

EXPLANATION

▲ Known or probable large subaqueous slide

→ Direction of movement of lateral seismic sea wave; dashed when uncertain

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Shoreline showing slight damage from seismic sea waves or probable seismic sea waves. Numerical indicates maximum runup height, in feet, above postearthquake mean lower low water

Shoreline showing damage from locally generated waves or waves of unknown origin

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Inferred direction of wave movement (arrow), relative magnitude of damage (numeral at base of arrow), and runup height of waves in feet above water level at time of earthquake (numeral) on shore. Parentheses around runup height indicate estimated or reported amount; all others were measured. Relative magnitudes of damage are based on a scale of increasing damage from 1 to 5 as follows:

1. Branches broken and snapped in direction of wave travel. Small limbs broken and minor snapping on trees. Runup heights only a few feet above extreme high-water level. Some wooden structures floated from foundations.
2. Trees and limbs less than 2 inches in diameter broken. Small trees uprooted. Driftwood and four-inch diameter logs thrown up above extreme high-water level. Filling creeps from beneath some structures and wooden structures floated off their foundations. Deep cracks about 10 feet on steep shores.
3. Trees and limbs as much as 8 inches in diameter broken; some large trees uprooted. Logs to cabinet size ended from intertidal zone and deposited above extreme high-water level. Soil eroded from bedrock areas. All foundation structures except those of reinforced concrete destroyed or floated away. Heavy machinery moved about. Maximum runup height 50 feet.
4. Trees larger than 8 inches diameter broken, uprooted, and overturned. Boilers thrown above extreme high-water line. Logs made up drift logs. All structures and equipment damaged or destroyed in inundated areas. Maximum runup height 100 feet.
5. Extensive areas of total destruction of vegetation. Boilers deposited 50 feet or more above normal extreme high-water level. Maximum runup height 170 feet.

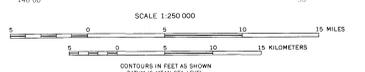
CORDOVA
Community discussed in this chapter

ANCHORAGE
Community discussed in other chapters of this series

Figure 1

Area of detailed figure showing location and intensity of wave damage

Base from U.S. Geological Survey 1:250,000 Anchorage, 1896-1948; Valdez, 1920-45; Seward, 1952; Cordova, 1959; and King Sound 1953 quadrangles.



MAP OF PRINCE WILLIAM SOUND, ALASKA, SHOWING DISTRIBUTION OF WAVES AND OF KNOWN OR INFERRED SUBAQUEOUS SLIDES

WAVE DAMAGE ALONG COAST MAPPED BY GEORGE FLETCHER, L. R. MANN, and J. B. COLE. DAMAGE AT PENAL LAKE MAPPED BY D.S. McCULLOUGH and MANN, 1964.