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## What Lies Beneath? How Fire & Ice Have Shaped Lake Floors in the Sea to Sky Region of British Columbia

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From coastal rainforest ecosystems to the alpine heather of 9,000-foot peaks, from lava flows to the thundering waterfalls cutting through them, and from submarine moraines to fumaroles steaming through the fractured glacier of a dormant volcano, British Columbia's Sea to Sky Region tells an end-to-end story of ongoing mountain building, glaciation, volcanism and collapse. Of particular note are the numerous globally unique examples of supra- and subglacial volcanic eruptions resulting in a variety of ice-contact lava formations of geological significance.

In this talk, I will describe results from bathymetric (lake floor) mapping done on remote alpine lakes in search of their origin. My mapping reveals the formation of these lakes belies their tranquil present and speaks to a fiery past where lava flows met glaciers and left behind beautiful lakes as well as precipitous landscapes prone to collapse. What lies beneath the turquoise, glacially fed lake waters is key to understanding the past, present and future of a landscape shaped by fire & ice.

