

UAA Professional Development
Seminar Series

The Snow River Outburst Flood: Building a Hydraulic Model of a Misbehaving River

Presented by Robin Beebee, Ph.D.

What do you do with a river that seems to change with every flood? Every two to three years, a lake drains rapidly beneath the Snow Glacier into Snow River, reaming out new channels though the forest and filling old channels with gravel and logs. The Seward Highway and Alaska Railroad both cross the Snow River and run along the floodplain. In 2017, one of the largest recorded floods caused extensive damage to the tracks, washed out several small bridges, and eroded the ends off two spur dikes protecting the highway bridge. This presentation will cover a brief history of the outburst flood, damage, channel change, and the joys and challenges of developing and calibrating a 2D hydraulic model of a braided, dynamic channel.

Robin Beebee is a hydrologist with the Alaska Science Center specializing in streambed scour and hydraulics. Robin has a B.A. from Williams College (1997), a PhD from the University of Oregon (2003), and has been working on various aspects of Alaskan hydrology since 2003.

Friday, February 8, 2019 11:45 am-12:45 pm UAA College of Engineering, EIB 211