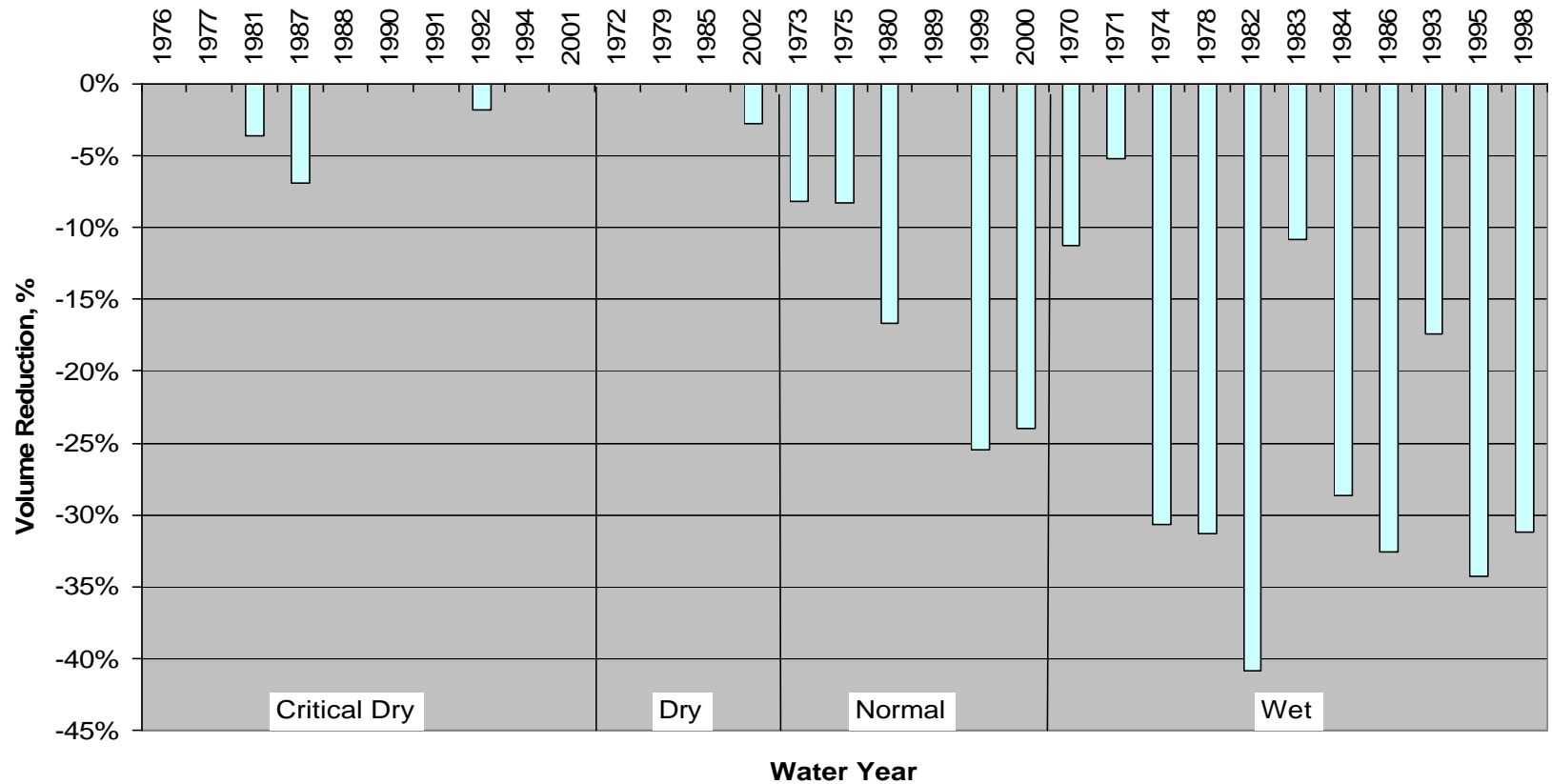


Curtain-Induced Volume Reduction of Lake Water With Temperatures Equal to or Less Than 16 Degrees Celsius On September 30



Volume reduction averaged 1.2% (max. 6.9%) for CD, averaged 0.7% (max. 2.8%) for Dry, averaged 13.5% (max. 25%) for Normal, averaged 24.9% (max. 40.9%) for Wet. Choose representative years for each water year type – 1987 & 1992 for CD, 2002 for Dry, 1980 & 1999 for Normal and 1982 & 1984 for Wet.

**Temperature Profile Comparison for Four Days (6/15, 7/15, 8/15 and 9/15)
Existing Prattville Intake versus Modified Prattville Intake (Curtain, Levees removed and
blending at Canyon Dam) for the following Seven Years**

Wet Year:

1982 – Extreme operation in a Wet Year

1984 – Average Operation in a Wet Year

Normal Year:

1999 – Extreme Operation in a Normal Year

1980 – Average Operation in a Normal Year

Dry Year:

2002 – Average Operation in a Dry Year

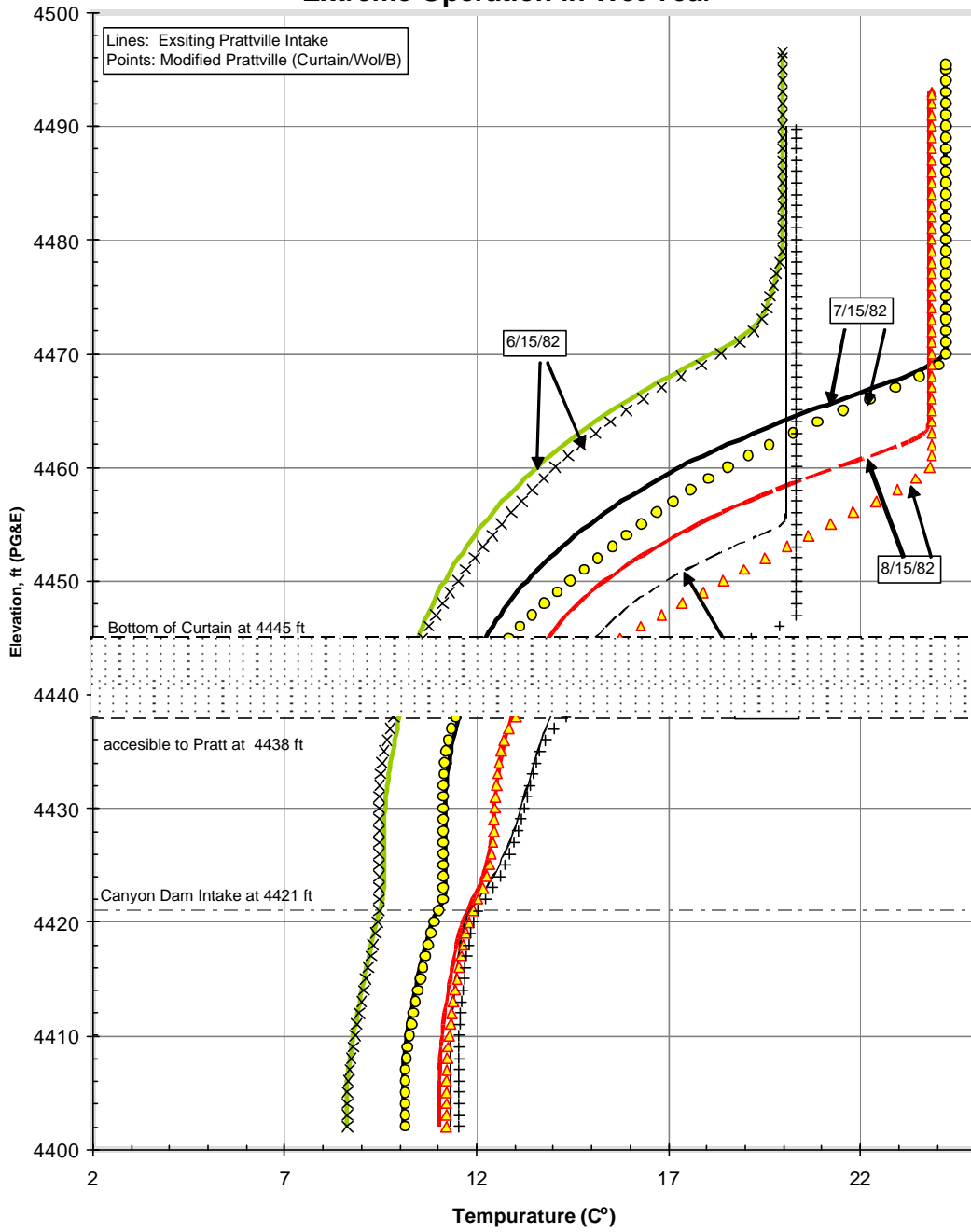
Critical Dry Year:

1987 – Extreme Operation in a Critical Dry Year

1992 – Average Operation in a Critical Dry Year

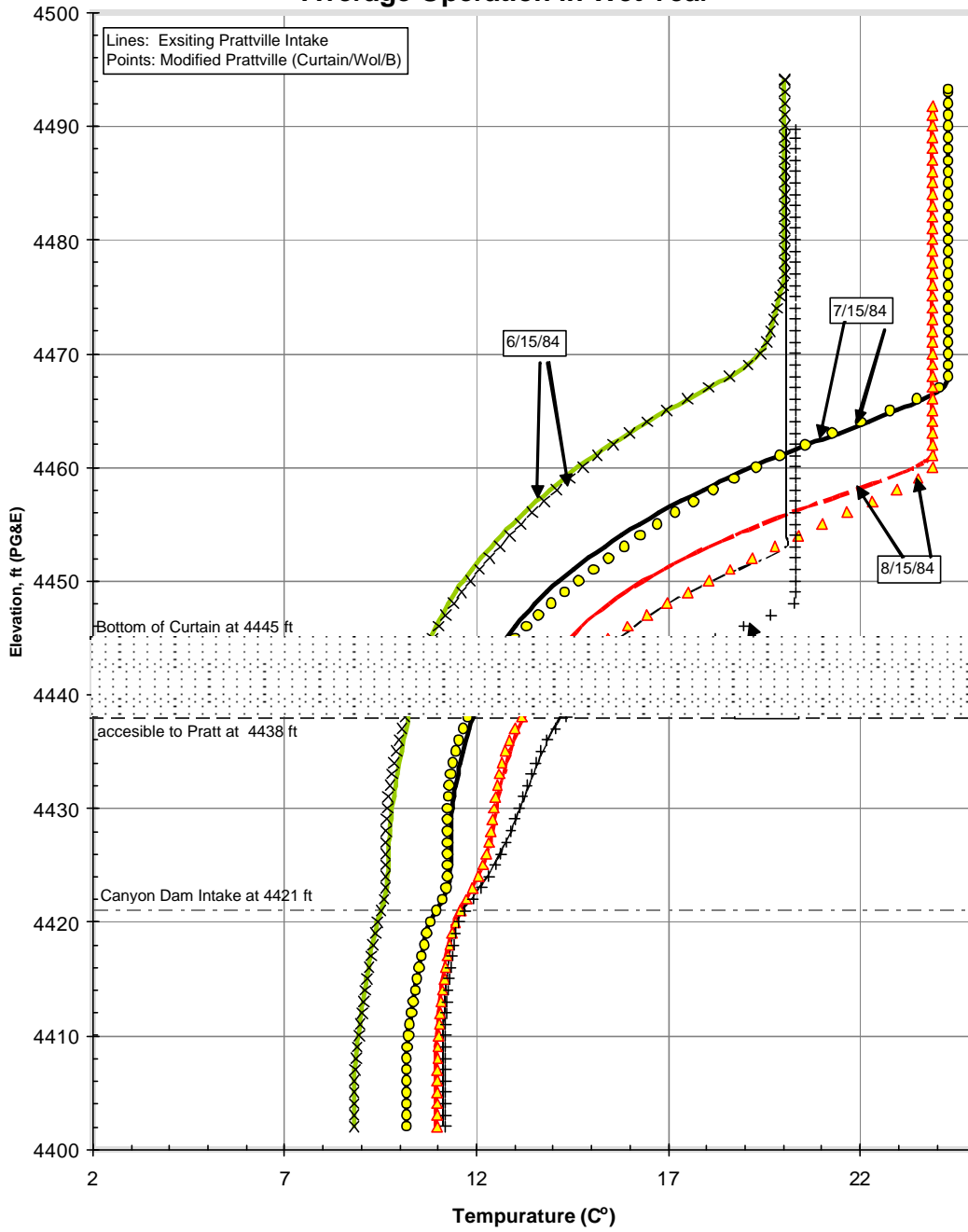
1982

Lake Almanor, Temperature Profiles Extreme Operation in Wet Year



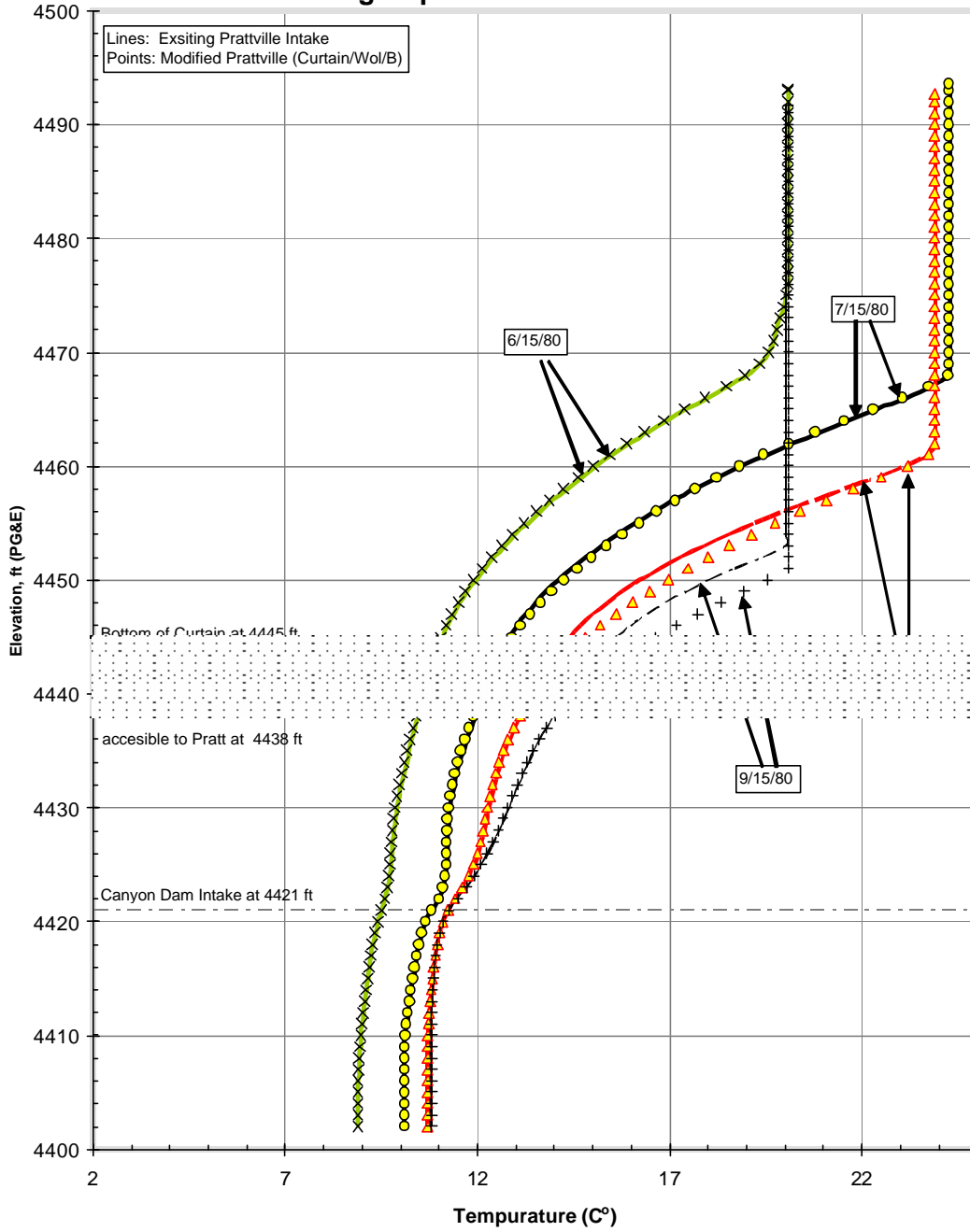
1984

Lake Almanor, Temperature Profiles Average Operation in Wet Year



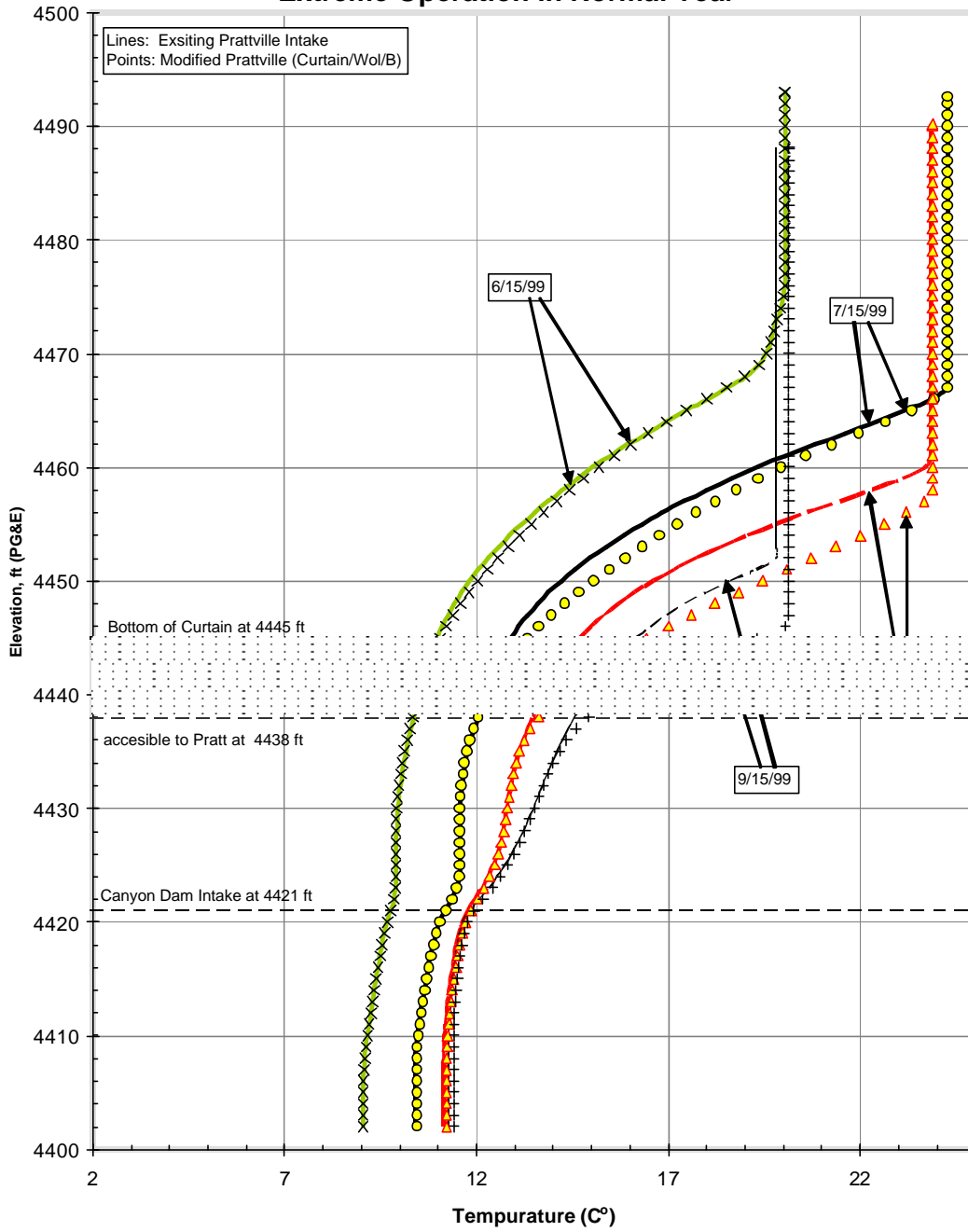
1980

Lake Almanor, Temperature Profiles Average Operation in Normal Year



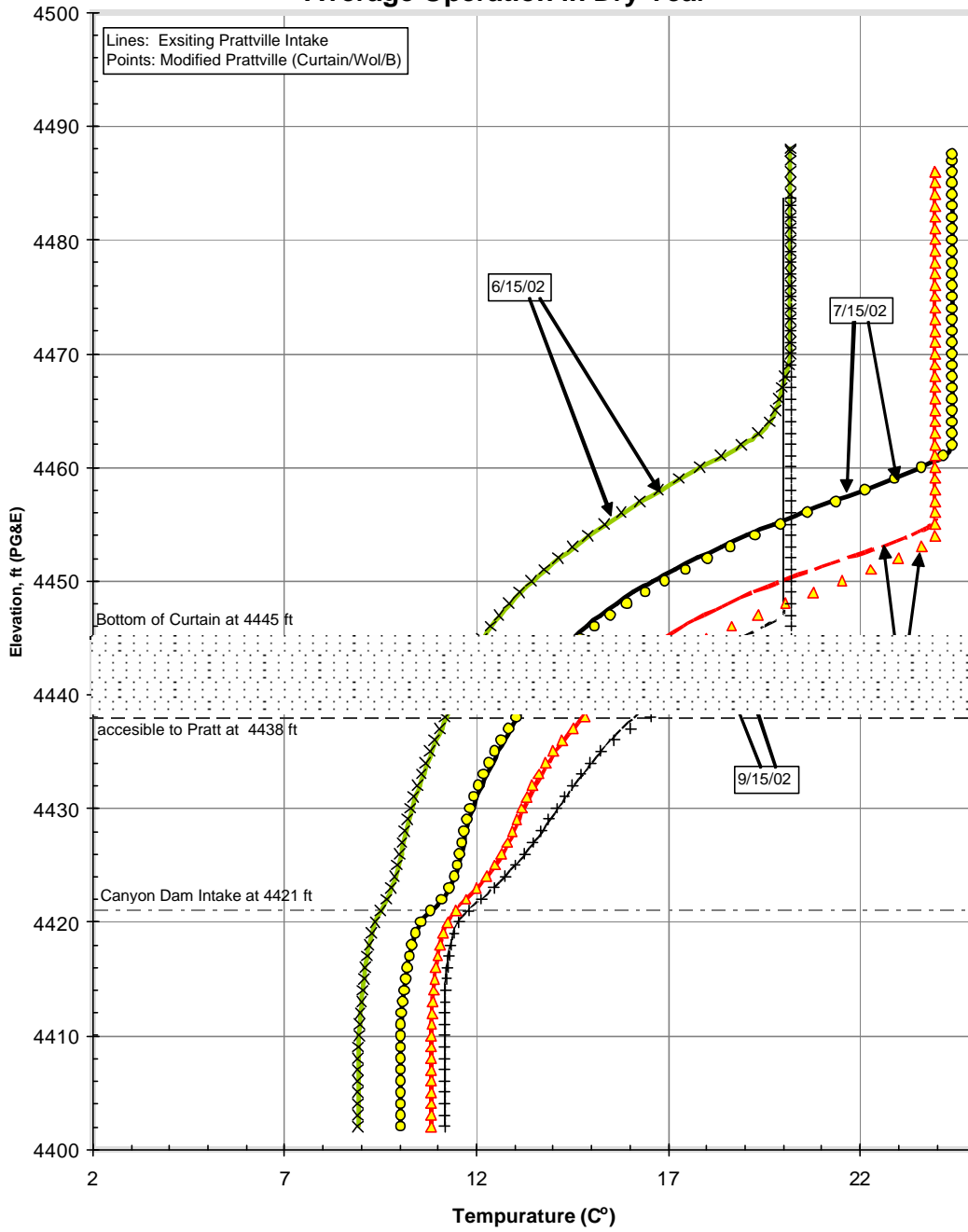
1999

Lake Almanor, Temperature Profiles Extreme Operation in Normal Year



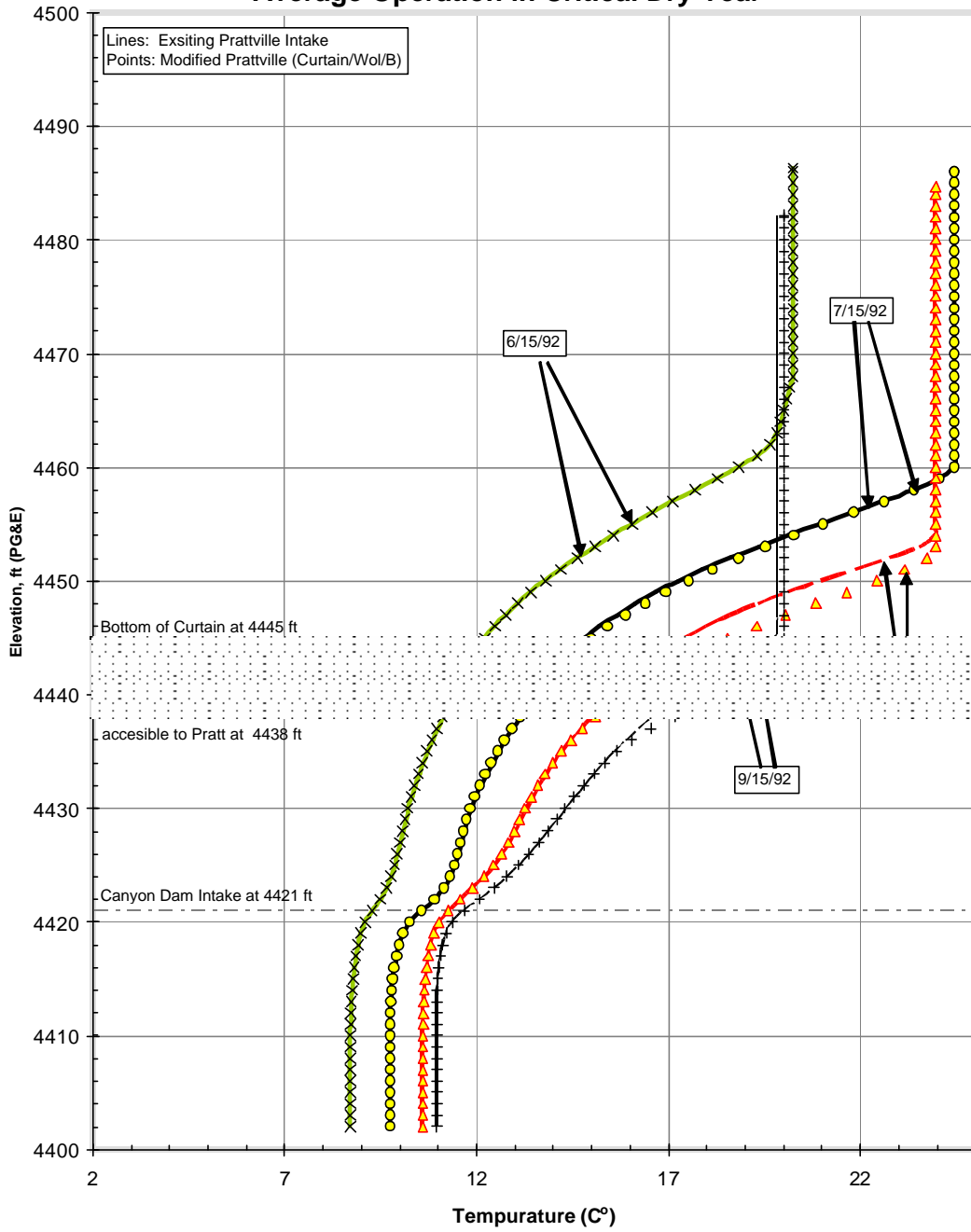
2002

Lake Almanor, Temperature Profiles Average Operation in Dry Year



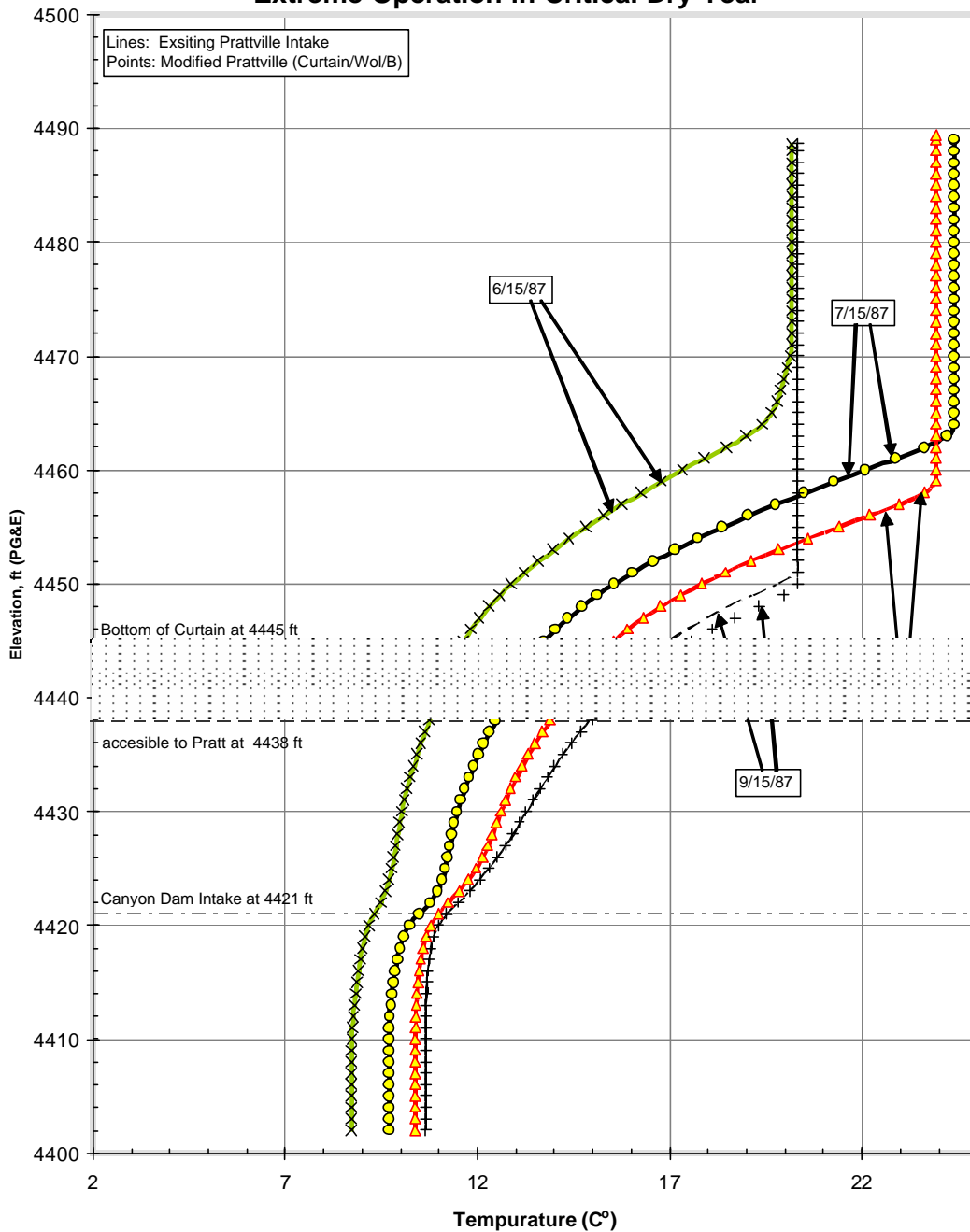
1992

Lake Almanor, Temperature Profiles Average Operation in Critical Dry Year



1987

Lake Almanor, Temperature Profiles Extreme Operation in Critical Dry Year



Volumetric Depletion Rates with Time
For Lake Almanor Water with Temperatures
Equal to or Less than Three Specified Temperature Levels (20°, 16° and 12° C)
Existing Prattville Intake Condition
Versus
Modified Prattville Intake (Curtain, Levees removed and blending at Canyon Dam)

Wet Year:

- 1982 – Extreme operation in a Wet Year
- 1984 – Average Operation in a Wet Year

Normal Year:

- 1999 – Extreme Operation in a Normal Year
- 1980 – Average Operation in a Normal Year

Dry Year:

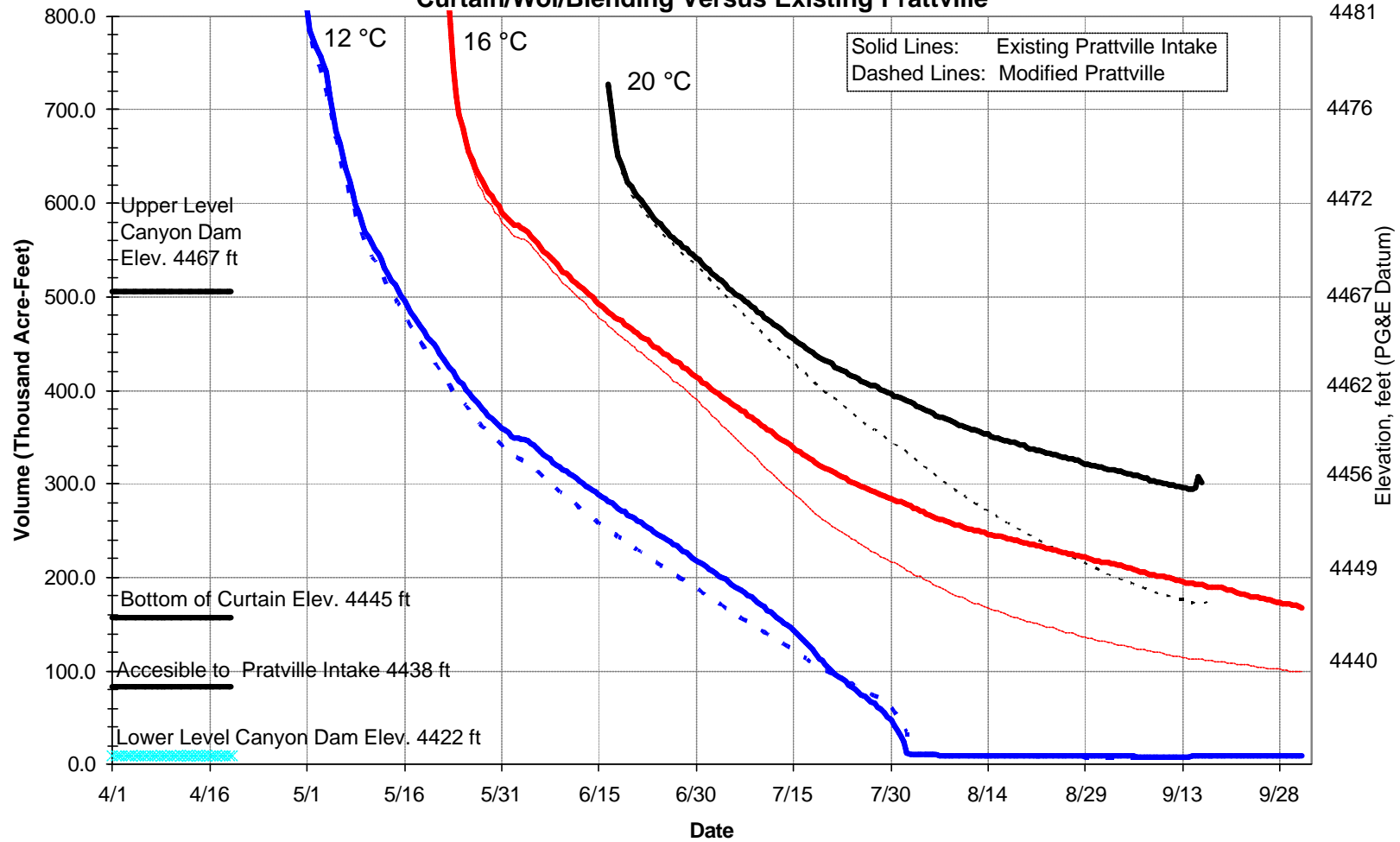
- 2002 – Average Operation in a Dry Year

Critical Dry Year:

- 1987 – Extreme Operation in a Critical Dry Year
- 1992 – Average Operation in a Critical Dry Year

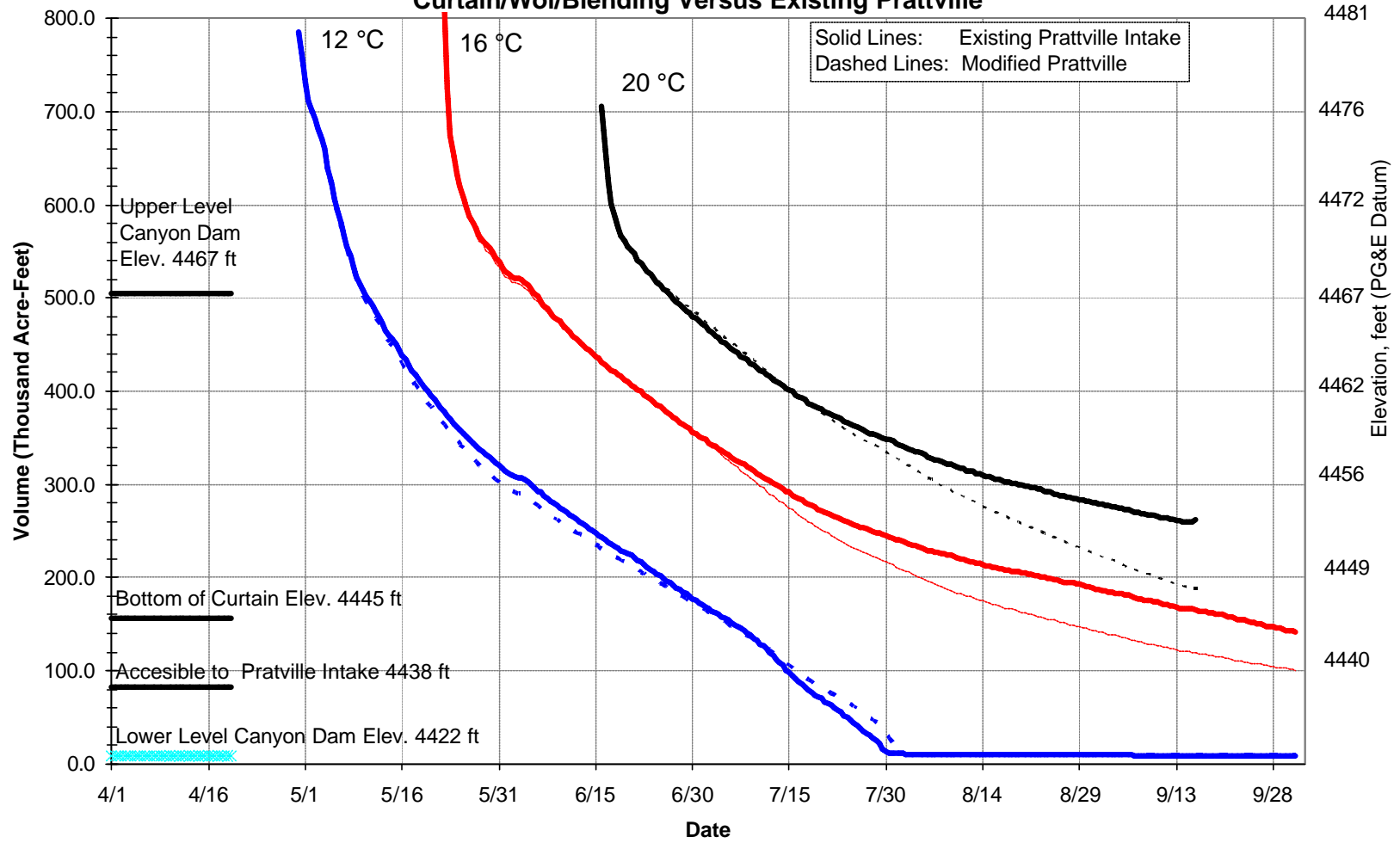
**Available Volume and Corresponding Elevation At Specified Temperature Levels
Wet Year - 1982**

Curtain/Wol/Blending Versus Existing Prattville

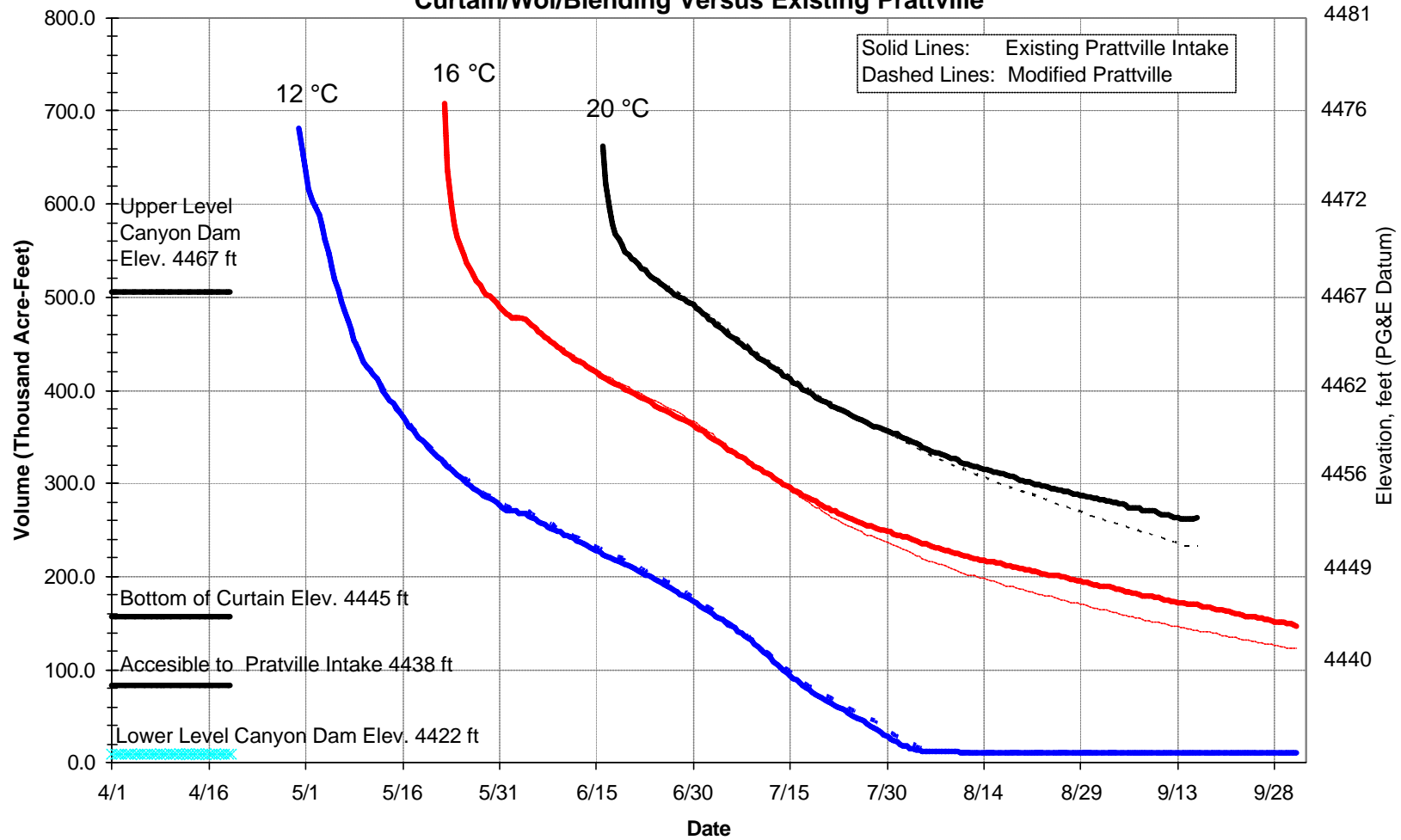


**Available Volume and Corresponding Elevation At Specified Temperature Levels
Wet Year - 1984**

Curtain/Wo/Blending Versus Existing Prattville

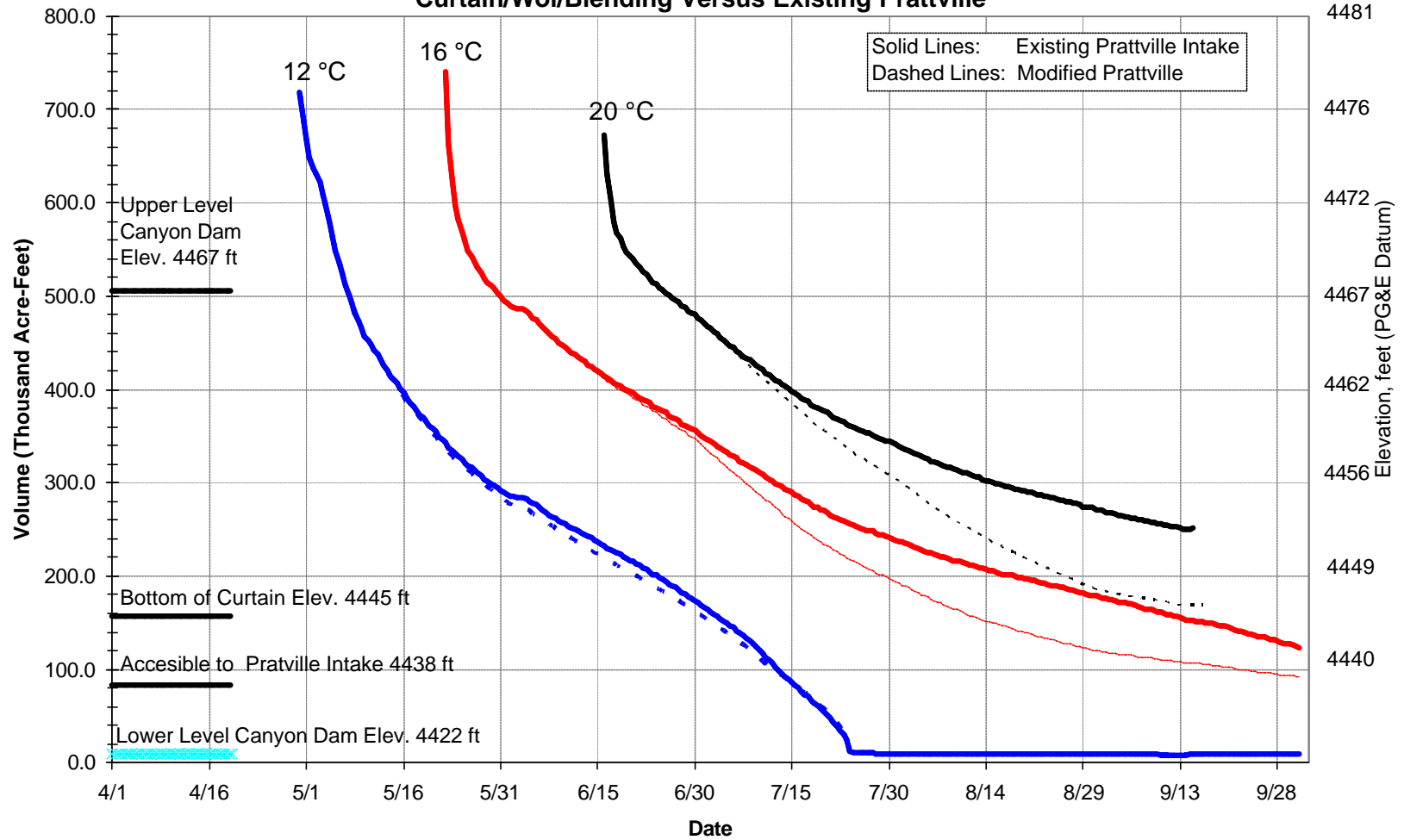


**Available Volume and Corresponding Elevation At Specified Temperature Levels
Normal Year - 1980
Curtain/Wo/Blending Versus Existing Prattville**

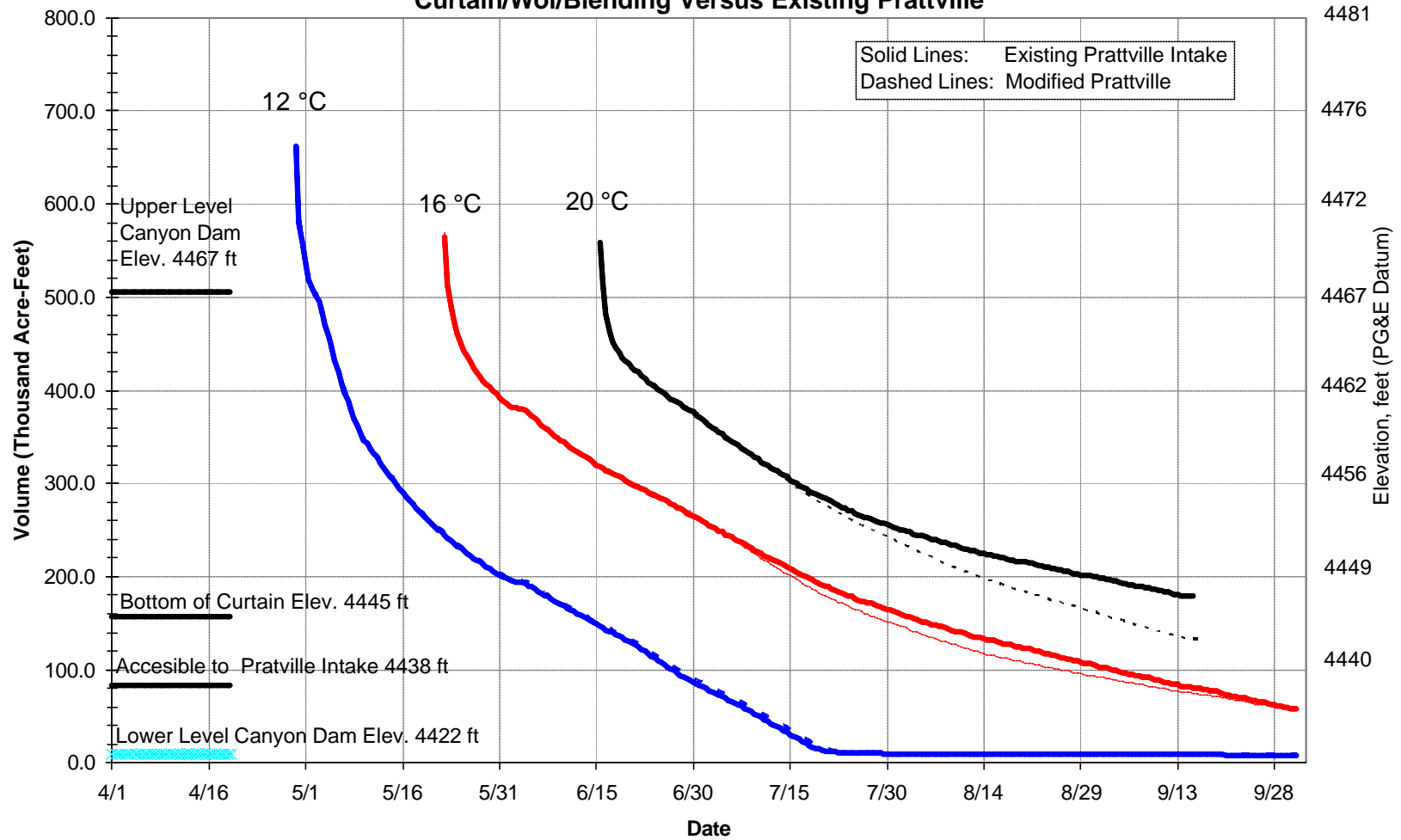


**Available Volume and Corresponding Elevation At Specified Temperature Levels
Normal Year - 1999**

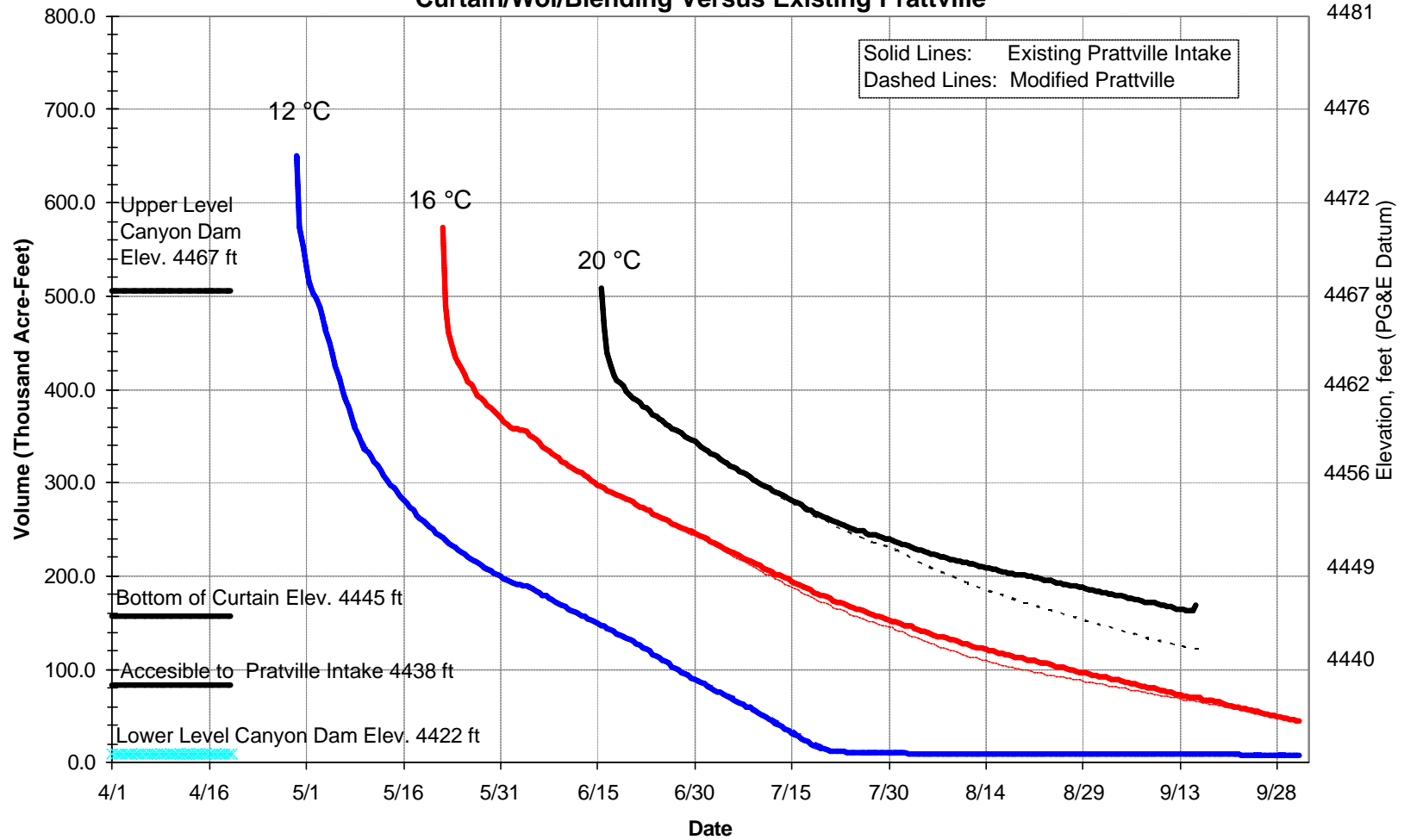
Curtain/Wo/Blending Versus Existing Prattville



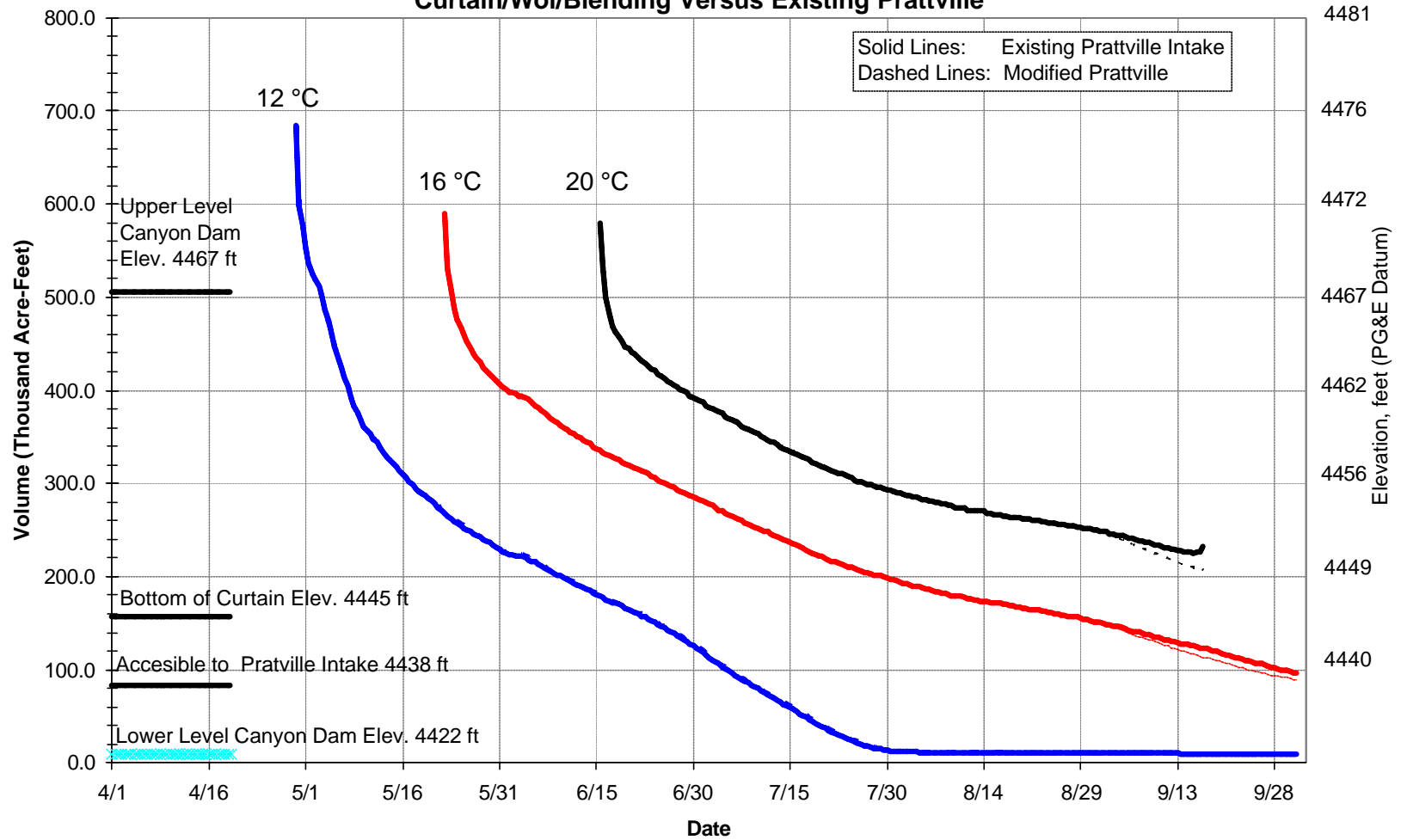
**Available Volume and Corresponding Elevation At Specified Temperature Levels
Dry Year - 2002
Curtain/Wol/Blending Versus Existing Prattville**



**Available Volume and Corresponding Elevation At Specified Temperature Levels
Critical Dry Year - 1992
Curtain/Wol/Blending Versus Existing Prattville**



**Available Volume and Corresponding Elevation At Specified Temperature Levels
Critical Dry Year - 1987
Curtain/Wol/Blending Versus Existing Prattville**



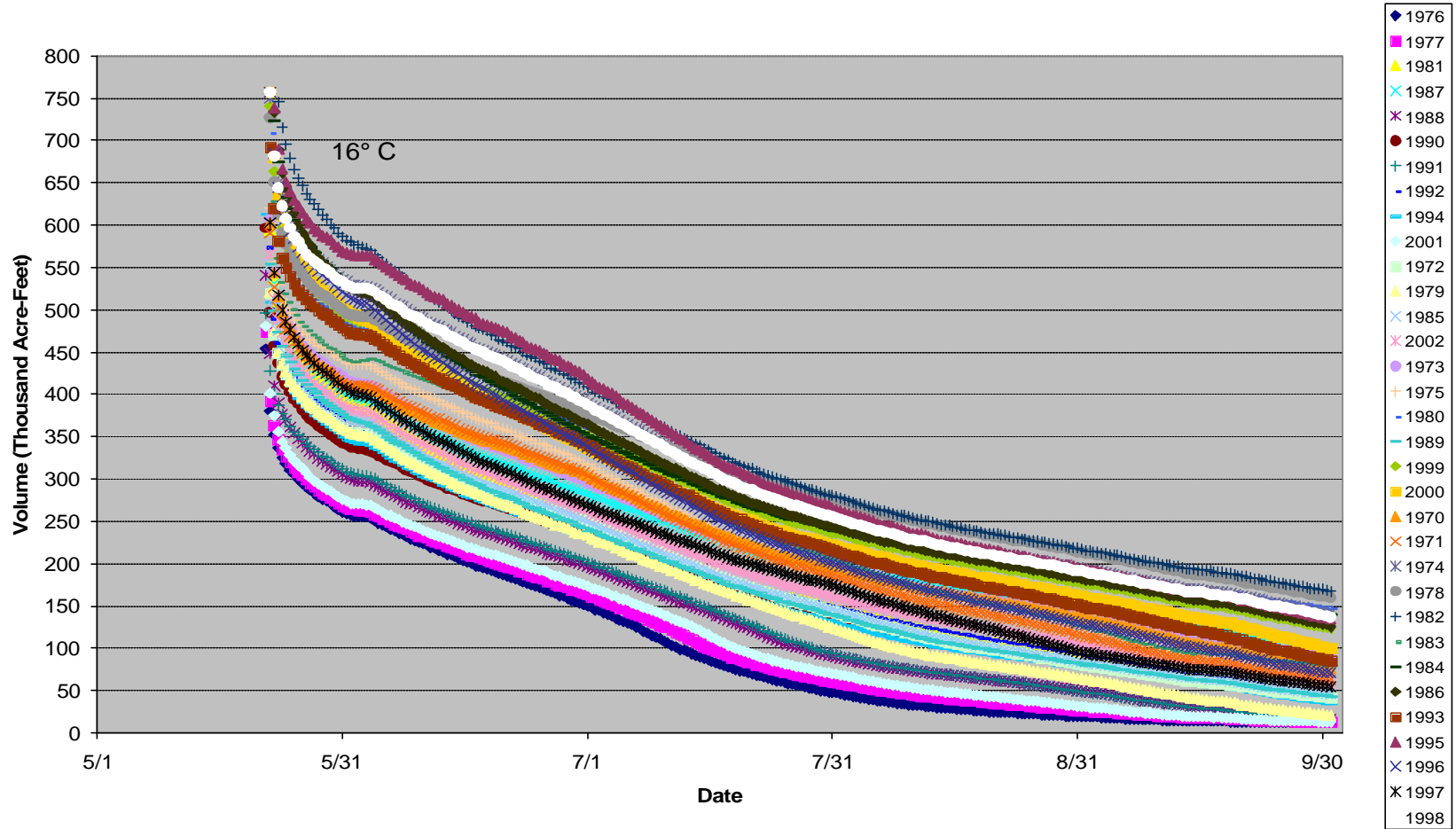
**A More Focused Comparison at Lake Waters
With Temperatures Equal to or Less than 16° C
Existing Prattville Intake Condition**

Versus

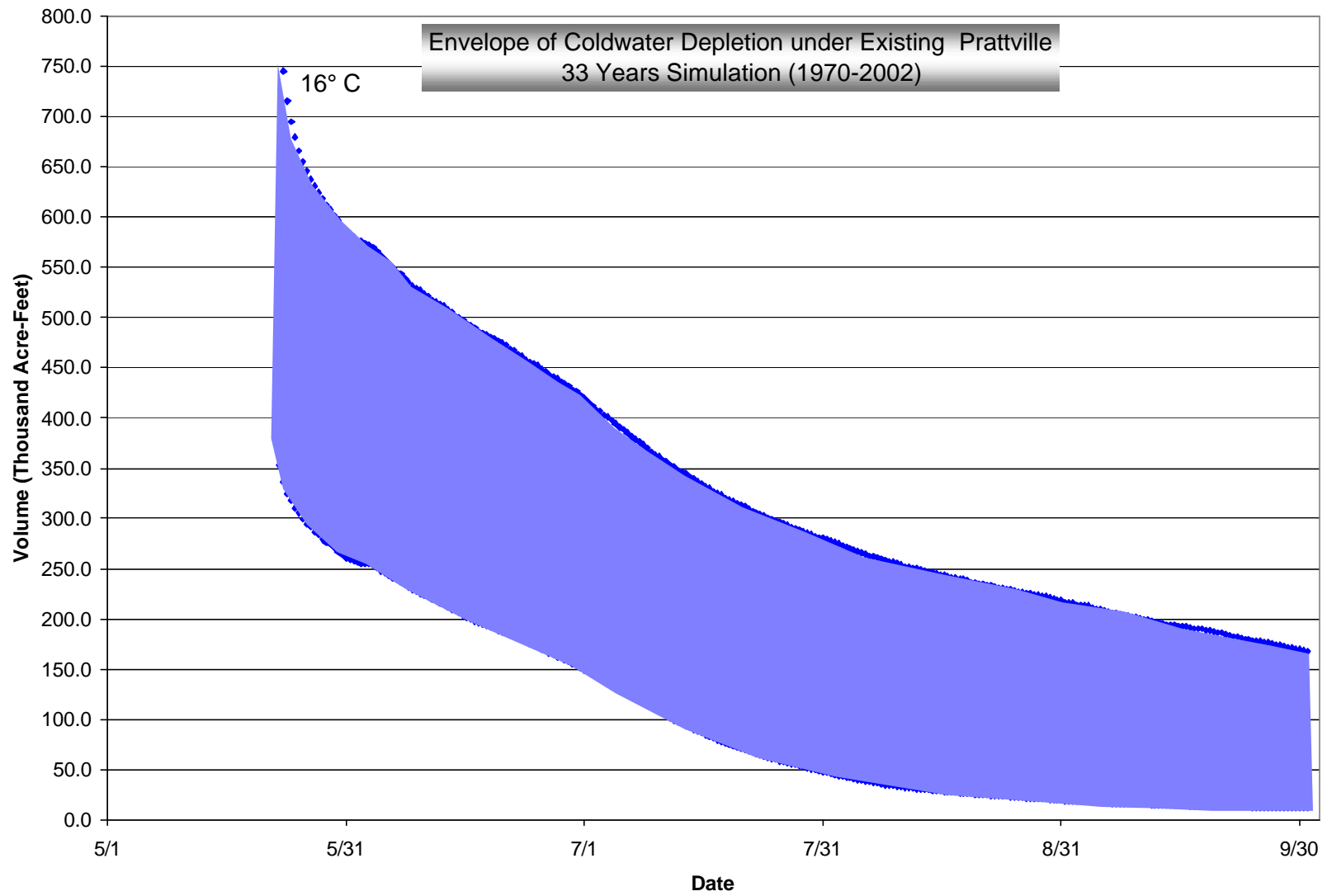
Modified Prattville Intake (Curtain, Levees removed and blending at Canyon Dam)

- Individual Volumetric Depletion Rates from 1970-2002
- Envelope for Overall 33-year Simulation Results
- Envelope by the Water Year Type

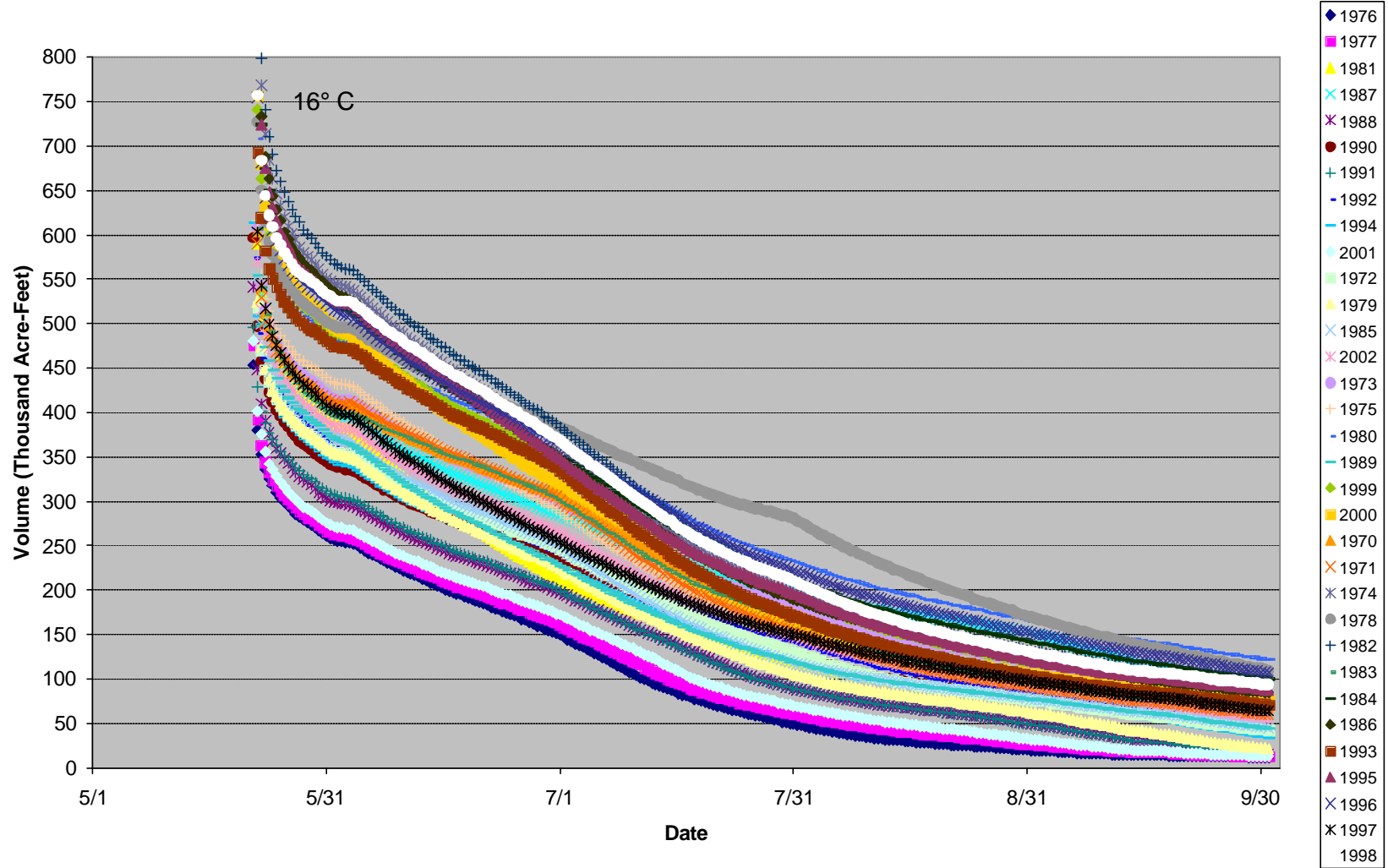
Available Volume of Water with Temperatures Lower than the Specified Level in Lake Almanor, Existing Conditions, 1970-2002

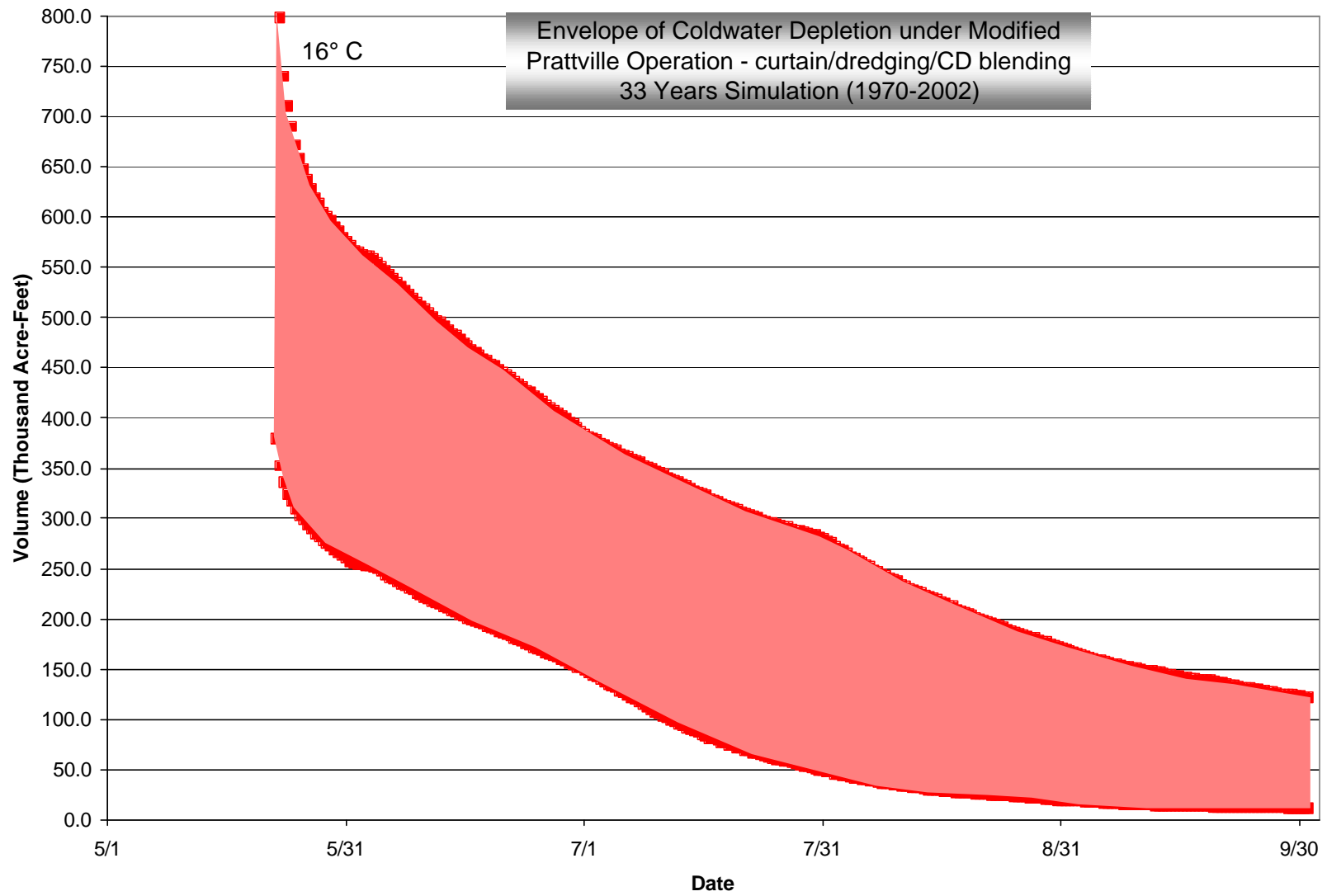


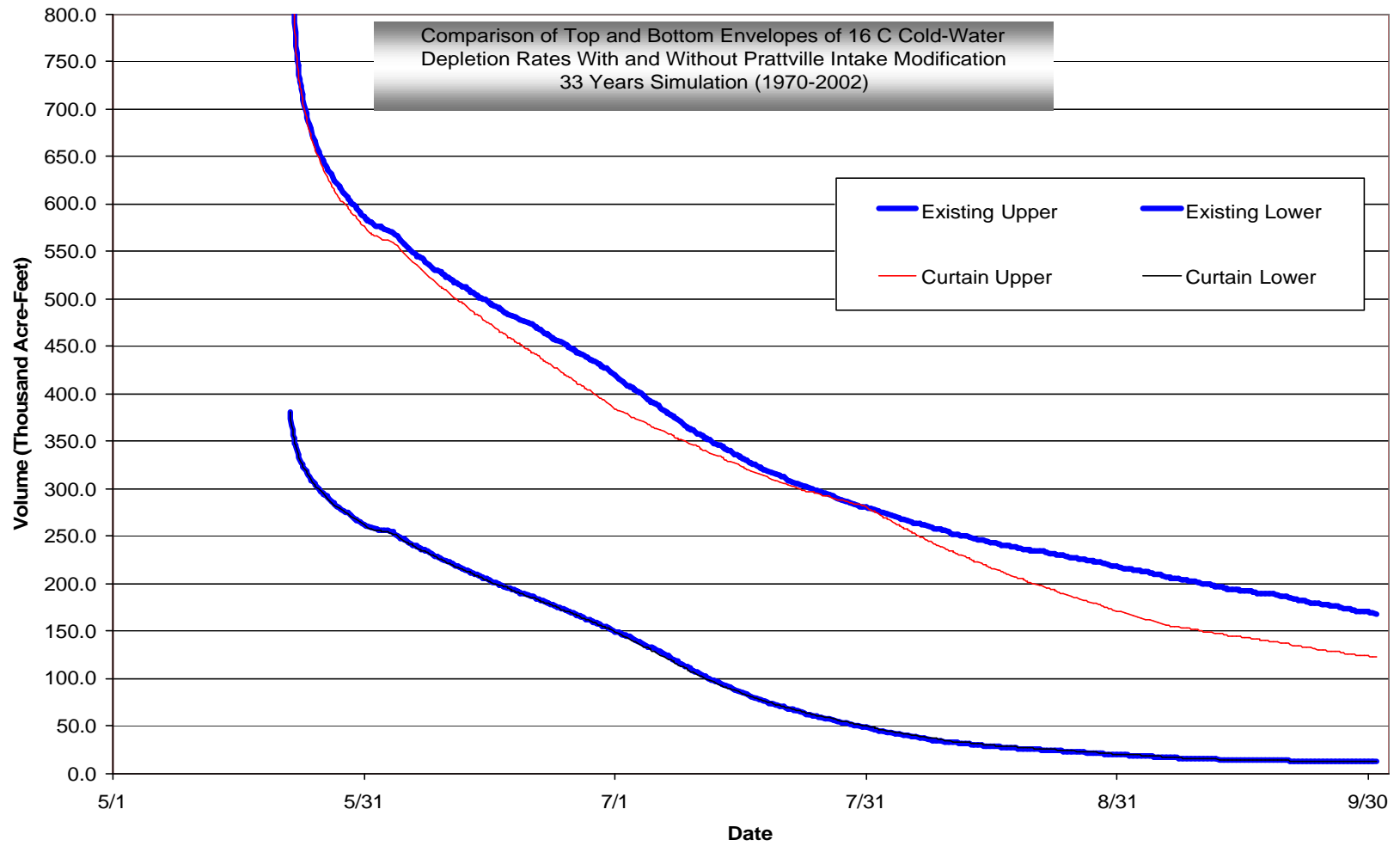
Natural variation of cold-water (using 16 C) depletion rate with time under existing Prattville Intake.



Available Volume of Water with Temperatures Lower than the Specified Level in Lake Alamnor, Curtain case without levees and with Canyon Dam blending

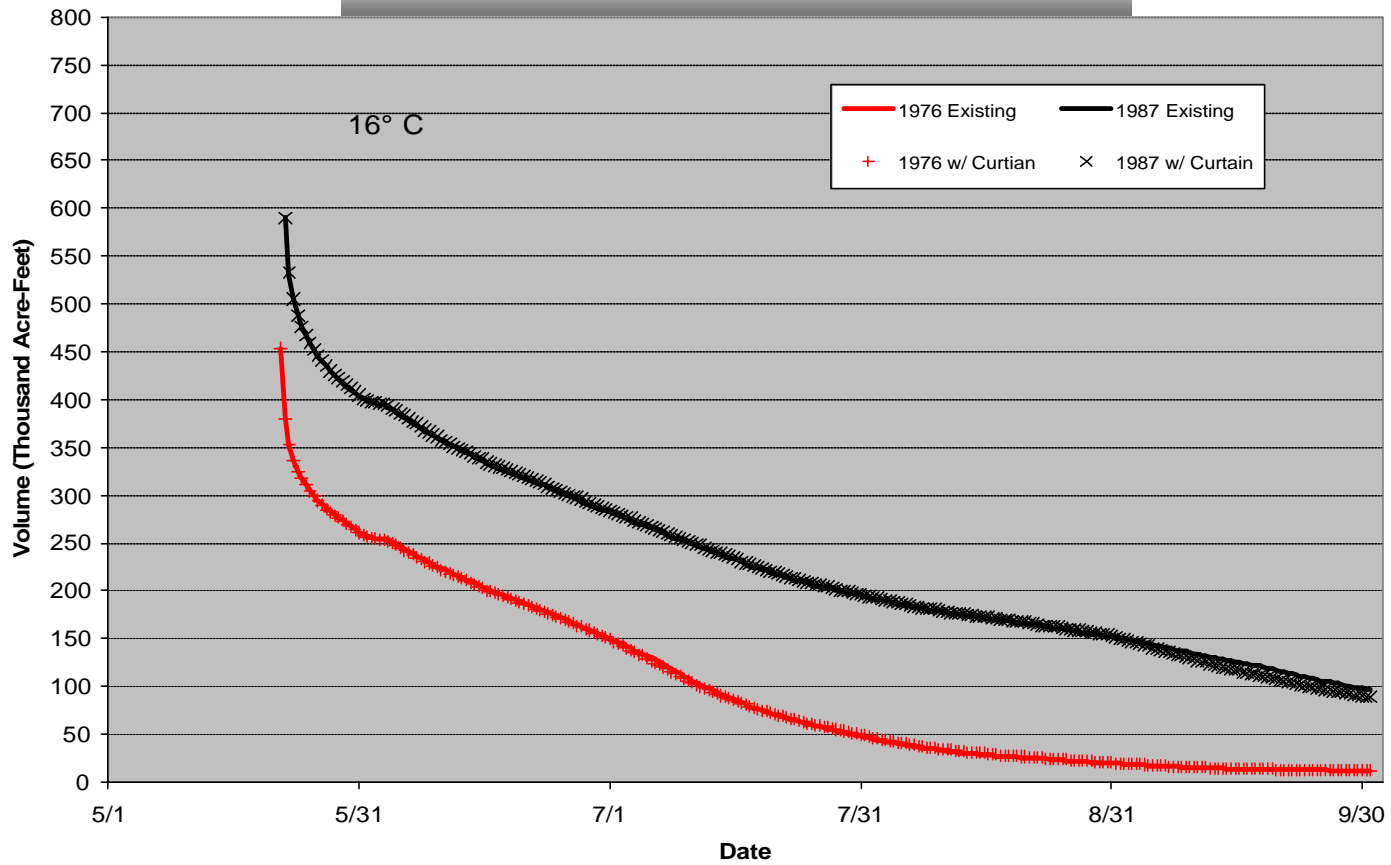






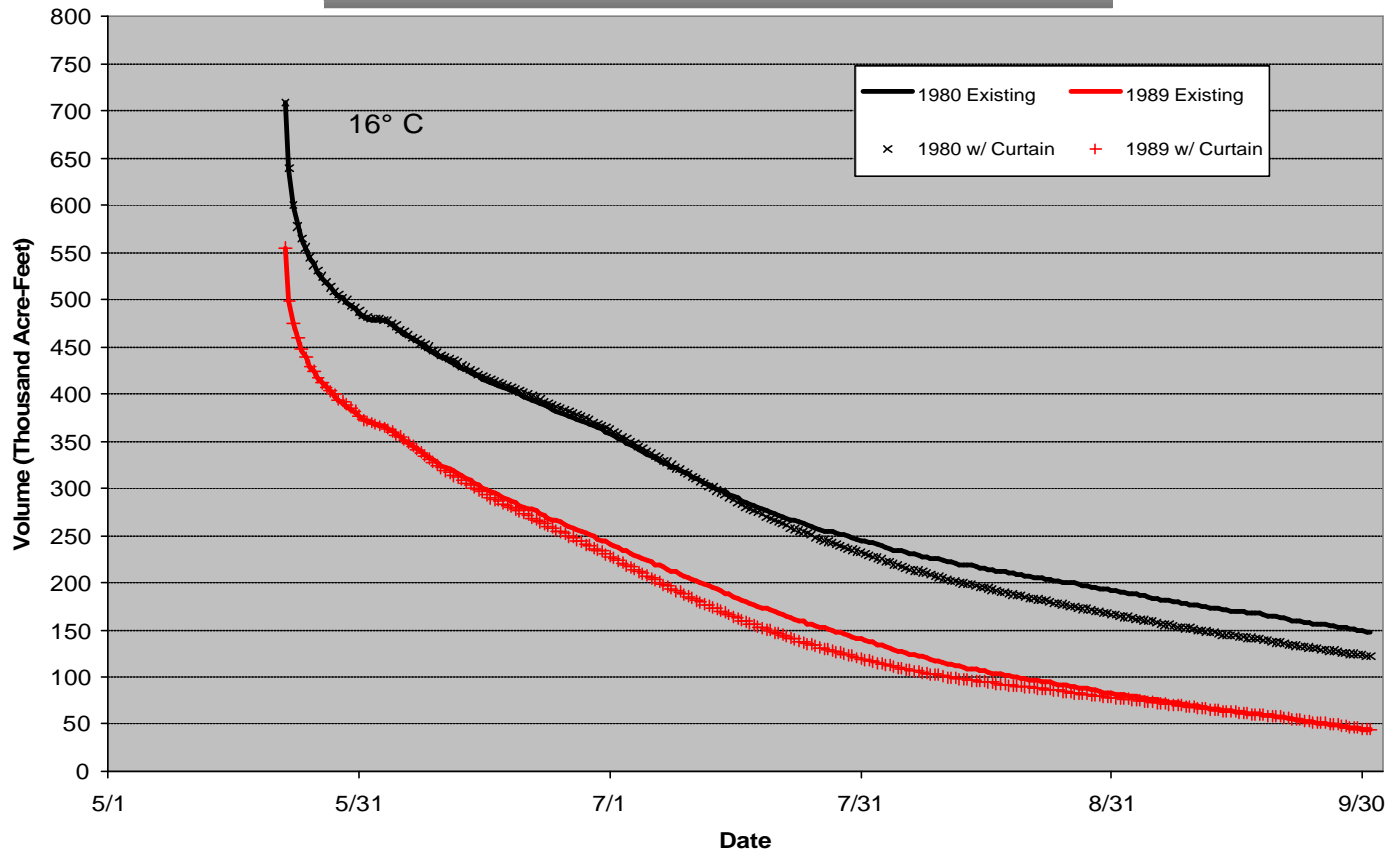
Envelope Comparison of Cold-water depletion rate for the overall period 1970-2002 → curtain-induced change well within natural variation

Comparison of Top and Bottom Envelopes of 16 C Cold-Water
Depletion Rates With and Without Prattville Intake Modification
Envelope of All Critical Dry Years in 1970-2002



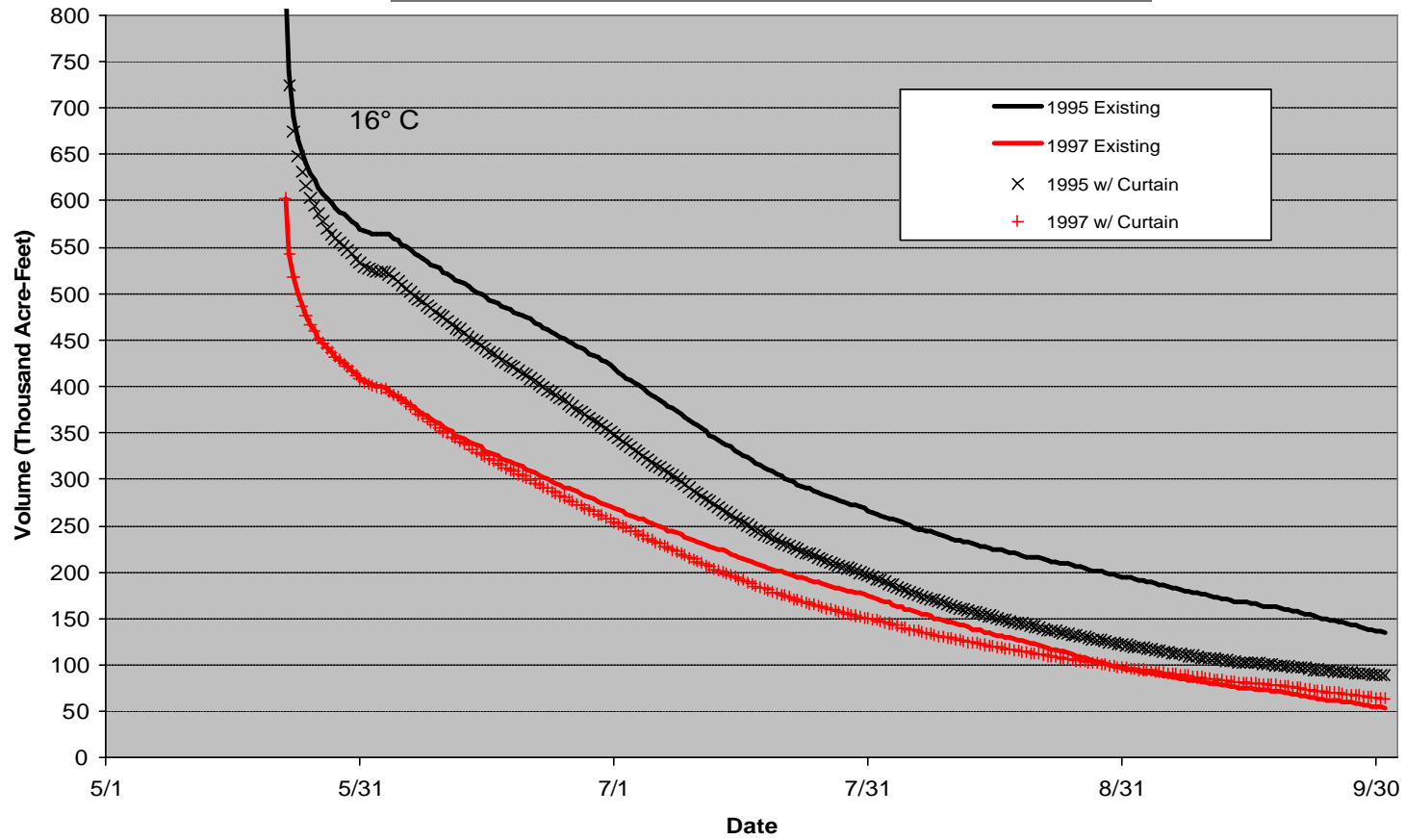
Envelope Comparison of Cold-water depletion rate for all **Critical Dry Years** in 1970-2002, with and without curtain

Comparison of Top and Bottom Envelopes of 16 C Cold-Water Depletion Rates With and Without Prattville Intake Modification Envelope of All Normal Years in 1970-2002



Envelope Comparison of Cold-water depletion rate for all **Normal Years** in 1970-2002, with and without curtain

Comparison of Top and Bottom Envelopes of 16 C Cold-Water Depletion Rates With and Without Prattville Intake Modification
Envelope of All Wet Years in 1970-2002



Envelope Comparison of Cold-water depletion rate for all **Wet Years** in 1970-2002, with and without curtain