

Port of Port Orford

The Port of Port Orford is located 75 miles north of the California border in north Curry County. The port is situated just south of Port Orford headland on the open ocean. As such, it is an open-water dock with no natural protection from a bay or jetty and boasts the title of being the only dry-dock port on the West Coast. The Port of Port Orford harbor that has been in use since the 1850s and was primarily used for shipping lumber. The first Port District was formed in 1911 and dock construction began in 1919. A breakwater was built in 1971 in an attempt to protect the dock from winter storms. Shoaling became a problem shortly after and dredging became necessary. Although no longer a deep harbor, Port Orford is still home to many commercial fishermen and is used as a harbor of refuge by many during severe storms (Port of Port Orford, 2021).

Figure I-13. Port of Port Orford, Aerial View.



Source: Port of Port Orford. Manuela Durson, photo credit.

Fishing boats and other vessels are lifted in and out of the water by cranes operated by port staff. The boats are then set upon custom-made dollies and parked in rows on the dock. As a result, it is known as a “dolly dock”.

Figure I-14. Port of Port Orford Dolly Dock



Source: Port of Port Orford, June 2012. Notes: 1. See boats and cranes on dock itself. 2. Shoaling of the harbor as seen at minus tide, showing dock sheet pile construction and aging high-capacity cranes used to launch and retrieve vessels.

Ports 2022-2027 Mitigation Actions

Action Item #	Lead	Hazard	Mitigation Action	Status/ Description/Partners PS=Problem Statement	Priority	Timeline /Cost	Goals met by Action	Curry County	City of Brookings	City of Gold Beach	City of Port Orford	Port of Gold Beach	Port of Port Orford	Fire Defense Board
PORT MITIGATION ACTIONS														
Port GB 22-MH-01	Port of Gold Beach	Multi-Hazard	Deepen/Dredge channels near high hazard zones.	Partners: U.S Army Corps of Engineers (USACE)	High	2-5 years/ \$20+ million	1,2,4,5	X				X		
Port GB 22-MH-02	Port of Gold Beach	Multi-Hazard	Replace, increase size and stability of, and install new dock piles	PS: Current piles and locations restricts size of boats. Piles may be compromised due to previous hazard impacts.	High	2-5 years/ \$750k	1,2,4,5	X				X		
Port GB 22-MH-03	Port of Gold Beach	Multi-Hazard	Secure funding to purchase equipment / assets (boats, cranes, hoist, dozer) to assist in response and recovery activities, expediting the re-establishment of the port. Equipment will be staged outside the tsunami inundation zone.	PS: The port does not have equipment to store outside the tsunami inundation zone, increasing the vulnerability of the port.	Medium	2-5 years/ \$500k	1,4,5	X				X		
Port GB 22-MH-03	Port of Gold Beach	Multi-Hazard	Develop plans to restrict traffic entering port and aid traffic evacuating	PS: Residents and visitors may not be aware of evacuations or intend to observe a tsunami or flood event from Port property. The Port plan should support local plans.	Medium	1-3 years/ Staff Time	1,4,5	X				X		
Port GB 22-EQ-01	Port of Gold Beach	Earthquake	Secure funding for High Dock seismic assessment and retrofit	PS: The High Docks was built in the 1960s and has not been through a retrofit.	High	2-5 years/ \$10 million	1,2,4,5	X				X		
Port PO 22-MH-01	Port of Port Orford	Multi-Hazard	Retrofit and maintain tsunami evacuation route from port, including identifying and installing alternate route.	PS: The port's tsunami evacuation route travels through a projected landslide zone, blocking the route for all port personnel.	High	5-10 years/ \$1 million	1,2,4,5	X					X	
Port PO 22-MH-02	Port of Port Orford	Multi-Hazard	Replace, increase size and stability of, and install new dock piles	PS: Current piles and locations restricts size of boats. Piles may be compromised due to previous hazard impacts.	High	1-3 years/ \$200k	1,2,4,5	X					X	
Port PO 22-MH-03	Port of Port Orford	Multi-Hazard	Secure funding for assessment of port dock and seismic upgrades.	PS: The sheet plate is underwater and may not withstand an earthquake. A compromised dock will inhibit the port re-establishment.	High	2-5 years/ \$100k	1,2,4,5	X					X	

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Port PO 22-MH-04	Port of Port Orford	Multi-Hazard	Ensure new infrastructure components are adequately designed to minimize risk from natural hazards	The aging infrastructure of the port components causes concern of the port stability and resilience.	High	5-10 years/ \$3 million	1,2,4,5	X					X	
Port PO 22-MH-05	Port of Port Orford	Multi-Hazard	Reinforce/reconfigure harbor control structures	PS: Harbor controls will be impacted, degraded, or destroyed during a tsunami or flood event.	High	5-10 years/ \$500k	1,2,4,5	X					X	
Port PO 22-MH-06	Port of Port Orford	Multi-Hazard	Reinforce, elevate, retrofit commercial receiving docks for resilience.	Dock has received damage in previous high wave events.	Medium	10-15 years/ \$750k	1,2,4,5	X					X	
Port PO 22-MH-07	Port of Port Orford	Multi-Hazard	Stormwater drainage	Antiquated system needs an upgrade to necessitate new development.	Medium	5-10 years/ \$600k	1,2,4	X					X	
Port PO 22-MH-08	Port of Port Orford	Multi-Hazard	Upland Storage Area – Aboveground fuel storage, fuel, water, wastewater, electrical service line support structure	Reinforcement or relocation should be considered to protect the Upland Storage area.	Medium	5-10 years/ \$15k	1,2	X					X	
Port PO 22-MH-09	Port of Port Orford	Multi-Hazard	Inventory system infrastructure locations subject to flood damages, including scour/erosion.	There needs to be an inventory to prioritize projects and conduct assessments following a disaster.	Medium	1-3 years / Staff Time	1,2,4,5	X					X	
Port PO 22-MH-10	Port of Port Orford	Multi-Hazard	Purchase equipment / assets (boats, cranes, hoist, dozer) to assist in response and recovery activities, expediting the re-establishment of the port. Equipment will be staged outside the tsunami inundation zone.	PS: The port does not have equipment to store outside the tsunami inundation zone, increasing the vulnerability of the port.	Medium	5-10 years/ \$50k	1,4,5	X					X	
Port PO 22-MH-11	Port of Port Orford	Multi-Hazard	Fortify and armor breakwaters	PS: The breakwater has been damaged in the past. The breakwater is needed to protect the cove and dock.	Medium	10-15 years/ \$5 million	1,2,4,5	X					X	
Port PO 22-MH-12	Port of Port Orford	Multi-Hazard	Reduce exposure of petroleum/chemical facilities	Reinforce, protect, and/or relocate facilities to prevent exposure due to natural hazards.	Low	5-10 years/ \$250k	1,2	X					X	
Port PO 22-MH-13	Port of Port Orford	Multi-Hazard	Install debris deflection booms to protect dock / port	Excessive debris carried by king tides, floods, and tsunamis creates additional tasks for the port to complete before operations can re-establish.	Low	5-10 years/ \$100k	1,2,4,5	X					X	
Port PO 22-EQ-01	Port of Port Orford	Earthquake	Evaluate the seismic vulnerabilities of embankments and over structures, prioritize replacements with seismically designed stabilizing methods.	The port is exposed to increased cascading risks in the event of a large earthquake, to include nearby landslides and falling rock from Coast Guard Hill.	High	2-5 years/ \$20k	1,2,4,5	X					X	

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Port PO 22-LS-01	Port of Port Orford	Landslide	Embankment repair, via H-pile / concrete section stabilization	A landslide event will prevent port evacuation, current evacuation route will be blocked by the landslide. Landslide mitigation is necessary to protect port employees.	Medium	10-15 years/ \$500k	1,2,4,5	X					X	
Port PO 22-TS-01	Port of Port Orford	Tsunami	Install tsunami signage and tsunami education displays	Visitors and port employees must have awareness of the tsunami hazard and the evacuation routes, both of which are not currently available in the port area.	High	1-3 years/ \$10k	1,2,4,5	X					X	