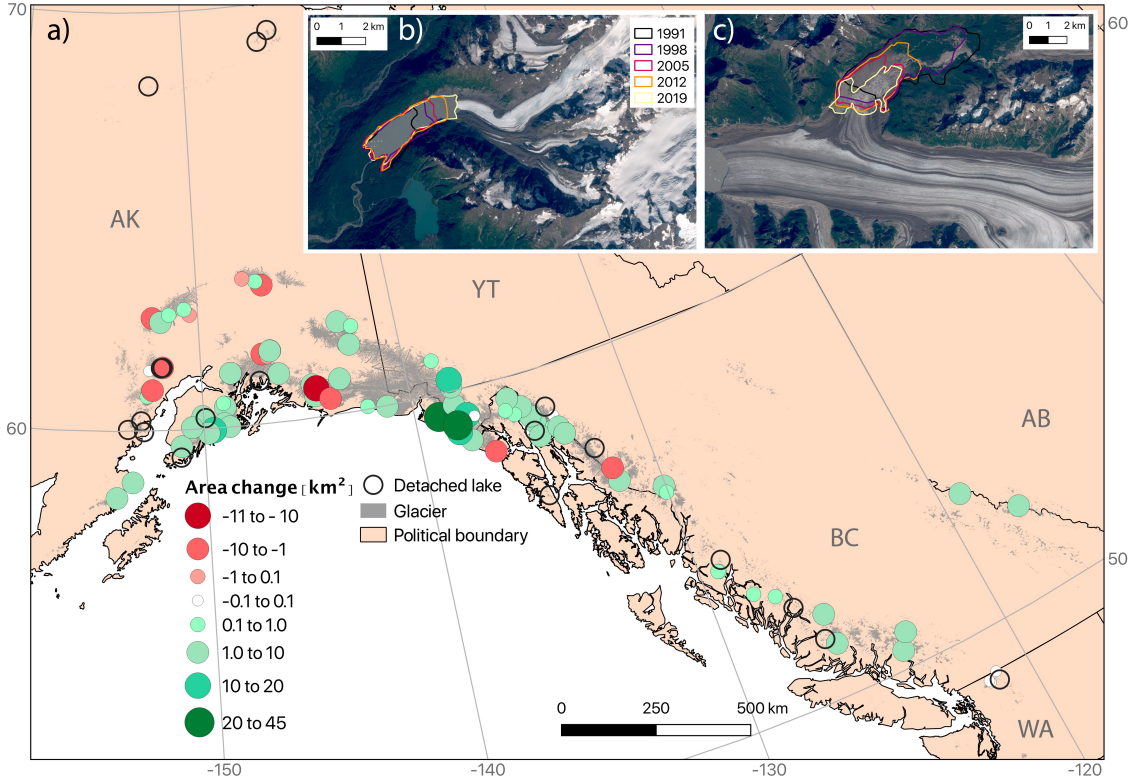
Lakes bounded by glaciers are rapidly changing in a warming climate

Across the Gulf of Alaska, **ice-marginal lakes** (lakes in direct contact with glaciers) **grew in cumulative area by 58%** over 1984 – 2018.

The formation and growth of these lakes **disconnects glacier from river, disrupting the flow of water & sediment** to the downstream environment.

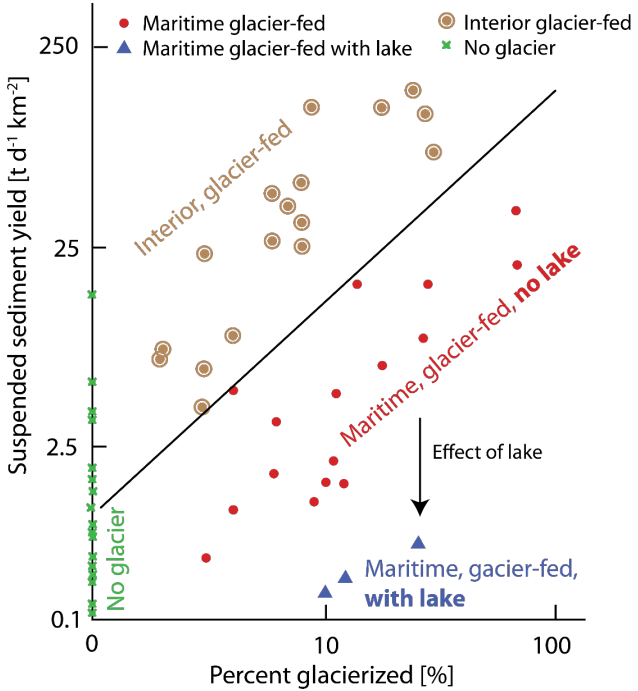


Read more @ https://doi.org/10.5194/tc-2020-366

Field, Armstrong, & Huss [in revision], The Cryosphere

What are the impacts of ice-marginal lake change on downstream biology and geomorphology?

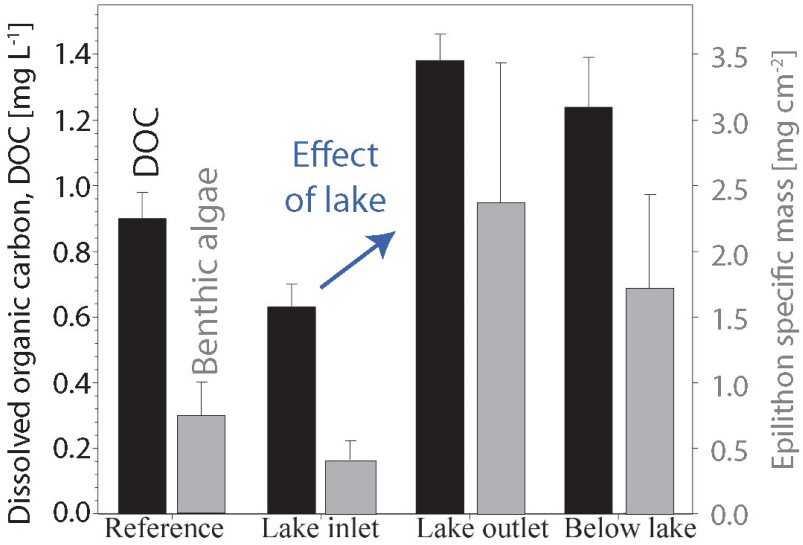
Decreased sediment flux



Modified from *Dorava & Milner* [2000], Hydrol. Process.

Modified from *Arp & Baker* [2007], *Limnol. Oceanogr.*

Enhanced primary productivity



Also impacts:
Flow variability
Water temperature
Spawning habitat
Channel stability

I am a: glaciologist

In search of:
Ecologist, biologist, wildlife manager, geomorphologist

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