

Marlette Lake Dam Resilient Infrastructure Project
 Estimate of Pre-Mitigation Costs of the Dam Fails - Additional Facilities

Item	Damage	Calculation	Estimated Cost
1	Cost to Repair Damage to Existing Erosion Control Improvements	Based on actual costs for a 2018 erosion control project along this section of road. Total project construction cost was \$1,039,000. Cost per linear foot was determined and that cost was applied to a potential length of damaged area of approximately 2,400 LF	\$ 84,000.00
2	Cost to Repair Damage to Sanitary Sewer Export Line	Based on IVGID Capital Projects Budget for export line replacement. Total estimated replacement cost of \$10,000,000 was used to determine a price per linear foot and that cost was applied to the potential length of damaged pipe of 2,400 LF	\$ 757,000.00
3	Cost to Repair Damage to 2400 LF of SR 28	See attached spreadsheet	\$ 3,696,247.00
4	Cost to Repair Dam in the Event of a Dam Breach	See attached spreadsheet	\$ 16,516,555.00
5	Cost of loss of clarity in Lake Tahoe due to release of sediment	It is difficult to put a cost on the loss of clarity to Lake Tahoe. A 2006 report on the Lake Tahoe TMDL estimated that 199.2 tonnes/yr (219.6 tons/yr) enter Lake Tahoe from normal streambank erosion along Marlette Creek. It is feasible that a dam breach event with a large volume of water moving at a high velocity down Marlette Creek could result in the annual sediment load being deposited in this one event.	Unknown



11.29.18