Summary of Alternatives

In the Draft EIS, the five action alternatives are compared to the No-Action Alternative.

Feature	CP1	CP2	CP3	CP4	CP5
Dam Raise	6.5 feet	12.5 feet	18.5 feet	18.5 feet	18.5 feet
Increased Storage	256,000 acre-feet	443,000 acre-feet	634,000 acre-feet	634,000 acre-feet	634,000 acre-feet
Focus	Anadromous Fish Survival & Water Supply Reliability	Anadromous Fish Survival & Water Supply Reliability	Agricultural Water Supply Reliability & Anadromous Fish Survival	Anadromous Fish Survival with Water Supply Reliability	Water Supply Reliability, Anadromous Fish Survival, Ecosystem Restoration, and Recreation
Major Components	Dam Modifications & Reservoir Area Relocations Mitigation Measures	Dam Modifications & Reservoir Area Relocations Mitigation Measures	Dam Modifications & Reservoir Area Relocations Mitigation Measures	Dam Modifications & Reservoir Area Relocations Adaptive Management (Reserving 378 thousand acre-feet of Storage for Cold-Water Pool) Augment Spawning Gravel Restore Riparian, Floodplain, & Side Channel Habitat Mitigation Measures	Dam Modifications & Reservoir Area Relocations Construct Resident Fish Habitat at Shasta Lake & Along Tributaries Augment Spawning Gravel Restore Riparian, Floodplain, & Side Channel Habitat Increase Recreation Opportunities Mitigation Measures

CP = Comprehensive Plan

Benefits and Costs

Alternatives

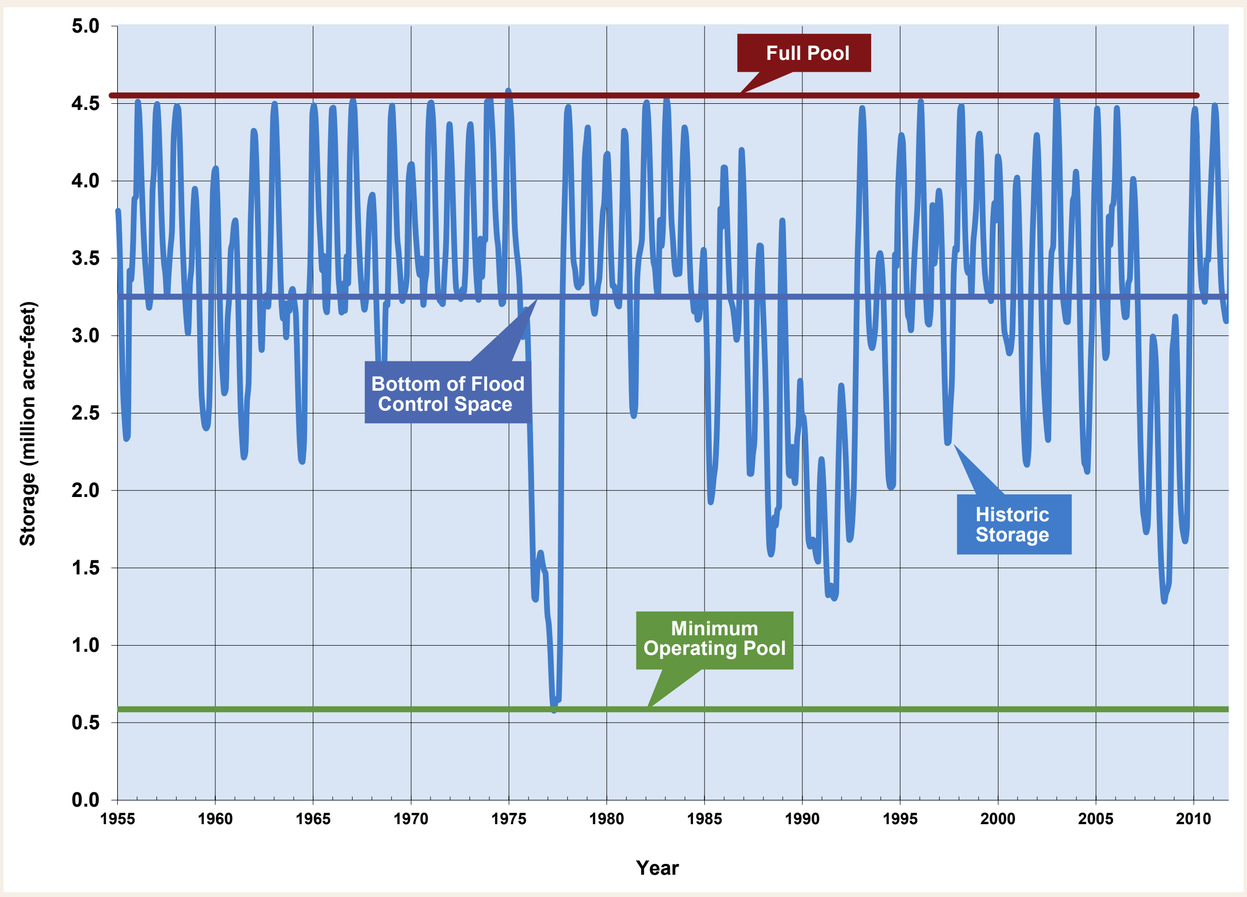
Estimated Benefits and Costs of Alternatives*					
Alternative **Dam Raise**	**CP1** **6.5 Feet**	**CP2** **12.5 Feet**	**CP3** **18.5 Feet**	**CP4** **18.5 Feet**	**CP5** **18.5 Feet**
PRIMARY OBJECTIVE BENEFITS					
Water Supply Reliability					
Critical & Dry Years Increased CVP/SWP deliveries (acre-feet)	47,300	77,800	63,100	47,300	113,500
Average Annual Increased CVP/SWP deliveries (acre-feet)	31,000	51,300	61,700	31,000	75,900
Increased water use efficiency funding	Yes	Yes	Yes	Yes	Yes
Increased emergency water supply response capability	Yes	Yes	Yes	Yes	Yes
Andromous Fish Survival					
Average annual increase in anadromous fish	61,300	379,200	207,400	812,600	377,800
Spawning gravel augmentation (tons)	–	–	–	10,000	10,000
Side-channel rearing habitat restoration	–	–	–	Yes	Yes
SECONDARY OBJECTIVE BENEFITS					
Develop Additional Hydropower Generation					
Increased hydropower generation (GWh/year)	54	90	90	133	117
Flood Damage Reduction					
Increased reservoir capacity for capture of flood flows	Yes	Yes	Yes	Yes	Yes
Preserve, Restore, and Enhance Ecosystem Resources					
Reservoir shoreline enhancement (acres)	–	–	–	–	130
Reservoir tributary aquatic habitat enhancement (miles)	–	–	–	–	6
Riparian and floodplain habitat restoration	–	–	–	Yes	Yes
Increased ability to meet flow and temperature requirements along the Upper Sacramento River	Yes	Yes	Yes	Yes	Yes
Preserve or Improve Water Quality					
Improved Delta water quality/emergency response	Yes	Yes	Yes	Yes	Yes
Preserve and Increase Recreation					
Recreation (increased user days, 1,000)	89	134	205	370	175
Modernization of relocated recreation facilities	Yes	Yes	Yes	Yes	Yes
ESTIMATED COST					
Total Estimated Construction Cost ($Million)	**$891**	**$984**	**$1,147**	**$1,154**	**$1,174**

* Benefits and Costs have been updated since the February 2012 release of the Draft Feasibility Report
CVP = Central Valley Project
SWP = State Water Project
GWh = Gigawatt Hours
CP = Comprehensive Plan

RECLAMATION

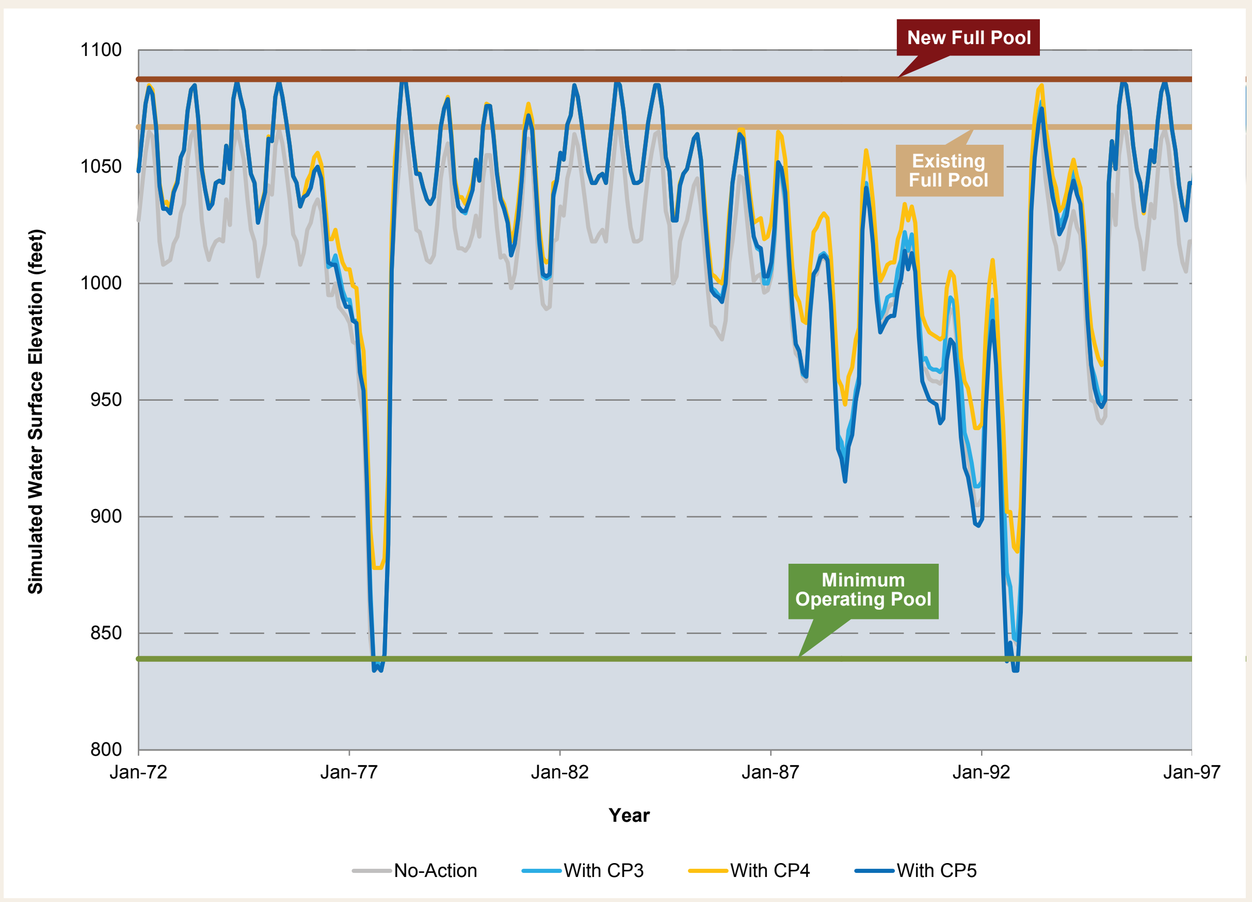
Shasta Reservoir Fill and Drawdown

Historic Conditions



During most years, storage in Shasta Reservoir varies from about 3.25 million acre-feet during the late fall to early spring, to as much as 4.55 million acre-feet the remainder of the year. The 1.3 million acre-feet difference in storage is the maximum space reserved for flood control. During about 1 of every 3 years, Shasta Reservoir reaches full storage capacity, and can be significantly drawn down during drought periods.

Simulated Conditions



Raising Shasta Dam would not change this pattern of fill and drawdown. In most years, storage in the enlarged reservoir would vary by the same 1.3 million acre-feet, only at higher elevations. Similar to under current conditions, the reservoir would fill to capacity in about 1 of every 3 years, and only be drawn down during drought periods.

Alternatives

RECLAMATION