

Monterey County Water Resources Agency
Nacimiento Dam - Deferred Maintenance Projects

Priority	Project Name	Total	Project Need	Project Description/Notes
1	Replacement of 3 Low-level Outlets	\$ 880,000	Compliance with State and/or Federal Programs. Achieve Full Operational Function	Contractor to install, MCWRA to purchase valves and provide, consultant to prepare bid package for contractor, no env req'd, no permits, consultant to provide install oversight, MCWRA staff time for Project management, timing of construction will result in additional monitoring costs and potentially pumping costs.
2	Spillway Investigation (FERC Part 12D Requirements)	\$ 2,325,000	Compliance with State and/or Federal Programs	In the fall MCWRA will be drilling holes.
3	Spillway Plunge Pool Erosion and Boil Prevention: Phase I (FERC Part 12D Requirements)	\$ 12,900,000	Compliance with State and/or Federal Programs. Achieve Full Operational Function	AECOM on board, will give a report with alternatives around the first of the year for the Engineer's Report. Will require Env and permitting
4	Repair and Modify Low-level Valve 6 - Flow Control Energy Dissipating Outlet	\$ 3,547,500	Compliance with State and/or Federal Programs. Achieve Full Operational Function	No Design or ESDC required, project is already funded, will require permitting with RWQCB, Fish & Wildlife, FERC, DSOD.
5	Hydraulic Intake Valve Actuators (3)	\$ 1,067,000	Compliance with State and/or Federal Programs. Achieve Full Operational Function	MCWRA will purchase actuators, plus additional materials. Will require dive team for installation.
6	Seismic Stability for Embankment (FERC Part 12D Requirements)	\$ 1,352,000	Compliance with State and/or Federal Programs	If the dam land is liquefiable, would result in a very large project. Not going to account for this at this time.
7	Bridge over Spillway Maintenance	\$ 195,000	Public and/or Employee Safety	Need engineer to inspect and provide report, need costs for contractor to repair, no env. required, no permits, swallow habitat (timing issues with contractor).
8	Bradley and Camp Roberts Warning System	\$ 520,000	Public and/or Employee Safety	CDF to allow a tower that would be connected to dam (pressure transducers). We also need to add Camp Roberts.
9	Nacimiento Drive Road Repair	\$ 3,536,000	Public and/or Employee Safety	Remove and replace 2 miles of road. Includes 13 survey monuments.
10	Geologic Review and Minor Improvements of Slope Above Power House: Phase I (FERC Part 12D Requirements)	\$ 160,000	Compliance with State and/or Federal Programs	Study is being conducted right now. If the slope repairs are too much, may need to look at alternative routing to get to the hydro plant. Break point of \$5,000,000. Consultants report will be available by the first of the year so we will have better numbers for the Engineer's Report.
11	Security Plan Requirements (lights/cameras)	\$ 41,600	Compliance with State and/or Federal Programs	
12	Misc. Projects	\$ 1,248,000	Achieve Full Operational Function	
Phase I Subtotal		\$ 27,772,100		
13	Slope Stability Above Power House: Phase II	\$ 10,400,000	Compliance with State and/or Federal Programs	
2a	Spillway Repairs (Depends on Investigation)	\$ 25,800,000	Compliance with State and/or Federal Programs. Achieve Full Operational Function	
3a	Downstream Boils: Phase II	\$ 12,900,000	Compliance with State and/or Federal Programs. Public and/or Employee Safety	
Phase II Subtotal		\$ 49,100,000		
Grand Total		\$ 76,872,100		

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Monterey County Water Resources Agency
San Antonio Dam - Deferred Maintenance Projects

Priority	Project Name	Total	Project Need	Project Description/Notes
2	BFV Hydraulic Upgrade	\$ 520,000	Achieve Full Operational Function	96" BFV, would require fabrication, engineering. DSOD fee required.
3	Low Level Discharge Valve Maintenance	\$ 149,500	Achieve Full Operational Function	Need a full inspection and service.
4	Replace Air Release Valves (8)	\$ 156,000	Achieve Full Operational Function	
5	Closed Circuit TV and phone in Valve Chamber	\$ 81,250	Achieve Full Operational Function. Public and/or Employee Safety	
6	Install Hatch in 84" Penstock	\$ 329,000	Compliance with State and/or Federal Programs. Public and/or Employee Safety	Design being done.
7	Install Intake Structure Trash Racks	\$ 561,125	Compliance with State and/or Federal Programs. Achieve Full Operational Function	3 trash racks, installed underwater
8	Install Intake Bulkhead Gate	\$ 224,250	Compliance with State and/or Federal Programs. Public and/or Employee Safety	Includes 2 dives, remove and replace, fabrication. No Env. Monitoring, MCWRA to do the project planning and oversight.
9	Potential Failure Mode Analysis	\$ 127,075	Compliance with State and/or Federal Programs	This is for a study only, no repairs. Repair costs are not included in estimate, no field exploration. If inner lake tunnel moves project, this project may go away.
10	Interior and Exterior Paint of Penstock Piping	\$ 2,827,500	Compliance with State and/or Federal Programs. Achieve Full Operational Function	Consultant to prepare specification
11	Horizontal Drain Repair	\$ 416,000	Compliance with State and/or Federal Programs. Achieve Full Operational Function	125 feet long, 12" drain, slip lining, existing AC coated Corrugated metal pipe (CMP). New exit, 8" PVC well casing with slots for drain
12	Toe Drain Repair	\$ 208,000	Compliance with State and/or Federal Programs. Achieve Full Operational Function	
13	Sidehill Drain	\$ 520,000	Compliance with State and/or Federal Programs. Achieve Full Operational Function	
14	New Piezometers (5)	\$ 1,456,000	Compliance with State and/or Federal Programs. Achieve Full Operational Function	GEI provided an estimate of \$90k per hole. If inner lake tunnel moves project, this project may go away. DSOD fee required
15	Road Pavement Repair	\$ 520,000	Public and/or Employee Safety	Internal roads inside the gate, chip seal (1.5 miles, 20 ft wide) plus 0.75 miles of Vista Road crack repairs, minor repairs, chip seal / repave areas will be inspected by inner lake tunnel.
16	Update Dam Stability Analysis	\$ 127,075	Compliance with State and/or Federal Programs	This is for a study only, no repairs. Repair costs are not included in estimate, no field exploration. If inner lake tunnel moves project, this project may go away
17	Staff Gauge Improvements	\$ 56,875	Compliance with State and/or Federal Programs. Achieve Full Operational Function	
18	Replace Boat Barrier Buoy Line and Spillway Log Boom	\$ 416,000	Public and/or Employee Safety	Replace 1,700 ft
Phase I Subtotal		\$ 8,695,650		
1	Chute Major Repair/Replacement (MCWRA Cost Estimate)	\$ 60,000,000	Compliance with State and/or Federal Programs. Achieve Full Operational Function. Public and/or Employee Safety	
Phase II Subtotal		\$ 60,000,000		
Grand Total		\$ 68,695,650		