costs, we do not assume future

² See Mead Corporation, Publishing Paper Division, 72 FERC Para. 61,027 (July 13, 1995).

escalation or de-escalation of the various cost components included in the cost of project power or alternative power."³

The average annual cost of Project power will include all the costs of owning and operating the Project. Project cost components include unrecovered past capital additions (e.g., the depreciated Plant-in-Service costs, or net book value), unrecovered relicensing costs, future capital replacements, routine operations and maintenance costs, FERC fees, taxes, insurance, and the cost of implementing anticipated new license conditions (e.g. PM&E measures). A Fixed Charge Rate (FCR) of 14% will be used to annualize the costs of capital improvements, (capital improvements are improvements that have a service life in excess of one year and which are repaid over time); the FCR includes capital recovery with a cost of capital of about 9%, taxes and insurance costs. Expenses, such as payroll costs, are paid in the year the expenditure is made and do not include any tax or insurance component.

The net book value represents the cost of owning the facilities and reflects unrecovered past capital expenditures. The costs of relicensing, under 1992-revised CPUC regulations, are booked to the Project upon receipt of the new FERC license. Relicensing costs will be included in the Project economics as "relicensing costs" (these "unbooked" costs are not contained in the net book value). All the other costs listed above represent future costs.

³ See "Draft Environmental Assessment for Hydropower License" Hat Creek FERC Project No. 2661-012.

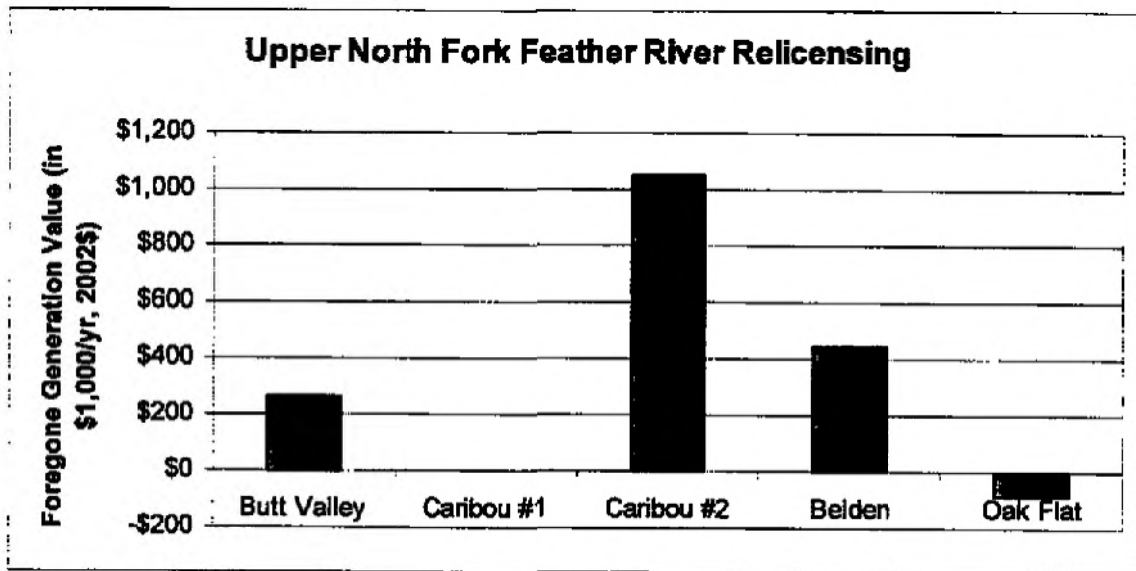
Dependable capacity is the load carrying ability of a hydroelectric plant under adverse hydrologic conditions for the specified time interval and period of a particular electric system load. The Project dependable capacity is based on the Project's load carrying ability during the critical hydrologic period (e.g., 1977) coincident with the Licensee's peak electric system load. Currently, the peak system load occurs during summer heat storms, typically in July or August in the Licensee's service territory. Simply stated, if a powerhouse with flow-regulating capability like the Project, has enough water to operate at its installed capacity for an average of 4 to 6 hours per day during July and August under 1977 hydrologic conditions, its dependable capacity is equal to its installed capacity. If sufficient water is not available, and/or if a powerhouse cannot re-regulate the flow of water to match the system peak, its dependable capacity is less than the installed capacity.

Table H-1 summarizes the project's average annual energy production and dependable capacity for the No Action case. Figure H-6 shows the estimated foregone energy costs for Butt Valley, Caribou, Belden, and Oak Flat powerhouses associated with the potential minimum instream flow requirements.

Table H-1 - Generation Summary under Various Instream Flow Requirements

Minimum Instream Flow	Average Annual Energy, GWh	Foregone Energy, GWh	Dependable Capacity, MW
Current Operation: 35 cfs @ Canyon Dam year round; 65 cfs for summer and 140 cfs for the remaining months @ Belden	1153.6		362.3
75 cfs @ Canyon Dam year round and 140 cfs @ Belden year around	1108.9	44.7	362.3

FIGURE H-6



Results

The annual cost of Project power, on a cents per kWh basis, depends on the energy production from the Project. The Project's average annual energy production, and dependable capacity are affected by the available stream flow (due to hydrologic conditions), minimum instream flow requirements, and other stream flow requirements. The current Project's average annual energy production and dependable capacity is

contained in Exhibit B; energy and capacity data with potential new license conditions will be included in the final Relicensing application. Average annual cost of Project power under the "no action" case is estimated to be 2.2 cents per kWh.

The results of the economic analyses are presented in three tables. Table H-2 shows economic data for the No-Action case. Table H-3 shows incremental economic data for the Licensee's proposed PM&E measures. Table H-4 summarizes the Project's overall economics, using FERC's current cost method, for the No-Action case and the Project with the Licensee-proposed PM&E measures.

Table H-2
Upper North Fork Feather River Economics - No Action Case
Average Annual Cost of the Total Project using FERC's Current Cost Method (w/ 14% FCR)
Estimated Costs \$ 1,000's (\$ 2002)

Item Description	Capital, One-Time or Repeating \$1,000's or \$1,000's/yr	Annual Expense \$ 1,000's/yr	Replacement Power costs \$ 1,000's/yr	Average Annual Costs \$ 1,000's
NO ACTION CASE - EXISTING CONDITIONS				
Replacement power costs			-\$70,900 /yr	
Net Book Value	\$106,548	\$0 /yr		\$14,917 /yr
FERC License Application	\$9,920	\$0 /yr		\$1,389 /yr
Normal O&M	\$0	\$4,000 /yr		\$4,000 /yr
Future Capital Additions	\$2,230 /yr	\$0 /yr		\$3,791 /yr
FERC Fees	\$0	\$876 /yr		\$876 /yr
Total "No Action" Average Annual Costs		\$4,876 /yr	-\$70,900 /yr	\$24,973 /yr
Cost of production	1,153.6 GWh/yr	-\$92,288 /yr		\$21.6 /MWh
Net "No Action" Average Annual Costs				-\$45,927 /yr

Table H-3
Average Annual Cost of the Total Project using FERC's Current Cost Method (w/ 14% FCR)
Estimated Costs \$ 1,000's (\$ 2002)

Item Description	One-Time Costs \$1,000's	Annual Expense \$ 1,000's/yr	Replacement Power costs \$ 1,000's/yr	Average Annual Costs \$ 1,000's
LICENSEE PROPOSALS				
Minimum Instream Flow increase to 75 cfs below Canyon Dam			\$2,160 /yr	
Minimum Instream Flow increase to 140 cfs below Belden Dam			\$590 /yr	
Recreation Facilities				
New campgrounds and campground improvements for Lake Almanor	\$12,747	\$192 /yr		\$1,977 /yr
New campgrounds & campground improvements for Butt Valley Reservoir	\$1,244	\$47 /yr		\$221 /yr
New campgrounds and campground improvements for Belden Reservoir	\$182	\$5 /yr		\$30 /yr
Educational program, resource protection, boater safety, and monitoring program	\$138	\$80 /yr		\$99 /yr
Cultural Resources	\$410	\$39 /yr		\$96 /yr
Fishery & Wildlife				
Bald eagle, fish, water quality, and sensitive species monitoring	\$95	\$15 /yr		\$28 /yr
Visual / Spoil Pile				
Vegetation plantings, hoist house painting	\$17	\$1 /yr		\$3 /yr
Aquatic Measures				
Removal old weir dam and fish barrier	\$350	\$0 /yr		\$49 /yr
Operation Measures				
Maintenance at Caribou Camp	\$100	\$25 /yr		\$39 /yr
Road grading and road signs	\$13	\$1 /yr		\$3 /yr
Total "Licensee-Proposed" Costs	\$15,296	\$404 /yr	\$2,750 /yr	\$2,545 /yr
Total "Licensee-Proposed" Average Annual Costs				\$27,517 /yr
Cost of production	1,108.9 GWh/yr			\$24.8 /MWh
Net "Licensee-Proposed" Average Annual Costs				-\$40,632 /yr

**Table H-4
Upper NFFR Comparison of Economic Analyses
Project Economic Analysis Using FERC's Current Cost Method
Estimated Costs in \$1,000 (\$2002)**

	No-Action Case	Licensee Proposals
Dependable Capacity (MW)	362.3	362.3
Annual generation (GWh)	1,153.6	1,108.9
Annual Power value: Annual generation		
thousands \$	\$70,900 /yr	\$68,151 /yr
mills / kWh	61.5	61.5
Annual cost:		
thousands \$	\$24,973 /yr	\$27,517 /yr
mills / kWh	21.6	24.8
Current net annual benefits:		
thousands \$	\$45,927 /yr	\$40,633 /yr
mills / kWh	39.8	36.6

H.3.2 Costs of Agency Recommendations

Proposals made by the resource agencies that change Project costs, operation, or generation will impact the cost of power. The impacts of the agencies' environmental enhancement proposals made in response to the final application will be included in the Licensee's response comments.

H.3.3 Projected Resources to Meet Requirements

With the creation of the CalPX and CAISO in 1998, the Licensee's energy and ancillary services requirements were met by purchases from the CalPX and CAISO. The State of California and the CAISO started procuring energy, on the spot market and with long-term contracts, in January 2001 on behalf of the Licensee's and California's electricity

customers. Regardless of who the purchasing agent is, additional wholesale power purchases will be used to offset any reduction in Project power.

Load Management Measures. Energy conservation has been identified as a key element in solving California's electricity shortage. The Licensee plans on continuing to implement a wide range of load management measures. The Licensee has historically implemented Demand Side Management (DSM) projects to minimize load growth. As part of industry restructuring, other parties are competing to provide DSM services.

Since California's 2000-2001 energy crisis, the Licensee and others are aggressively pursuing all cost-effective conservation and DSM measures. The beneficial impact of electricity conservation is evident in the decline of peak demand experienced in the summer of 2001 (See Figure H-2). Additional conservation programs will be used to minimize high-cost purchased power and are not a realistic option for replacing the Project's low-cost power.

The Licensee is aggressively pursuing all cost-effective conservation and DSM programs. Consequently, additional conservation programs are not a realistic option for replacing UNFFR power. Even if additional conservation programs were successful, the Licensee would use it to displace the most expensive resource on the system, not Project power.

H.3.4 Alternative Sources of Power

The alternative source of power that may be available is increased purchases. For the purposes of this economic analysis, the total cost of this alternative source of power, including energy, capacity and ancillary services, is deemed to be about 6.15 cents per kWh.

H.4 EFFECT ON INDUSTRIAL FACILITY

The Licensee is a regulated utility and thus does not use the Project power for its own industrial facility. Therefore, this item is not applicable.

H.5 INDIAN TRIBE NEED FOR ELECTRICITY

The Licensee is not an Indian tribe, so this item is not applicable.

H.6 EFFECT ON TRANSMISSION SYSTEM

H.6.1 Effects of Redistribution of Power Flows

The Project powerhouses are connected to the 60 kV, 115 kV and 230 kV transmission circuits, which supply power to the Sacramento and San Francisco Bay areas as well as meeting local needs as part of the northern California transmission system. The transmission system carries power from northern California hydroelectric projects, various non-utility generators, and power imported into California from the Northwest to the major demand area of the San Francisco Bay area.

Northern California hydroelectric generation levels affect the total amount of power that can be imported into California from the Northwest on the AC and DC systems. Because of voltage stability limits, northern California hydroelectric generation levels above approximately 90 percent of capacity may slightly reduce the amount of power that can be imported into California from the Northwest. Not receiving a Project license for the UNFFR Project and retiring the facility would relax import restrictions during high northern California hydroelectric generation periods, providing greater access to Northwest power. However, if the UNFFR Project were licensed to an entity other than the current Licensee and remained connected to the northern California transmission system, no change would be anticipated in the amount of power that can be imported into California.

The effect of the UNFFR Project on transmission line energy losses is insignificant due to its relatively small capacity.

H.6.2 Advantages of Licensee's System

The Licensee's transmission system is adequate to accommodate the Project's power output; no transmission line upgrades are necessary to continue to operate UNFFR Project if the Licensee is granted a Project license.

H.6.3 Single-Line Diagram

A single-line diagram showing the Project and the surrounding interconnected transmission system is shown in Figure H-6.

H.7 MODIFICATIONS CONFORMING WITH COMPREHENSIVE PLANS

The Licensee does not propose to modify the existing Project operation.

Licensee is continuing its ongoing evaluation of hydroelectric projects, and if further development appears feasible, the Licensee will amend the Project license accordingly.

At this time, the Licensee anticipates no new hydroelectric projects, however, unit upgrades may be proposed in the future.

H.8 PROJECT CONFORMANCE WITH COMPREHENSIVE PLANS

As indicated in Exhibit E, the Project is in conformance with all comprehensive plans.

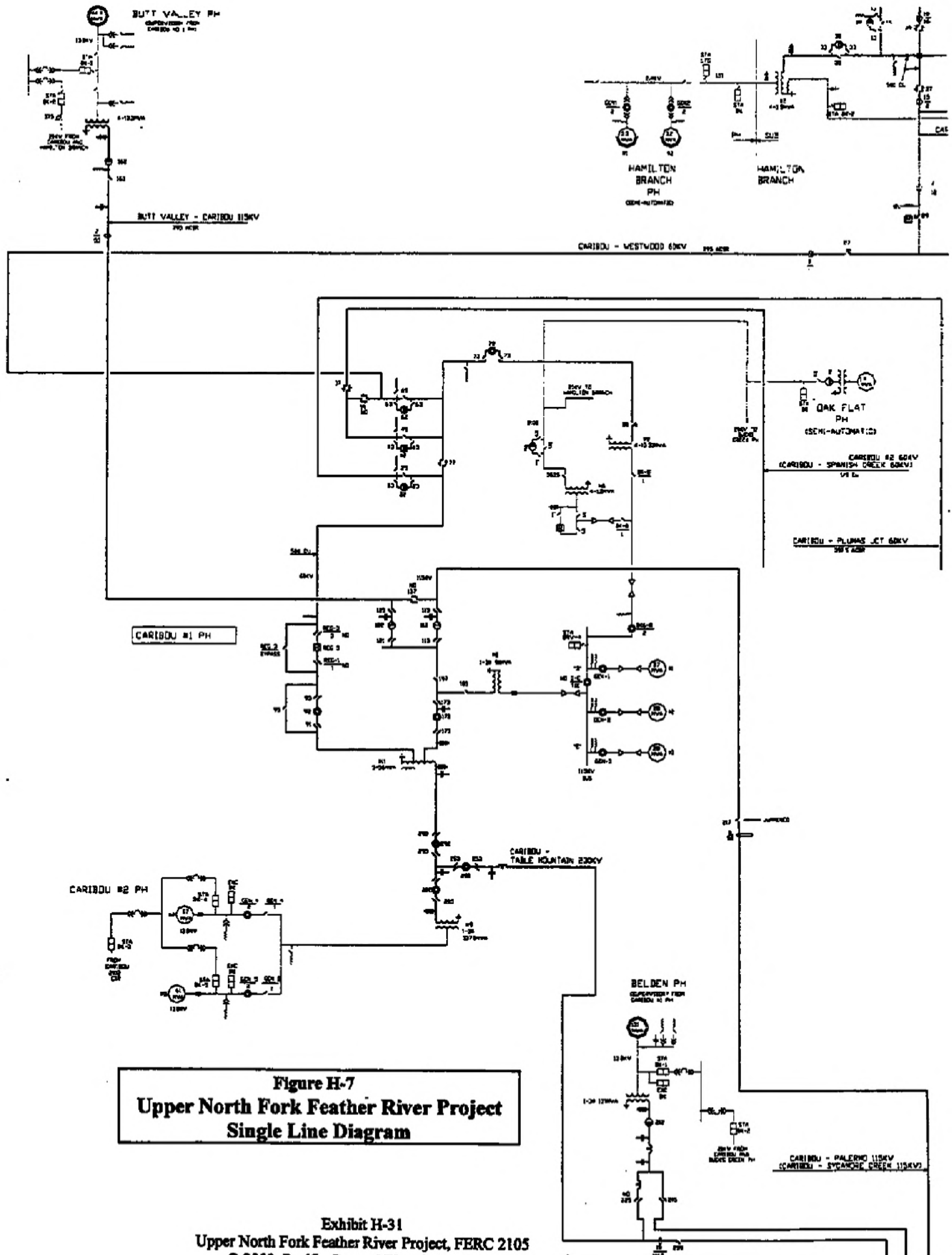


Figure H-7
Upper North Fork Feather River Project
Single Line Diagram

H.9 FINANCIAL AND PERSONNEL RESOURCES

H.9.1 Financial Resources

The Licensee's sources of financing and annual revenues are sufficient to meet the continuing operation and maintenance needs of the Project. For specific financial information, please refer to Licensee's financial statements which it has submitted annually to the Commission in FERC Form 1, and to its record in constructing, operating, and maintaining projects. However, in late 2000 and early 2001, the Licensee had difficulty in meeting its purchased power costs due to the regulatory framework in California, and filed for Chapter 11 bankruptcy in April 2001. In September 2001, the Licensee announced its Plan of Reorganization in the bankruptcy proceedings which, when approved, will allow the Licensee to pay its creditors and resume its creditworthy status. The bankruptcy court, State legislators and regulators continue to address this cash flow issue; a resolution is expected in the near future.

H.9.2 Personnel Resources

The personnel that maintain and operate the UNFFR Project comprise many technical trades. The level of training for the various classifications represented by the International Brotherhood of Electrical Workers is negotiated. Most personnel complete a state-approved apprenticeship program to progress to a journeyman level position.

- Asbestos handling
- PCB handling
- Safety and first aid instruction (6 hours per year)

Other training as required includes:

- Safety indoctrination for new employees
- Pesticide and confined space safety regulations for employees that are exposed to these hazards

H.10 PROJECT EXPANSION NOTIFICATION

The Licensee has no current plans to expand the Project. However, during the review of existing Project boundaries, Licensee has determined that minor adjustments to Project boundaries would be appropriate to accommodate existing Project activities. These are summarized as follows:

- Caribou to Butt Valley Road – The alignment of this road appears to have changed over the years and the alignment shown on Project drawings did not match conditions in the field. This is being corrected on Drawing G-33.
- Project Spoil Areas – The Project spoil areas located west of the downstream portal of Caribou No. 2 tunnel and just downstream of the road from the top of

H.11.2 Compliance with Regulatory Requirements

The Licensee is in compliance with many energy conservation decisions issued by the California Public Utility Commission's (CPUC). See the Energy Conservation Information summary at the end of Exhibit H.

H.12 INDIAN TRIBE NAMES AND MAILING ADDRESSES

The following Native American tribes may be affected by the Project:

Ms. Lorie Jaimes, Tribal Chair
Greenville Rancheria
P. O. Box 279
Greenville, CA 95974

Ms. Valerie Edwards, Tribal Chair
Susanville Indian Rancheria
P.O. Box Drawer U
Susanville, CA 96130

H.13 SAFE MANAGEMENT, OPERATION, AND MAINTENANCE

The Licensee implements numerous measures to ensure safe management, operation, and maintenance of this Project.

H.13.1 Safe Management

In compliance with §6401.7 of the California Labor Code and the Licensee's Standard Practice 726-8, the Licensee has implemented a comprehensive Hydro Generation Department Injury and Illness Prevention Program (IIPP). Safety responsibilities under the IIPP are shared by a Hydro Generation Safety Chairperson, Hydro Generation Safety Council, Hydro Generation Safety Committee, traveling safety teams, and all Hydro

Generation employees. Functional elements of the IIPP include safety meetings, 10-day safety tailboard meetings, safety training, safety inspections, employee reporting of hazards, investigations, and record keeping. Licensee contractors and subcontractors are also required to have effective IIPPs.

Other measures implemented to ensure safe management of the Project include:

- Conducting the FERC's 18 CFR Part 12 dam safety review
- Complying with inspection of dams by the State of California, Department of Water Resources, Division of Safety of Dams
- Complying with the Project's Public Safety Plan filed with the Commission's San Francisco Regional Office
- Developing a penstock safety program
- Licensee-mandated facility inspection by company personnel
- Disseminating information to Licensee's employees

H.13.2 Safe Operation

Personnel familiar with the Project visit project facilities frequently. During the winter season, system power dispatchers, powerhouse personnel, and supervisory personnel inform Project operation and maintenance personnel about potential weather systems that may impact Project operation and facilities. Maintenance personnel frequently inspect

the Project facilities for potential problems during the winter months. See Section H.14 for more details on Project operation.

H.13.3 Safe Maintenance

All facilities are maintained to ensure safe and reliable operation. Frequent visits by Project personnel help identify potential problems, and these are corrected as they are discovered. The Licensee's preventive maintenance program is used to monitor maintenance. See Section H.15 for examples of major Project maintenance activities.

H.13.4 Operation During Flood Conditions

Non-Emergency Action Plan Events: Standard operating procedures for each dam location describe actions to be taken during flood conditions. The procedures require operation personnel to be in contact with the Caribou Powerhouse to respond to potential system problems. Maintenance personnel can be directly contacted 24 hours a day by the Caribou Powerhouse during flood conditions. If problems are noted by the Switching Center, maintenance crews are immediately called out to identify the nature and extent of the problem and estimate duration of repair, if needed.

Emergency Action Plan Events: The Project is required to have an EAP per 18 CFR 12.21(a). With initiation of the EAP, Project, local, state, and federal personnel are notified of potential failure of a Project feature. This step requires contacting the above-

mentioned parties or backup personnel via telephone. When it has been determined that the potential failure no longer exists, all contacted personal are notified.

H.13.5 Warning Devices for Downstream Public Safety

There are no automatic warning devices for downstream public safety below the forebay or powerhouse.

H.13.6 No Changes to Existing Emergency Action Plan

No changes are proposed to Project that would require changes to the existing Emergency Action Plan (EAP). There is no downstream development that would affect the existing EAP.

H.13.7 Monitoring Devices

All Project dams have monitoring to track seepage and other conditions. Various monitoring devices have been placed on the penstock supports and slopes for the Caribou No. 2 penstock and the upstream end of the Belden Siphon. Alarms have been installed on some devices on the Belden Siphon to immediately notify operators at Caribou Powerhouse if a movement has occurred so that corrective actions can be taken. Excess flow monitoring devices have been installed on tunnels and/or penstocks. These devices will trigger closure of shut-off valves or intake gates, as appropriate.

H.13.8 Employee Safety and Public Safety Record

Prior to 1985, all public safety records were filed separately with appropriate state and federal agencies on a case-by-case basis rather than by Project, making historical information before 1985 impossible to retrieve. Licensee records indicate that there have been 10 lost-time incidents involving employees in the area serving the ten Feather River basin powerhouses from 1985 to the present.

The Upper North Fork Feather River Project covers over 30,000 acres, including Lake Almanor, a heavily used recreation reservoir. Not all safety related incidents that occur in this area are reported to the Licensee. The following is a summary of the significant incidents, of which the Licensee is aware, that have occurred over the past ten years within the Project Boundary

- 1993 A boat traveling at a high rate of speed at night ran into Goose Island killing two occupants.
- 1996 (?) In two separate incidents, small planes crashed into Lake Almanor after taking off from the Chester Airport. In one of these incidents the occupants were killed.
- 1997 A small explosion and fire aboard a small boat injured a boater.
- 1998 A helicopter performing contract work for Licensee lost power and crashed into Belden Forebay killing the pilot.

H.14 CURRENT OPERATION

The Project powerhouses are currently operated as part of the generation mix used to meet the customers' electric demand. The powerhouses, with the exception of Oak Flat, are operated as load-following, peaking facilities.

H.15 HISTORY OF THE PROJECT

Refer to Exhibit C for the Project construction history. In addition to major construction projects, the Licensee has implemented numerous improvements and major maintenance projects. Significant projects include:

Canyon Dam Improvements: Improvements were made to Canyon Dam in 1962 and 1963 that ultimately led to the increase of the DSOD authorized water surface elevation to 4,494 feet, PG&E datum. In 1996, seismic remediation work took place and included placement of additional material on the upstream toe of the dam.

Caribou Slope Remediation: In 1984 significant damage occurred to the Caribou No. 1 penstocks and the Caribou No. 2 Powerhouse and switchyard. Major rebuilding of the Caribou No. 1 tunnel portal and upper penstocks took place and major clean-up work was required at the Caribou No. 2 Powerhouse and switchyard.

Belden Siphon: To address slope stability concerns, a project was completed to remove potential slide material and install anchor bolts in 1996.

Butt Valley Dam Remediation: After seismic studies determined that the existing earth fill dam might sustain significant damage in the event of an earthquake, the reservoir level was lowered and the dam substantially rebuilt in 1996 and 1997.

The applicant also has several ongoing programs that review penstock safety, transformer reliability, and powerhouse sump adequacy.

H.16 GENERATION LOST OVER THE LAST FIVE YEARS

During the last five years approximately 13 major outages (more than a few days) have occurred on one or more units at the Project powerhouses due to annual maintenance, extreme weather conditions, fires affecting the transmission lines, or equipment failure.

H.17 COMPLIANCE WITH TERMS AND CONDITIONS OF LICENSE

The Licensee has an excellent record of compliance with the terms and conditions of the existing license. A review of the Licensee's records indicates no incident of noncompliance with the license.

H.18 ACTIONS AFFECTING THE PUBLIC

The Project has an Emergency Action Plan that deals with public safety in the event of a dam failure.

H.19 OWNERSHIP AND OPERATING EXPENSES

Estimates of the future Project O&M, capital replacements, and proposed mitigation and enhancement costs were made to estimate the Project production costs in Section H.3. If the license were transferred, these future Project costs would no longer be necessary, although the Licensee would have to pay for replacement power. The total future Project cost for the existing facilities that could be eliminated if the license were transferred is estimated to be about \$11.2 million per year (using FERC's current cost method). About \$4.0 million of this annual cost represents the current level of Project O&M; the remainder of the annual cost represents future capital replacement costs, estimated FERC fees, and the Licensee's proposed environmental mitigation and enhancement costs.

H.20 ANNUAL FEES FOR FEDERAL OR INDIAN LANDS

Various portions of the Upper North Fork Feather River Project occupy lands administered by the Plumas National Forest and the Lassen National Forest. A total of 1136.5 acres of such lands are currently used for Project features, exclusive of transmission lines. Minor adjustments in Project boundaries as discussed in Section A.6 will increase this figure. A total of 361 acres of land within the Plumas National Forest is used for transmission lines. The majority of this total is subject to the Commission's December 22, 1998 order under which the Caribou to Big Bend 115 kV line is no longer jurisdictional and will be deleted from the Project 2105 license as soon as the necessary

permits are completed by the U.S. Forest Service. For 2000 the annual fee for federal lands was about \$83,400. No Indian lands are included within the UNFFR Project boundary.

Pacific Gas and Electric Company

Proposed Customer Energy Efficiency Program Detail

PG&E PY 2002
Proposed Customer Energy Efficiency Program Detail

Statewide Programs

Residential

Retrofit

Single-Family Program— The SF Rebate program will provide rebates for qualifying energy efficiency measures, supported by information, education, and energy management services. The Smarter Energy Line call center (SEL), PG&E's Web site (www.pge.com) and the Home Energy Efficiency Surveys will provide direct energy efficiency information and recommendations to customers, whereas the Energy Training Center will provide education to contractors and product installers to familiarize them with energy efficiency measures and technical standards. The target market for rebates will include retrofit and renovation, appliances, and heating and cooling measures.

Multi-Family Program— The target market segments for this program will include retrofit and renovation, appliances, and heating and cooling. The program will assist customers within the multifamily residential sector that have not traditionally nor actively participated in energy efficiency programs. The program, like the single-family program, will use an integrated approach of combining information, education, energy management services and customer incentives to stimulate customer action.

Appliance Retirement and Recycling Program— The Statewide Appliance Retirement and Recycling Program will offer an incentive for the recycling of the primary or secondary refrigerator or freezer, an additional incentive for the early retirement and recycling of an existing primary refrigerator and replacement with an ENERGY STAR® labeled unit, and joint promotion through existing partnerships with retailers and manufactures to encourage customers to retire their primary refrigerators and replace with an ENERGY STAR unit.

New Construction

California ENERGY STAR New Homes Program— This program will encourage single family and multifamily builders to exceed AB 970 Title 24 energy efficiency standards by 15% -20%. Under the program, the IOUs will offer a combination of financial incentives, design assistance and training to encourage the construction of single family and multifamily buildings that exceed AB 970 Title 24 residential building standards. The program is structured as a two-tiered performance-based program, with incentives that vary by building type, the degree to which the building exceeds AB 970 Title 24 standards, and climate zone.

Nonresidential

Retrofit

Express SPC - Program offers cash incentives for energy saved from energy efficient facility retrofits. All IOU customers may participate, but large, complex projects are

targeted. Incentive levels will be lower than those offered in 2001, no special incentives for peak kW reduction or customer size.

Express Efficiency - Program will offer cash rebates to small/ medium IOU customers for installation of energy efficient equipment. New measures will be added and measures covered in Express Efficiency will not be available in Express SPC for those customers who are eligible to participate in both programs.

Energy Management Services/Audits - Program will include energy audits (i.e., phone, mail-back, CD Rom, on-line and on-site audits for small/ medium IOU business customers) and targeted major energy consuming system audits (large business customers).

Builder Operator Certification - A comprehensive training and certification program to be marketed through the Pacific Energy Center (PEC) and building owner associations.

Emerging Technologies - Program will focus on a very few select technologies with market potential to deliver long-term energy savings

New Construction

Savings by Design (SBD) - In 2002, SBD will target commercial, industrial and agricultural new construction markets. The program provides rebates, information and design assistance. Program materials, and program processes will be uniform across the participating IOUs.

Residential/Nonresidential

Cross-Cutting

Upstream Residential Lighting - The program will target residential and business customers in PG&E's service territory and will be delivered through information and rebate programs. Based on the success of last years program, this years program will continue to collaborate with retailers to offer point of sale discounts for Energy Star lighting products.

Upstream Training, Education and Information - This program targets upstream training, education and information for Heating, Ventilation and Air Conditioning, Home Improvement and Appliance programs. This program is designed to enhance the partnership between upstream market actors and statewide utilities and will result in better-trained salespeople and the availability of high efficiency products at reasonable prices.

Savings by Design (SBD)/Energy Design Resources (EDR) - In 2002, SBD/EDR will target commercial, industrial and agricultural new construction and retrofit markets. The program provides information and design assistance. Program materials, and program processes will be uniform across the participating IOUs.

Codes and Standards – Will work with industry and government and conduct advocacy activities on behalf of ratepayers to lower energy bills by improving the state building and appliance codes and standards.

Local Programs

Residential

Energenius® – The program has offered a school-based education program to public and private schools within the PG&E service territory in the past. In 2002 it will build on the successful current structure consisting of five Energenius Educational Series of complete curricula on energy efficiency and gas and electric safety for grades one through eight. The program will target teachers, students and parents and the each Series provides a teacher curriculum guide and student guide.

Pacific Energy Center (PEC) & Energy Training Center (ETC), Stockton - Will support all PG&E residential EE programs with technical expertise, information and educational services.

Hard-to-Reach – This program is designed to educate and encourage Hard-to-reach (HTR) customers to participate in utility programs. The program will promote and facilitate an increase in discretionary residential retrofit activities in the HTR market through a locally delivered marketing and outreach strategy. PG&E will work with third party local implementers to develop communications plans that are tailored to specific HTR sectors. Through these local implementers, the program will provide information on available energy efficiency programs and assistance on how to participate.

Nonresidential

CAMP - Program will build on 2001 successes to target "no cost"/ "low cost" energy savings at customer facilities with sizable compressed air systems.

Small Business Energy Surveys - On-site audits focusing on lighting and HVAC at small commercial/retail businesses outside the Bay Area.

Residential/Nonresidential

Cross-Cutting

School Resources Programs - Will continue to help schools become more energy efficient based on 2001 successes through energy audits, project assistance and workshops. Emphasis on getting school districts access to all available resources (utility, state and federal).

Pacific Energy Center (PEC) & Energy Training Center (ETC), Stockton - Will support all PG&E residential and nonresidential EE programs with technical expertise, information and educational services.

Codes & Standards - Local Government Policy Information - A program focusing on training local government officials on Title 24 changes and encouraging innovation with local codes and their enforcement.

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