

RECLAMATION

Managing Water in the West

Folsom Reservoir

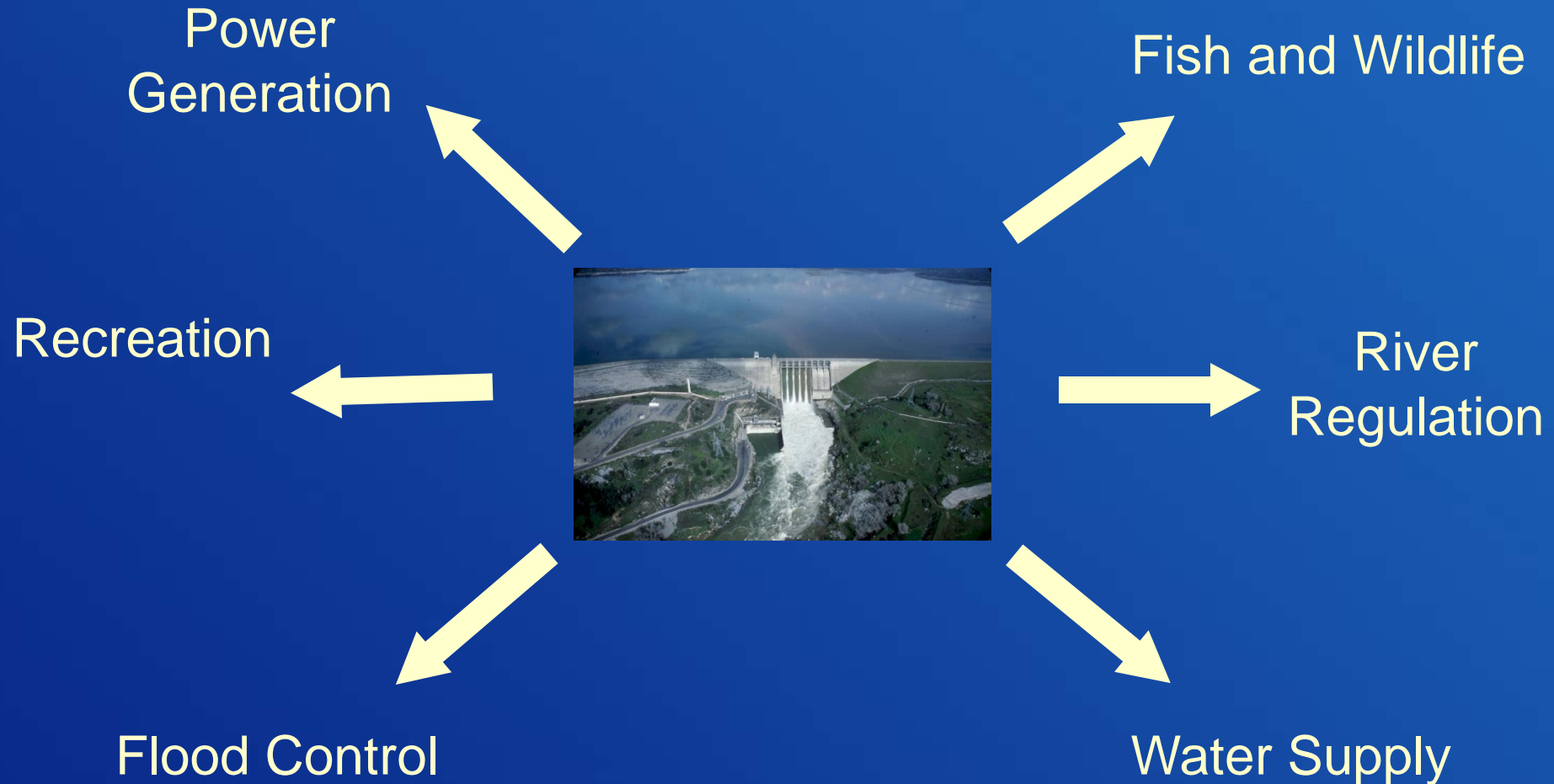
Overview



U.S. Department of the Interior
Bureau of Reclamation

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Authorized Purposes



American River Division



- Folsom Reservoir ~1M af (1.2 GCM)
- Folsom Powerplant 215,070 kW



- Water Temperatures and Flows (steelhead v. fall-run)
- SAFCA Flood Control Diagram
- High Visibility Project

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Folsom Basic Information

- Average annual Inflow - 2.7 MAF
- Maximum Storage – 977 TAF
- Surcharge capacity – 110 TAF
- 3 Lower outlet tubes
- 3 Upper outlet tubes
- 8 Main spillway gates
- 6 Joint Federal Project spillway gates

Other Reservoirs on the American River

- Eighteen upstream reservoir
- Three upstream reservoirs considered in SAFCA agreement
- Upstream reservoirs provide impairment to Folsom reservoir inflow

How Does Folsom Reservoir Fit In

- Integrated CVP Operation
- Delta outflow/habitat needs
- Delta Salinity Management
- Instream needs
- Water supply needs (E.G. Delta Exports)
- American River contractors

Coordinating the Operations

- U. S. Fish and Wildlife Service
- National Marine Fisheries Service
- Western Area Power Administration
- U. S. Army Corps of Engineers
- State Water Resources Control Board
- State Department of Water Resources
- State Department of Fish and Game
- Local Stakeholders

Flood Control Operations

- Five standard ways to release flood water
 - Lower Outlet tubes
 - Upper outlet tubes
 - Powerhouse
 - New JFP facility
 - Original spillway
- One emergency method of releasing flood water
 - Emergency spillway

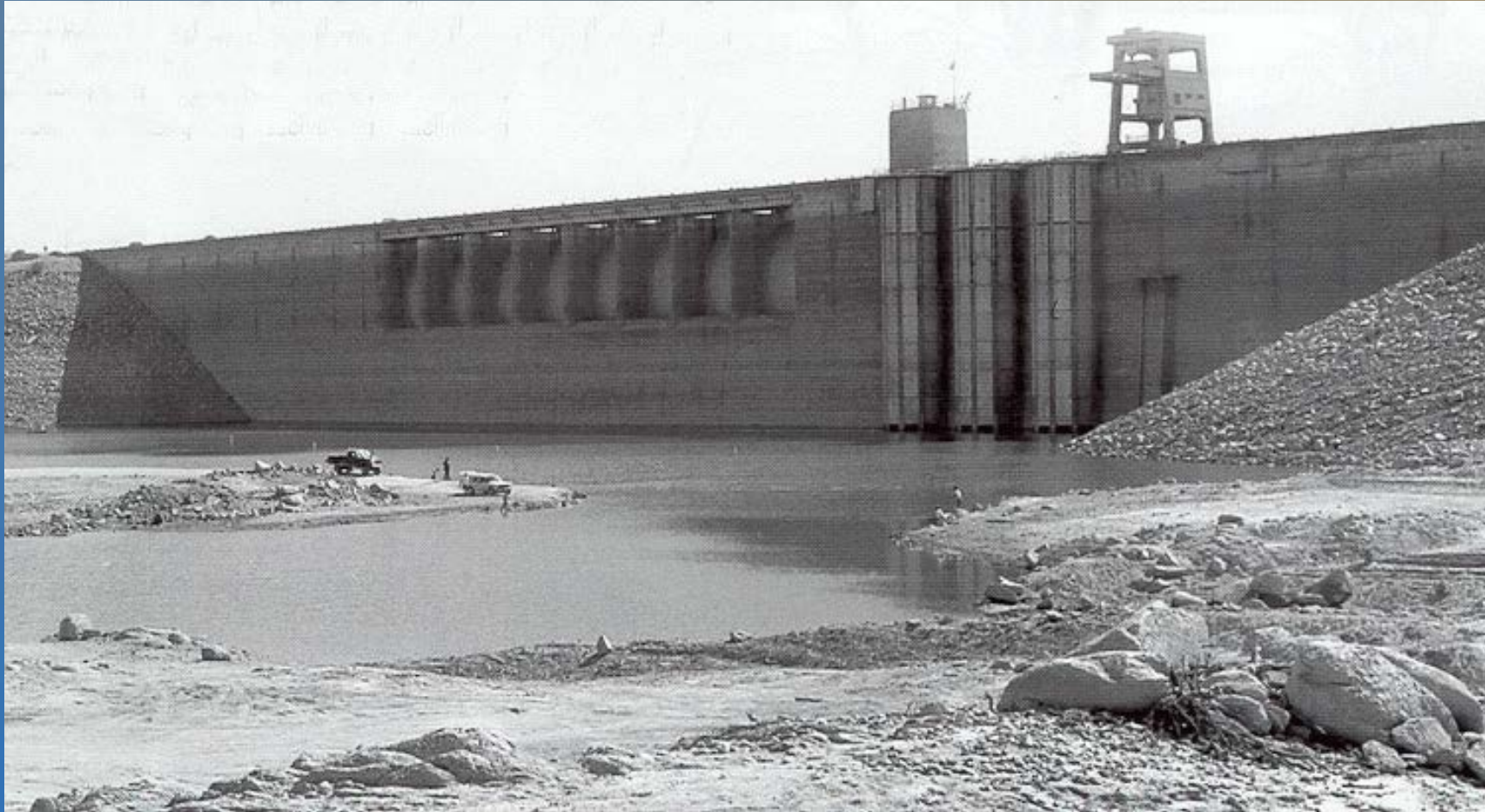
Operational Constraints

- Flood control
- Cold water pool management
- Fishery habitat
- Salmonid spawning and rearing flows
 - Need stable flows for spawning
 - Stranding issues during rearing timeframes

Cold Water Pool Management

- Use change of release volume
- Use change of release location
- Power by-pass

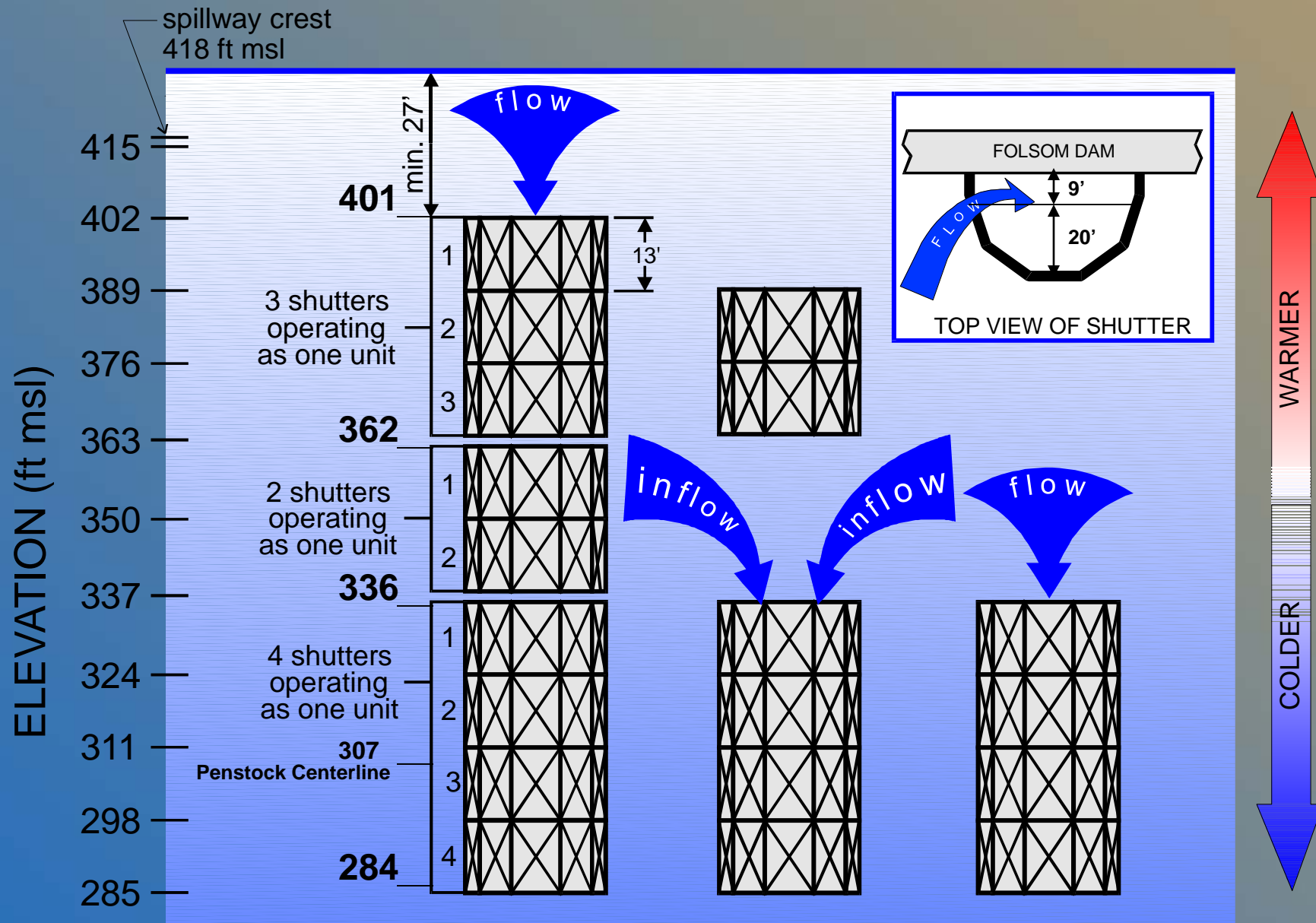
Temperature Shutters on Penstocks for Selective Withdrawal



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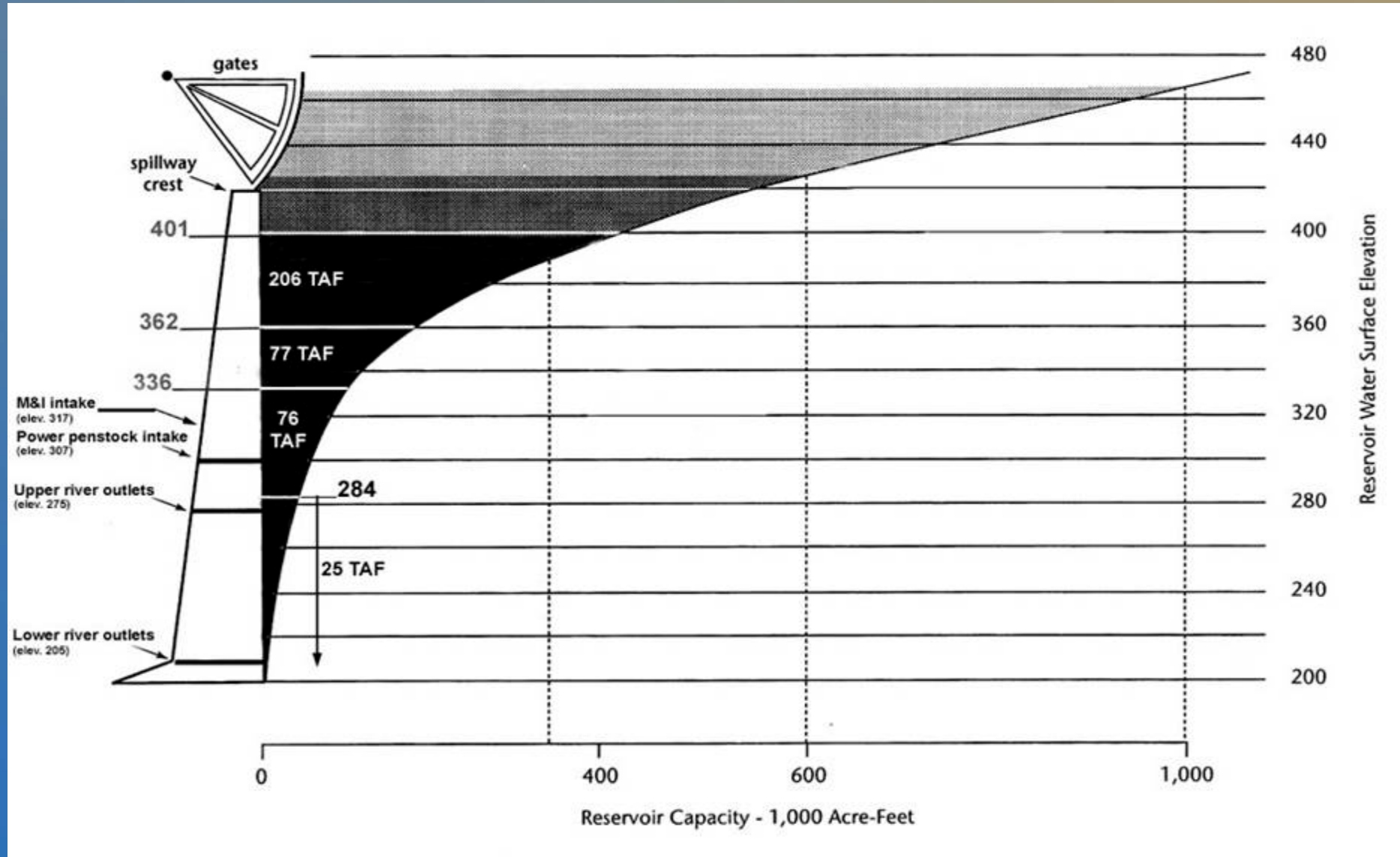
Folsom Dam Shutters



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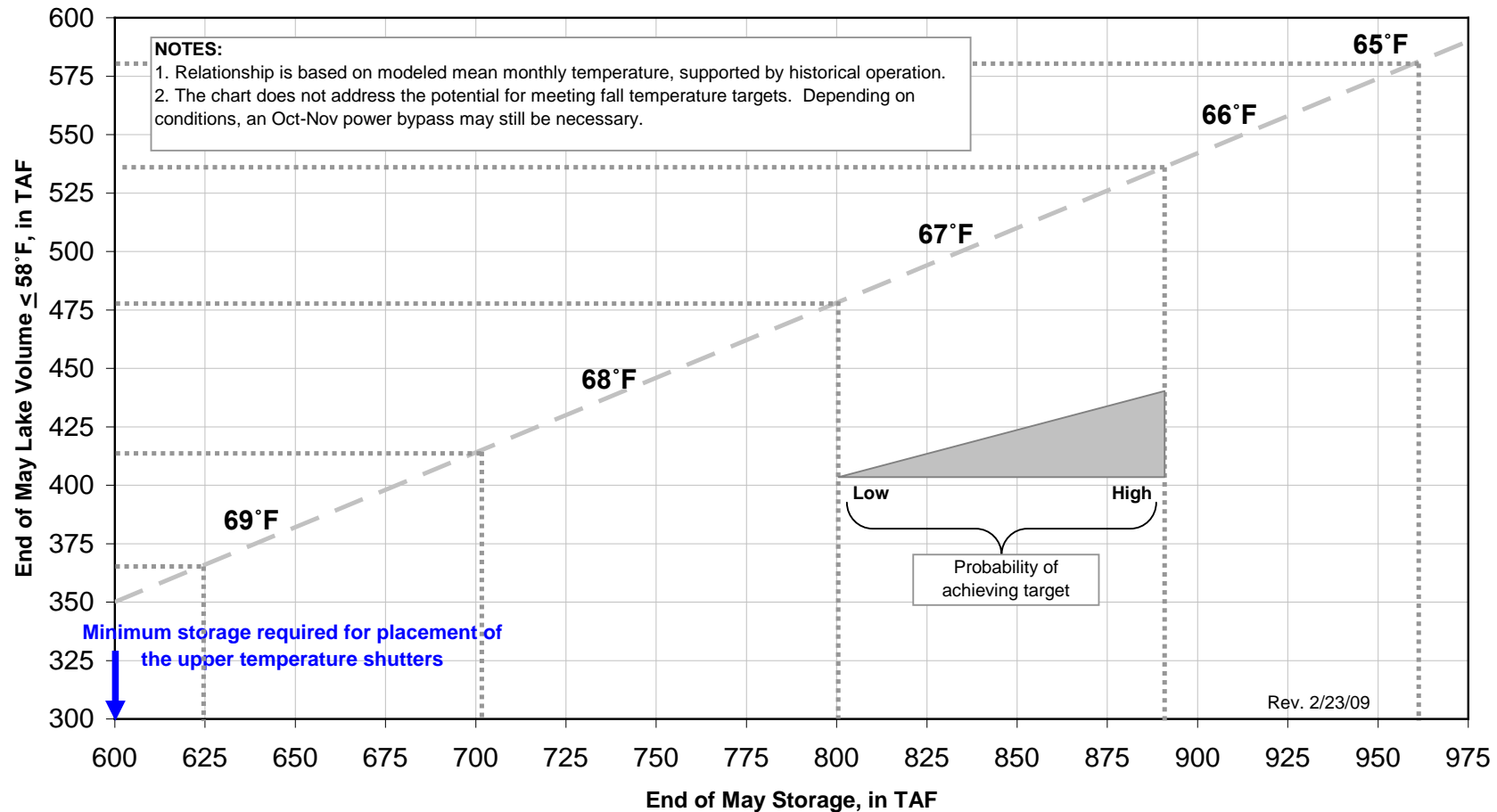
Folsom Outlet Elevations



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Folsom Lake End of May Storage Potential for Meeting Summer Temperature Targets (Jun-Sep) at Watt Avenue



Questions?