

September 2021 Estimated Water System Seismic Upgrade Needs for 2020-2030¹

Water Supplier	Proposed Seismic Projects	Est. Cost
City of Seattle	Transmission pipeline seismic upgrades	\$30M
	Storage reservoir upgrades	\$30M
	Building upgrades	\$15M
	Reservoir and tank seismic valves	\$8M
	Transmission system isolation valves	\$8M
	Distribution system isolation valves	\$8M
	Emergency preparedness improvements	\$5M
	Cascades Dam	\$90M
City of Tacoma	Water supply seismic upgrades	\$15M
	Transmission pipeline seismic upgrades	\$34.5M
	Reservoir strengthening and tank seismic valves	\$9.5M
	Emergency preparedness improvements	\$5M
City of Everett	Dam seismic upgrades	\$2.5M
	Treatment plant seismic upgrades	\$13M
	Transmission pipeline seismic upgrades	\$71M
	Emergency preparedness improvements	\$0.2M
	Reservoir 3 replacement	\$62M
Cedar River Water and Sewer District (Seattle wholesale customer)	East Area second water supply line	\$1.5M
	Water tank study and upgrade	\$3.2M
	Onsite backup power generation	\$0.45M
King County Water District 90 (Seattle wholesale customer)	Seismic-driven relocation of wellfield and water treatment plant	\$1.5M
	Building and Operations Center upgrades	\$3M
North City Water District (Seattle wholesale customer)	Distribution system seismic upgrades	\$6.7M
	Reservoir seismic upgrades	\$8.5M
Northshore Utility District (Seattle wholesale customer)	Evergreen Hospital on-site reservoir	\$7M
	24" CCP transmission main seismic restraint and liquefaction zone	\$0.6K
	ShakeAlert; early seismic warning and control system	\$0.08M
	Building upgrades	\$0.3M

¹ The list of projects should be used to show the types and cost magnitude of the projects needed. Individual projects will need detailed cost estimates. Further sequencing and prioritization will be needed.

Water Supplier	Proposed Seismic Projects	Est. Cost
Soos Creek Water and Sewer District (Seattle wholesale customer)	Tank 6 upgrade	\$3.8M
City of Issaquah (Seattle wholesale customer via Cascade Water Alliance wholesale customer)	Storage reservoir seismic upgrades	\$5.5M
	Watermain seismic upgrades	\$10M
	Pump station seismic upgrades	\$3.5M
	Wells seismic upgrades	\$5.2M
	Meter and valve seismic upgrades	\$0.5M
	System resiliency and redundancy improvements	\$8.5M
City of Bellevue (Seattle water system via Cascade Water Alliance wholesale customer)	Clyde Hill 390 reservoir seismic upgrades	\$3.8M
	Forest Hills reservoir seismic upgrades	\$5.3M
	Horizon View 3 reservoir seismic upgrades	\$2.7M
	Newport reservoir seismic upgrades	\$2.9M
	High priority resilient backbones	\$27M
	Emergency wells	\$30M
	Vulnerable water main seismic upgrades	\$31M
	Earthquake response infrastructure	\$2.5M
City of Kirkland (Seattle water system via Cascade Water Alliance wholesale customer)	Storage reservoir seismic upgrades	\$4M
	Water main seismic upgrades	\$2M
Sammamish Plateau Water (Seattle water system via Cascade Water Alliance wholesale customer)	Watermain seismic upgrades	\$14M
City of Tukwila (Seattle water system via Cascade Water Alliance wholesale customer)	Cast iron seismic upgrade and replacement (to be done in phases with some phases after 2032)	\$20M
	Southcenter Blvd & Crystal Sprints resiliency upgrades	\$5M
	Interties seismic upgrades and additions	\$5M
	Seismic upgrades of mains on bridges (to be done in 4 phases with some phases after 2032)	\$2M
	Reservoir backup supply	\$0.5M
Cascade Water Alliance (Seattle wholesale customer)	Emergency hose	\$4M
Covington Water District	Tank 4 replacement project	\$7M
	Tank 1 replacement project	\$9M
	Distribution system seismic upgrades	\$2.2M
Total		\$ 656M