

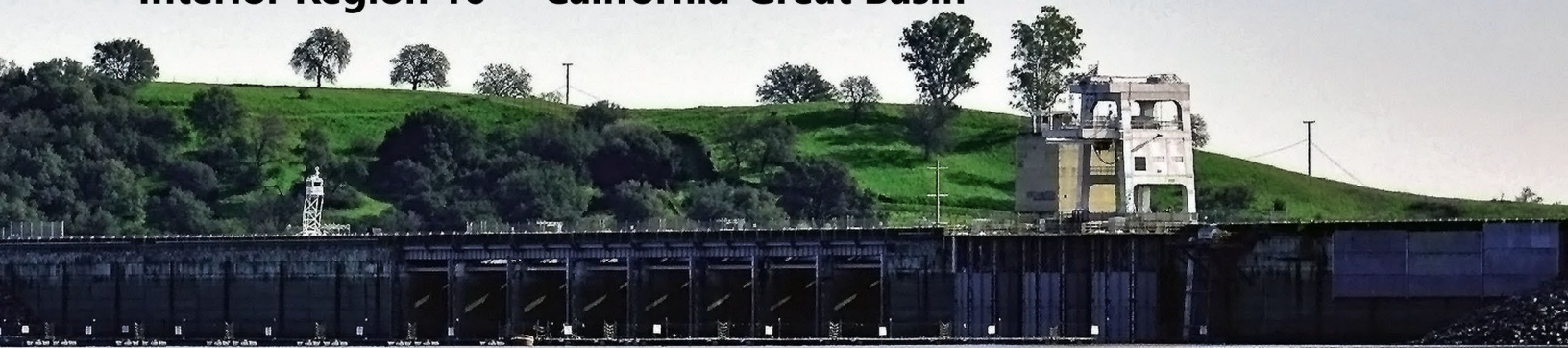


— BUREAU OF —
RECLAMATION

Appendix E

Adaptation Measure Preliminary Screening Results

American River Basin Study
Interior Region 10 – California-Great Basin



Note: This appendix is a record of analysis for the ongoing study (2018 - 2022).
The main report may have updated information that is not reflected in this appendix.



CITY OF
FOLSOM
DISTINCTIVE BY NATURE



CITY OF
ROSEVILLE
CALIFORNIA



City of
SACRAMENTO



El Dorado
Water Agency



PCWA
PACIFIC COAST WATER ASSOCIATION



RYA
Regional Water Authority



SAFCA
Sacramento Area Flood Control Agency

American River Basin Study

Project Evaluation Criteria - Metrics and Scoring

A. Relevancy to Vulnerability Pathways	Score
Ability to address vulnerability	Y
No/minimal or indirect ability to address vulnerability	N

D. Long-Term Viability - Duration of Benefit	Score
Sustained long-term benefit	Y
Short-term or diminishing benefit	N

B. Technical Feasibility - Proven Technology	Score
Similar technology/practices already implemented	Y
New technology/practices, not yet implemented elsewhere	N

D. Long-Term Viability - Benefit Type	Score
Provides primary benefits	Y
Provides incidental benefits only	N

B. Technical Feasibility - Project Definition	Score
Feasibility or detailed plans	Y
Conceptual	N

E. Nexus to Reclamation/ Federal Interest	Score
Connection to Federal interest	Y
No or indirect connection to Federal interest	N

C. Measurable Quantity of Yield - Regional Benefit	Score
Quantifiable regional benefits	Y
Localized benefits only	N

F. Local Support for Implementation - Locally Led	Score
Locally led	Y
Not locally led	N

C. Measurable Quantity of Yield - Demand/Supply Benefit	Score
Reduces demand and/or increases supply	Y
Neither reduces demand nor increases supply	N

F. Local Support for Implementation - Local Support	Score
Strong local support	Y
No or limited local interest	N

AMERICAN RIVER BASIN STUDY
November 2019

Adaptation Measures									A. Relevancy to Vulnerability Pathways										B. Technical Feasibility		C. Yield		D. Long-term Viability		E. Nexus to Reclamation/ Federal Interest				F. Local Support for Implementation			
									Folsom Reservoir is too small for the potential runoff	Large Supply Reliance on One Source (river)	Increasing volume of floods and no levee setback potential	Less reliable water rights/contract entitlements	Operation of Folsom Reservoir for the CVP purposes vs. regional needs	Lack of meaningful groundwater in the foothills	Lack of forest management affecting snowpack retention and fuel management	Regional conjunctive use potential is not fully developed	Inefficient water use for urban and agricultural purposes.	Proven technology or practices	Defined Project	Generate measurable volume on a regional-scale	Reduce demand or increase supply	Long-Term Benefits	Primary Benefit (not incidental)	1.Ability to Deliver Water (Reduce demand on Folsom or increase regulating capacity)	2-3. Other Benefits (Hydroelectric Power and/or Recreation)	4-7.Ecosystem Protection and Enhancement	8.Flood control and/or management	Locally-Led	Local Support/Interest			
Max Score									9	2	2	2	4	2	6	2	2	2	2	2	2	2	2	2	2	2						
c. Increase water storage and their integrated operation	•Improve and increase upper watershed storage (e.g., Alder Creek Reservoir)	5	2	2	2	4	2	5.6	Y	Y	N	Y	Y	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y							
	•Folsom Dam raise for flood storage and upstream reservoir outlet modifications	3	1	2	2	2	1	3.8	Y	N	Y	N	Y	N	N	N	N	Y	N	N	Y	N	N	Y	N							
	•Groundwater banks (federally recognized or not)	5	1	2	2	2	2	4.6	Y	Y	N	Y	Y	N	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y							
	•Minimum carryover storage in Folsom Lake	3	1	2	2	2	1	3.8	Y	N	Y	N	Y	N	N	N	N	Y	N	Y	Y	Y	Y	Y	N							
	•Implement Flood-MAR (e.g., create wetlands along Cosumnes river)	5	1	2	2	4	1	4.6	Y	Y	Y	Y	N	N	N	Y	N	Y	Y	Y	Y	Y	Y	Y	N							
	•Improve flood management capacity of the American River to maintain 200-year flood protection (e.g., levee raise)	2	1	0	1	2	1	2.2	Y	N	Y	N	N	N	N	N	N	Y	N	N	Y	N	Y	N	Y							
	•Maintain infrastructure (dams, stormwater, wastewater, transportation) in flood-prone areas	1	1	0	1	1	1	1.9	N	N	Y	N	N	N	N	N	N	Y	N	N	N	Y	N	Y	Y							
•Forecast-based flood operations (Folsom Operations Manual, coordination with upstream reservoirs)	3	0	1	1	2	1	2.3	Y	N	Y	N	Y	N	N	N	N	N	Y	N	Y	N	Y	N	Y								
4.Improve Resource Stewardship																																
a. Improve Headwaters and Forest Health	•Improve forest and biomass management practices and funding to reduce fire risk and improve snowpack and water retention, and protect source water (e.g., mechanical fuel reduction, land use standard modifications to enable natural fuel reduction via grazing, healthy conifer cover retention, ecosystem connectivity improvement)	2	1	1	1	1	1	2.5	N	Y	N	N	N	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N						
	•Headwater meadows restoration and protection for water retention	1	1	1	2	2	1	3.1	N	N	N	N	N	N	Y	N	N	Y	N	N	Y	Y	Y	Y	Y	N						
b. Improve Lower American River Ecosystem	•Modified Lower American River Flow Management Standards	3	2	1	2	2	2	4.3	N	Y	N	N	Y	N	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y						
	•Support implementation of the Water Forum Habitat Management Element (e.g., habitats for fish and endangered species, gravel replenishment)	0	2	0	1	1	2	2.8	N	N	N	N	N	N	N	N	N	Y	Y	N	N	Y	N	Y	Y							
	•Folsom Temperature Control Device	1	2	1	1	2	1	3.1	N	N	N	N	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	N							
5.Secure Institutional Agreements to Enable Flexibility																																
a. Resolve all pending Federal contracts and agreements	•CVP American River Division LTWS contracts, etc. and possible CVP contract reassignments	3	2	1	2	2	2	4.3	N	N	N	Y	Y	N	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y						
	•American River Basin CVPIA accelerated water transfer agreement	4	2	1	2	1	2	4.2	Y	N	N	Y	Y	N	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y						
b. Regional framework for transparency & Collaboration	•Common data management, monitoring network and reporting	4	2	0	1	0	2	2.9	Y	N	N	Y	Y	N	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y						
	•Basin-wide integrated resources planning (including upper and lower watershed)	6	0	0	2	0	2	2.7	Y	Y	N	Y	Y	Y	N	Y	N	N	N	N	N	N	N	N	N	Y						
	•Support and update the Water Forum Agreement to address potential climate change effects.	5	0	0	2	2	2	3.1	Y	Y	N	Y	Y	N	N	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y						
	•Identify and implement innovative finance structures to incentivize sharing of resources.	5	0	0	2	1	2	2.8	Y	Y	N	Y	Y	N	N	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y						
•Water marketing supporting tools and management framework	5	2	0	1	1	2	3.3	Y	Y	N	Y	Y	N	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y							

Key: CVP = Central Valley Project
LTWS = Long-Term Water Service

CVPIA = Central Valley Project Improvement Act
PCWA = Placer County Water Agency

EDCWA = El Dorado County Water Agency
SRCS= Sacramento Regional County Sanitation District