EXPLANATION

▲ Known or probable large subaqueous slide

Direction of movement of initial seismic sea wave; dashed where uncertain

20

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

(40) 40

2

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. Brush combed and scoured in direction of wave travel. Small limbs broken and minor scarring 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 finer beach deposits thrown up above extreme high-water level. Piling swept from beneath some structures and wooden structures floated off their foundations. Runup reached about 25 feet on steep shores.
3. Trees and limbs as much as 8 inches in diameter broken; some large trees overturned. Rocks to cobble size eroded from intertidal zones and deposited above extreme high-water level. Soil stripped from bedrock areas. All inundated structures except those of reinforced concrete destroyed or floated away. Heavy machinery moved about. Maximum runup height 55 feet.
4. Trees larger than 8 inches diameter broken, uprooted, and overturned. Boulders thrown above extreme high-water line. Loose rocks on cliffs torn loose. All structures and equipment damaged or destroyed in inundated areas. Maximum runup height 70 feet.
5. Extensive areas of total destruction of vegetation. Boulders 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, 1898–1948; Valdez, 1900–45; Seward, 1957; Cordova, 1959; and Blying Sound 1953 quadrangles

SCALE 1:250 000

5 0 5 10 15 MILES

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Wave damage along coast mapped by George Plafker, L. R. Mayo, and J. B. Case; damage at Kenai Lake mapped by D.S.McCulloch and Mayo, 1964