

RECLAMATION

Managing Water in the West

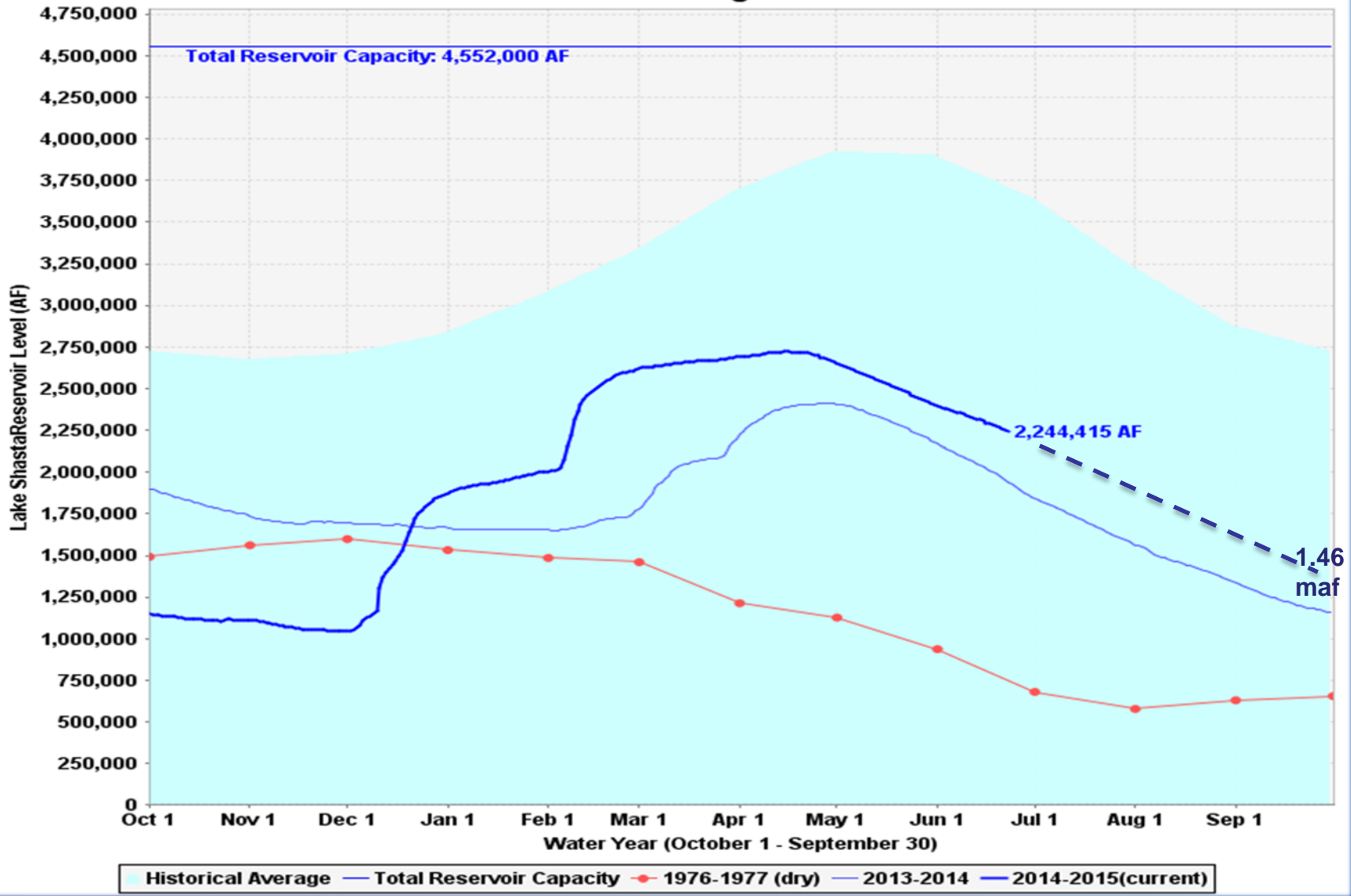
Revised Shasta Temperature Management Plan Overview

June 2015



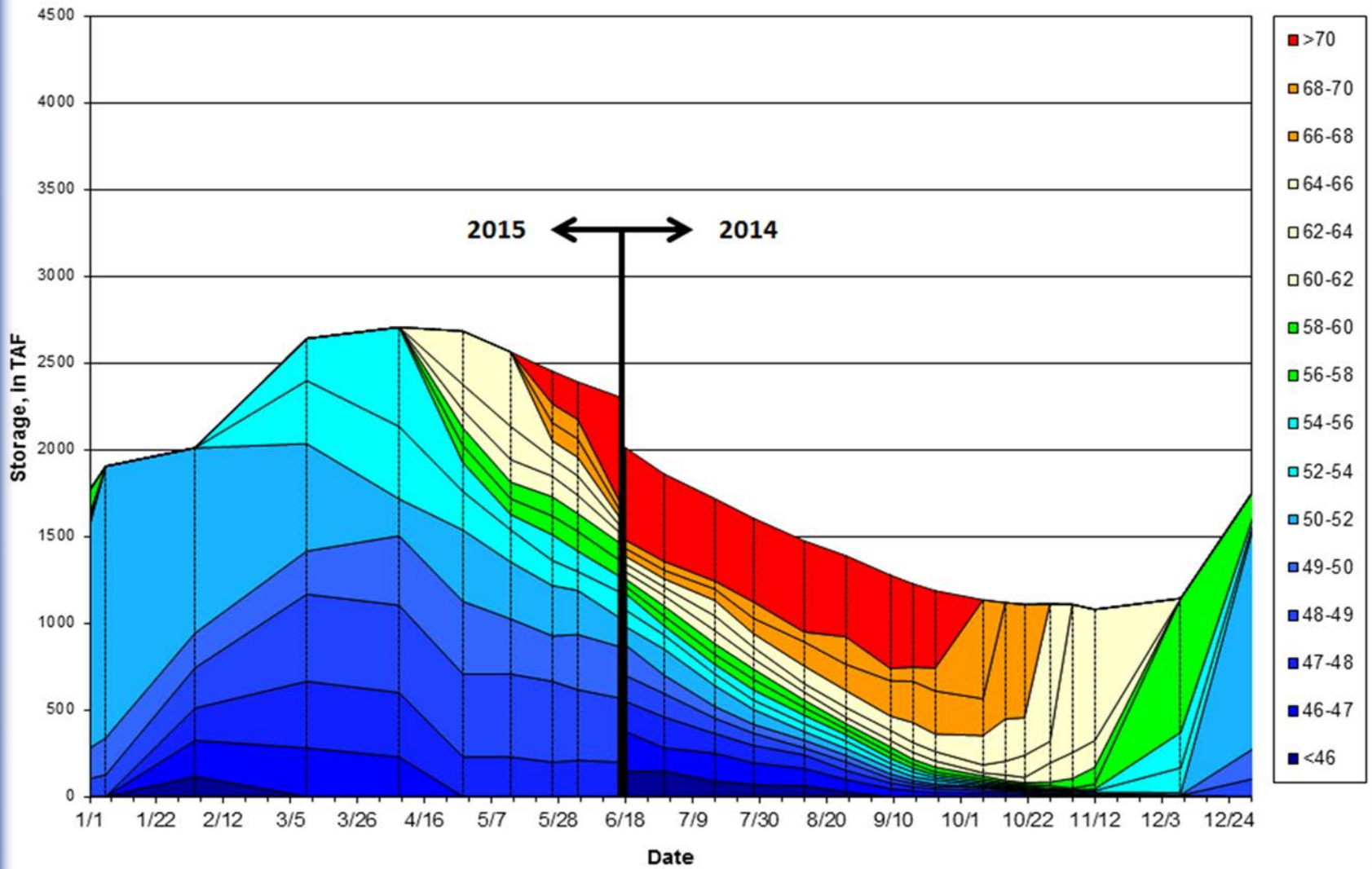
U.S. Department of the Interior
Bureau of Reclamation

Lake Shasta Storage Levels

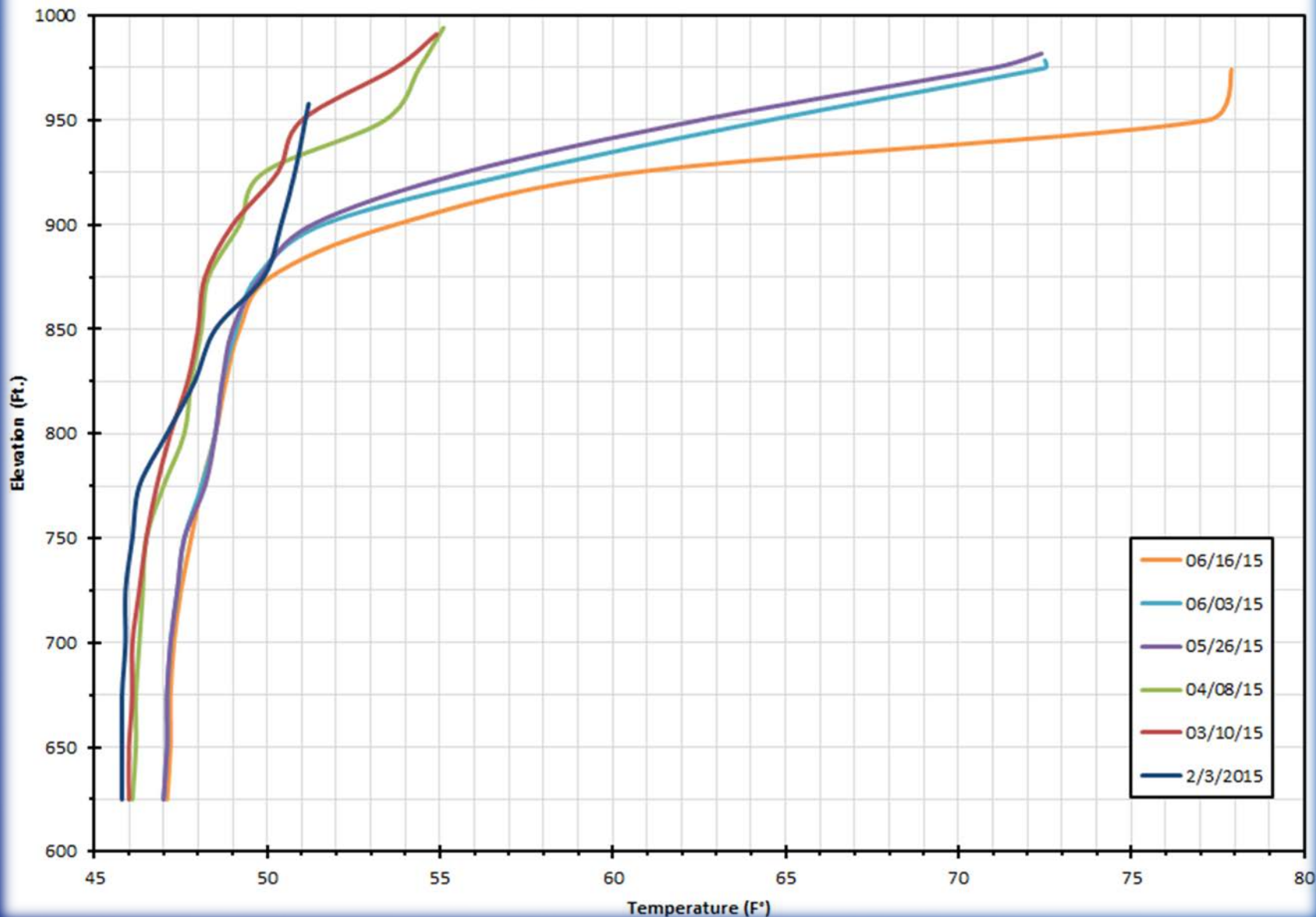


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Lake Shasta Isothermobaths (Water Temperature, in ° F)



Shasta Temperature Profile Comparison



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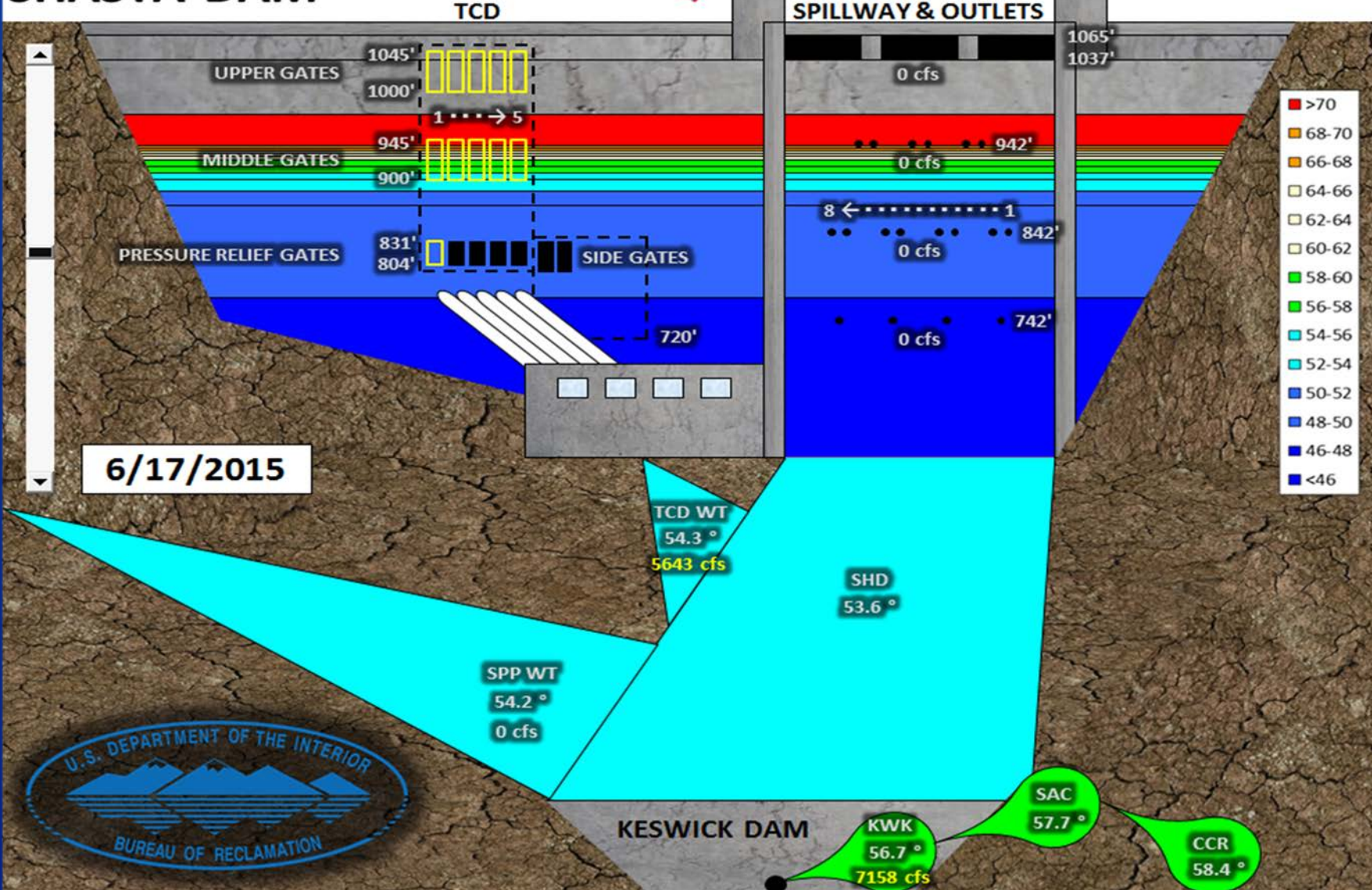
Shasta Temperature Control Device



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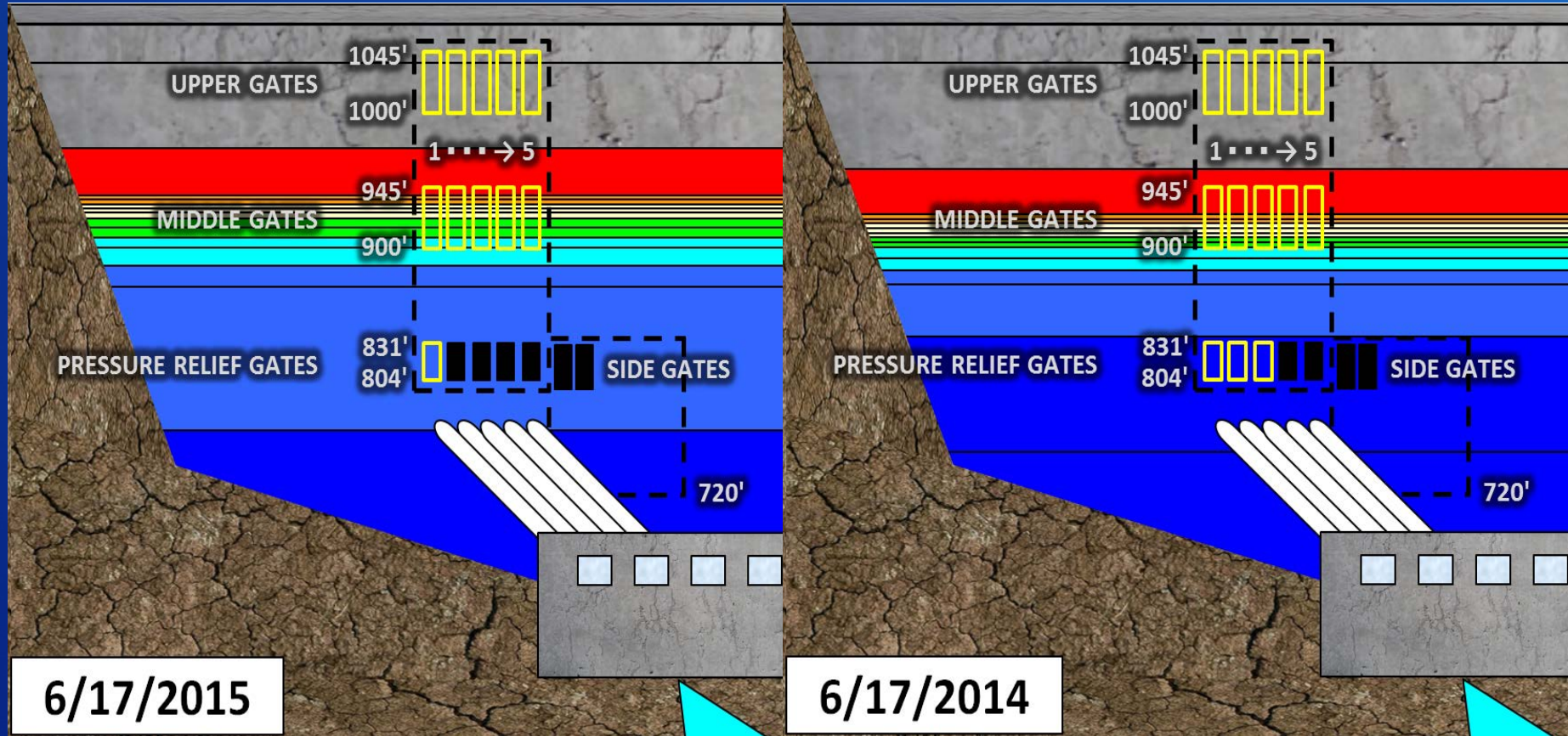
Beta Version Shasta TCD Dashboard

SHASTA DAM



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Shasta TCD Configuration 2015 vs. 2015



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Temperature Gage Locations



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Revised Plan Elements

- Target as close to 57°F as possible at CCR
- Closely monitor real-time temperatures near the Highway 44 bridge (SAC)
- Allowing short-term exceedances above 58°F at CCR to conserve cold water
- Set base flow at 7,250 cfs for June & July
- Delay full side-gate operation as long as possible
- Establish a Real-time Operations Team

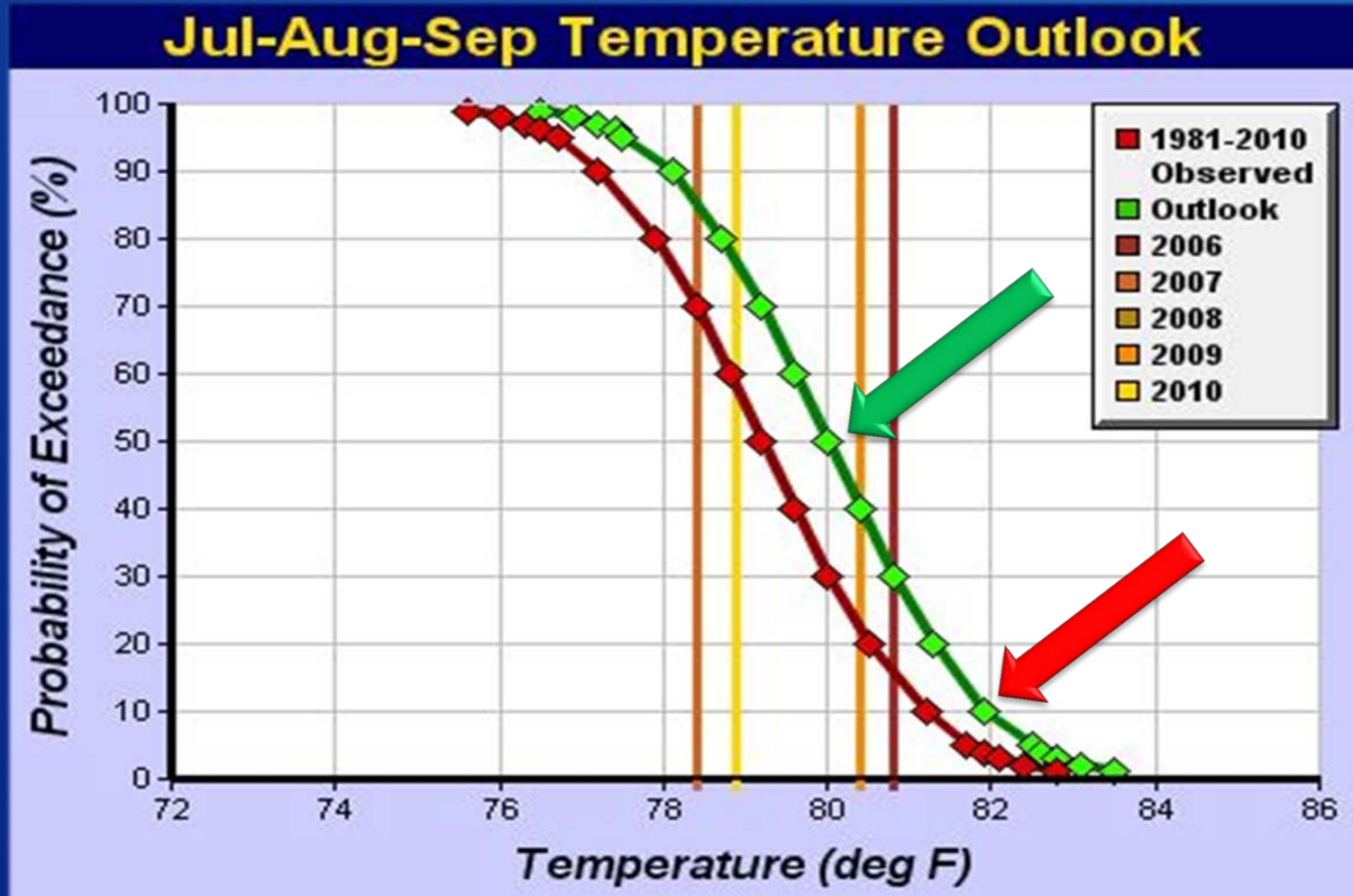
Revised Plan Elements

Base Keswick Flows

2015	Flow (cfs)
June	7,250
July	7,250
August	7,250
September	6,500
October	5,000

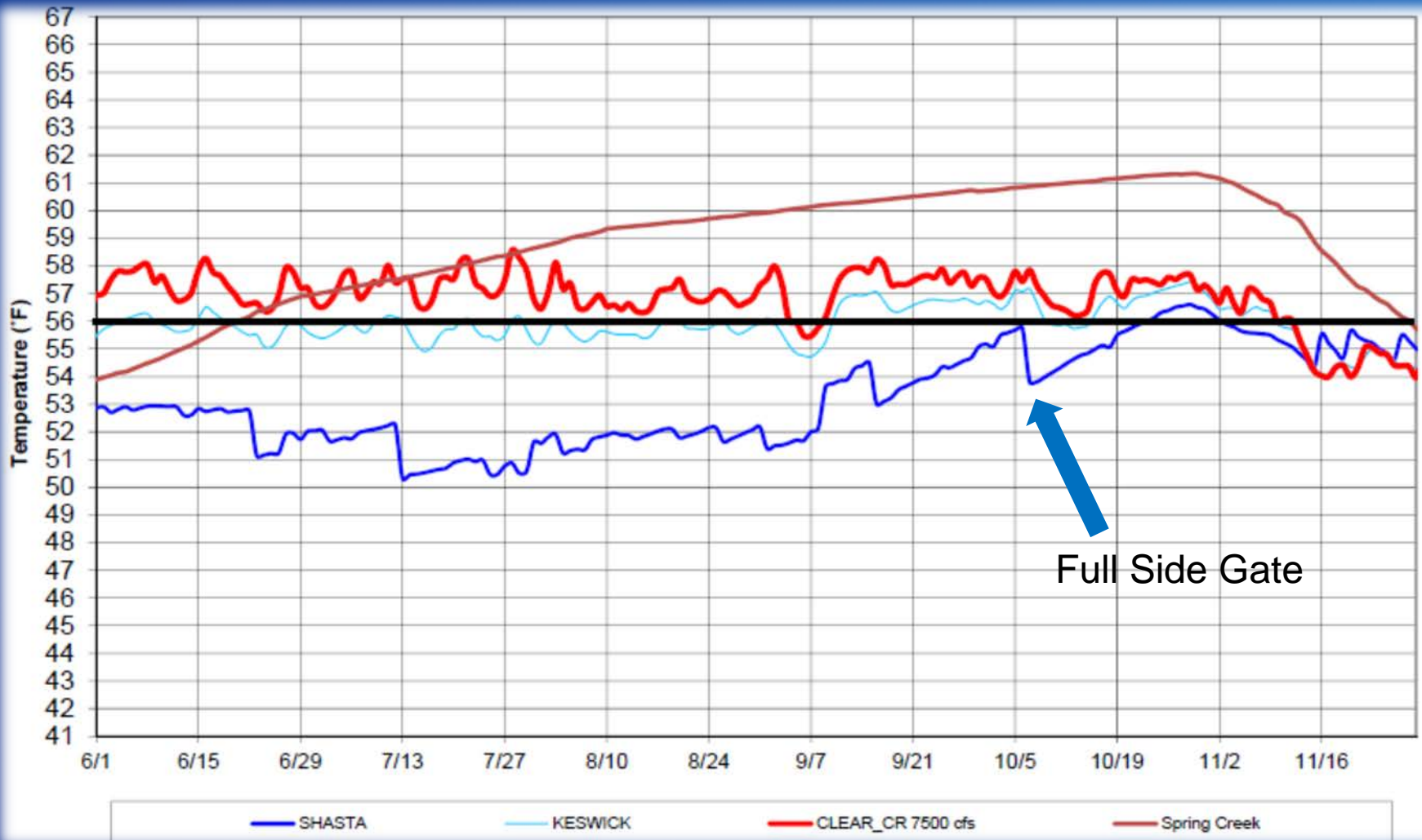
Flows subject to adjustment by the Real-Time Operations Team based on plan performance in June and July.

3 Month Temperature Outlook Shasta Dam



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Generic Temperature Trace Sacramento River 10% L3MTO



Additional Actions

- New temperature gage site (SAC)
- Deploy additional temperature sensors
- Increased redds and river monitoring
- Tracking report of temperature exposure
- More intense real-time decision making
- Increased capacity at LSNF Hatchery to accommodate up to 400 adults
- Model review effort for future refinements