

Shoreline Change (1951 to 2019)

Homer, Alaska



Shoreline Change Rate

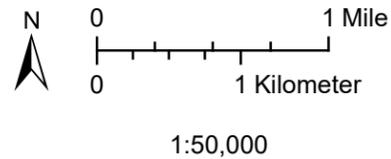
	meters/year	(feet/year)
Erosion	-1.2 to -1.0	(-3.9 to -3.3)
Stable	-1.0 to -0.3	(-3.3 to -1.0)
Accretion	-0.3 to 0.3	(-1.0 to 1.0)

Transect length is the shoreline change envelope, which is the distance between the two farthest-apart shorelines at that location.



STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

The State of Alaska makes no expressed or implied warranties (including warranties for merchantability and fitness) with respect to the character, functions, or capabilities of the electronic data or products or their appropriateness for any user's purposes. In no event will the State of Alaska be liable for any incidental, indirect, special, consequential, or other damages suffered by the user or any other person or entity whether from the use of the electronic services or products or any failure thereof or otherwise. In no event will the State of Alaska's liability to the Requestor or anyone else exceed the fee paid for the electronic service or product.
website: dgg.s.alaska.gov



Projection: NAD83 (2011) UTM Zone 5N. Orthoimagery from the Alaska High Resolution Imagery available from agc.dnr.alaska.gov/imagery_services.html
The bluff top and toe are delineated from historical photographs collected between 1951 and 2019. Using the Digital Shoreline Analysis System developed by the U.S. Geological Survey, the measured distance between shorelines through time determines the linear rate of shoreline change at shore-perpendicular transects. The transect length indicates the distance between the nearest and farthest bluff toe between 1951 and 2019. The shoreline change envelope is colored by the shoreline change rate (meters/year and feet/year), with hot colors representing erosion and cool colors representing accretion. The average linear rate of the bluff top and toe is used for the visualized change rate. Linear rates of shoreline change are simplified and do not accurately reflect shoreline erosion and accretion at all locations.

This work is funded by the Federal Emergency Management Agency. The Alaska Division of Geological & Geophysical Surveys is a FEMA Cooperating Technical Partner.