

Evaluation of streambed scour at bridges over tidal waterways in Alaska: USGS Scientific Investigations Report 2012–5245

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BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 52 pages. Dimensions: 9.7in. x 7.4in. x 0.1in. The potential for streambed scour was evaluated at 41 bridges that cross tidal waterways in Alaska. These bridges are subject to several coastal and riverine processes that have the potential, individually or in combination, to induce streambed scour or to damage the structure or adjacent channel. The proximity of a bridge to the ocean and watersurface elevation and velocity data collected over a tidal cycle were criteria used to identify the flow regime at each bridge, whether tidal, riverine, or mixed, that had the greatest potential to induce streambed scour. Water-surface elevations measured through at least one tide cycle at 32 bridges were correlated to water levels at the nearest tide station. Asymmetry of the tidal portion of the hydrograph during the outgoing tide at 12 bridges indicated that riverine flows were stored upstream of the bridge during the tidal exchange. This scenario results in greater discharges and velocities during the outgoing tide compared to those on the incoming tide. Velocity data were collected during outgoing tides at 10 bridges that experienced complete flow reversals, and measured velocities during the outgoing...



## Reviews

This book is definitely worth acquiring. Yes, it is enjoy, still an amazing and interesting literature. Its been written in an remarkably basic way and is particularly simply soon after i finished reading through this pdf where actually changed me, affect the way in my opinion.

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