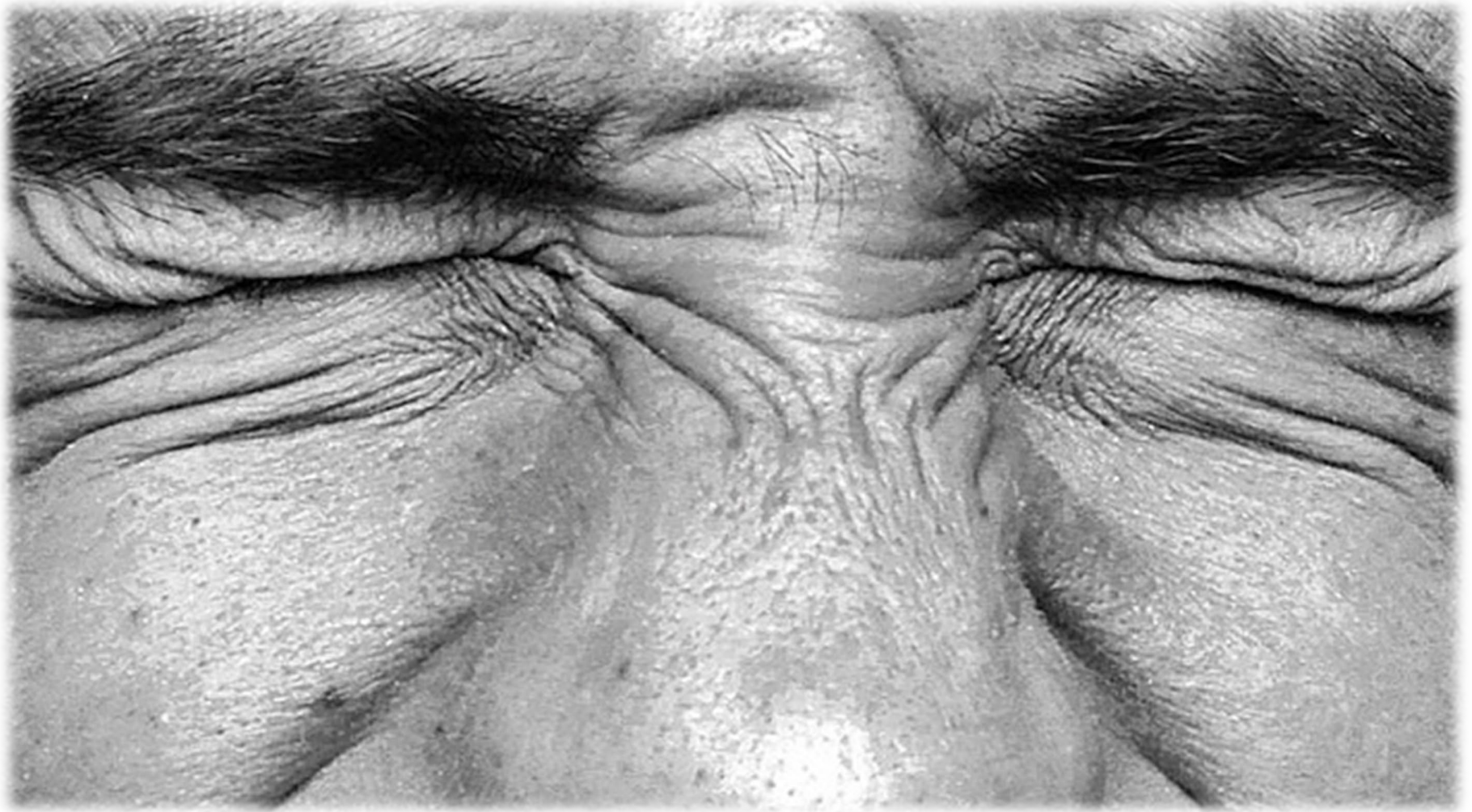


LTPBR WORKSHOP

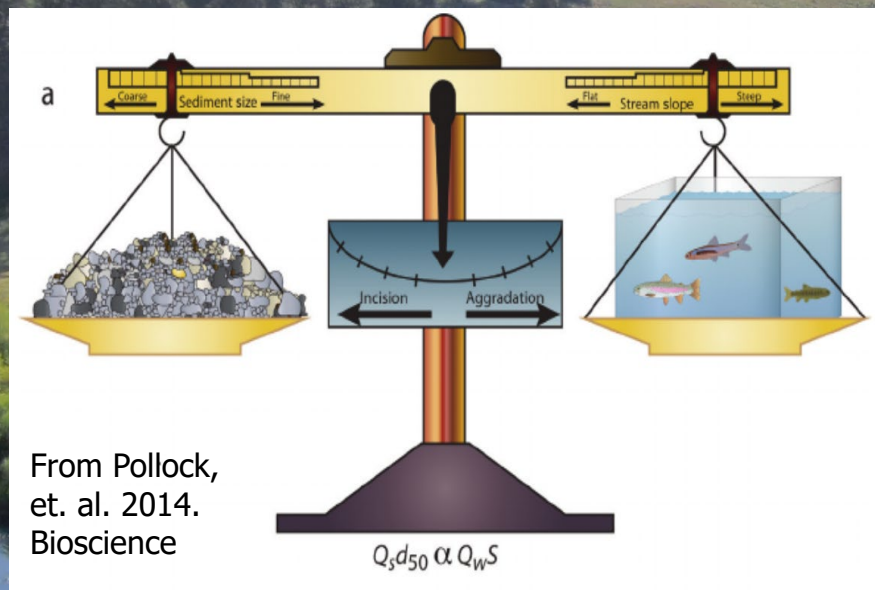
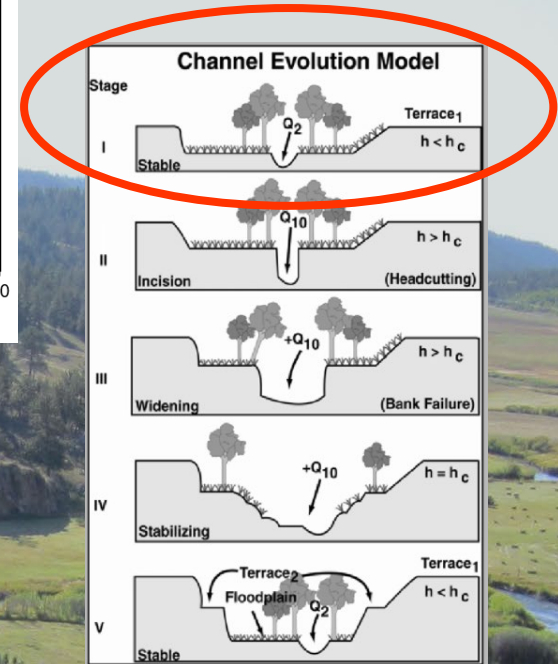
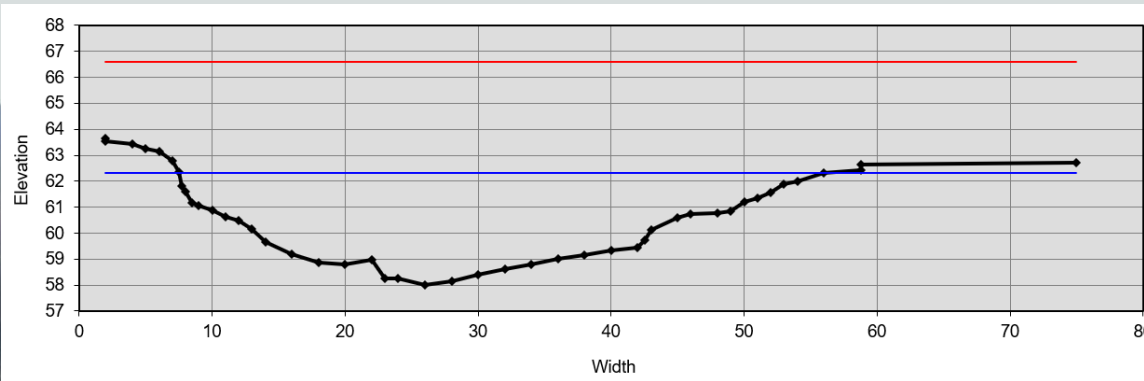
Reimagining what riverscapes could be



Close your eyes and imagine a healthy stream...

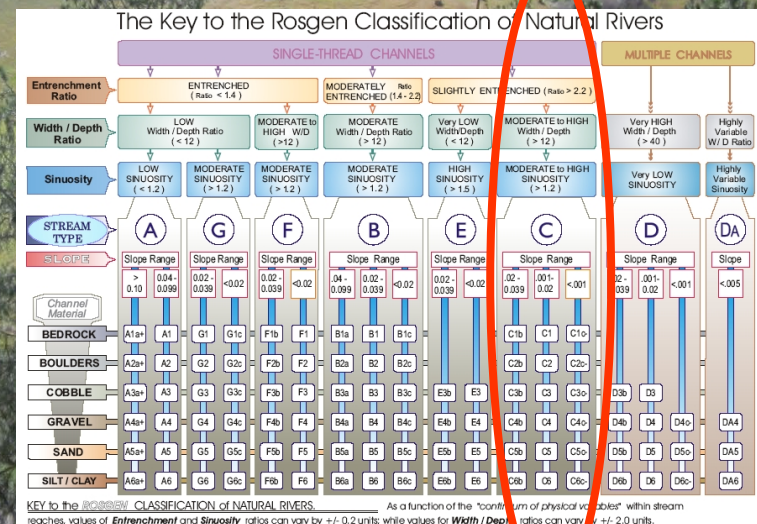


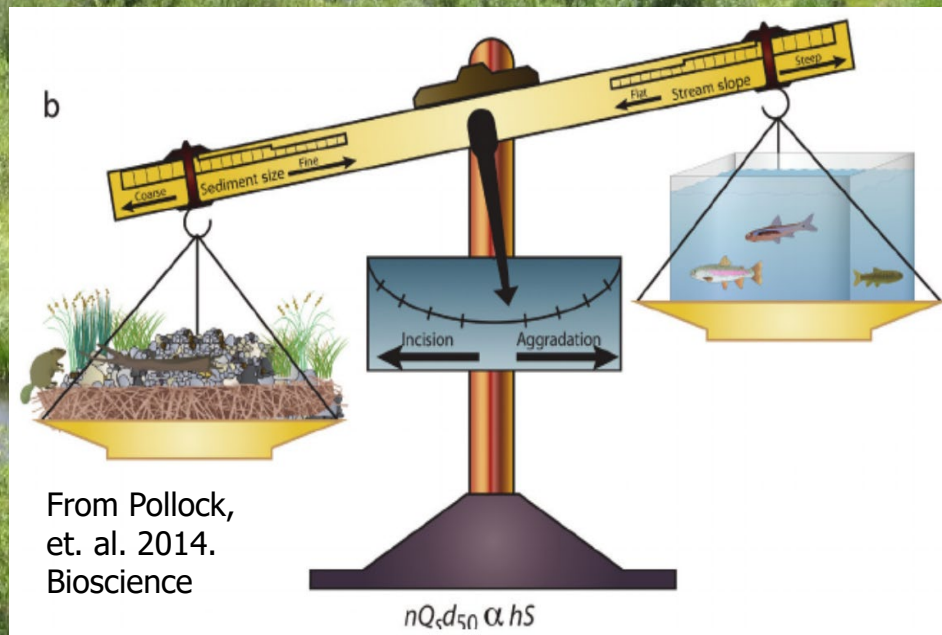
What do you see?

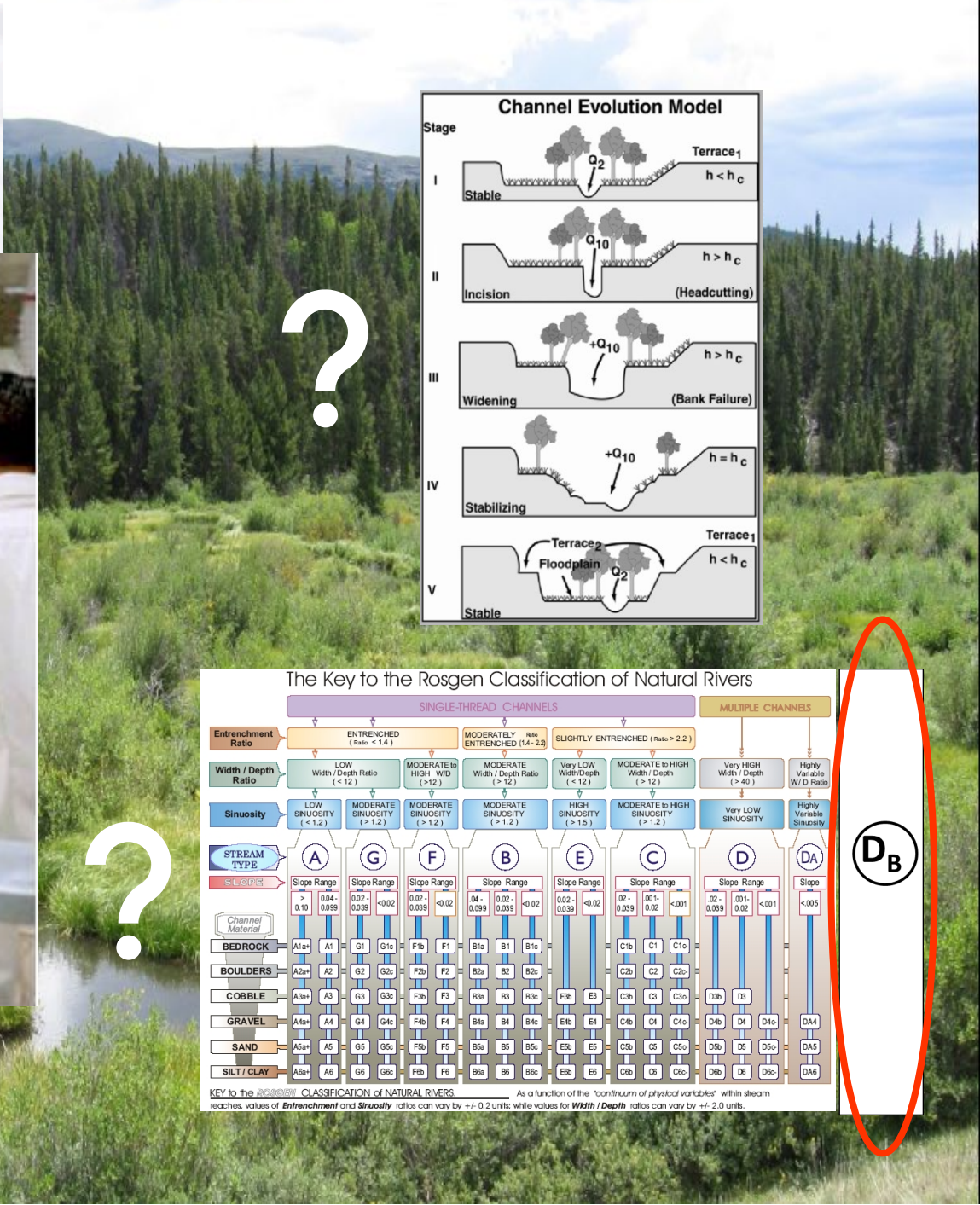


From Pollock,
et. al. 2014.
Bioscience

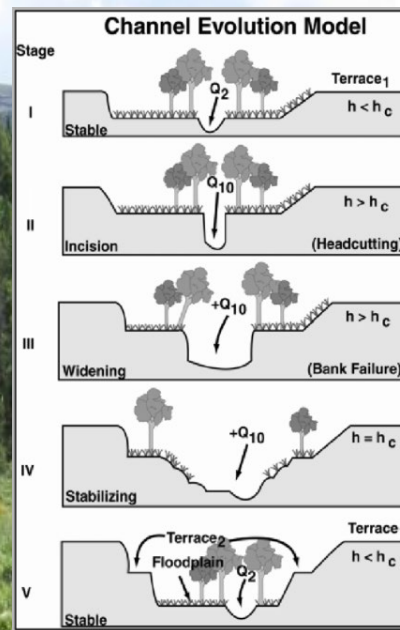
The Natural Equilibrium Paradigm



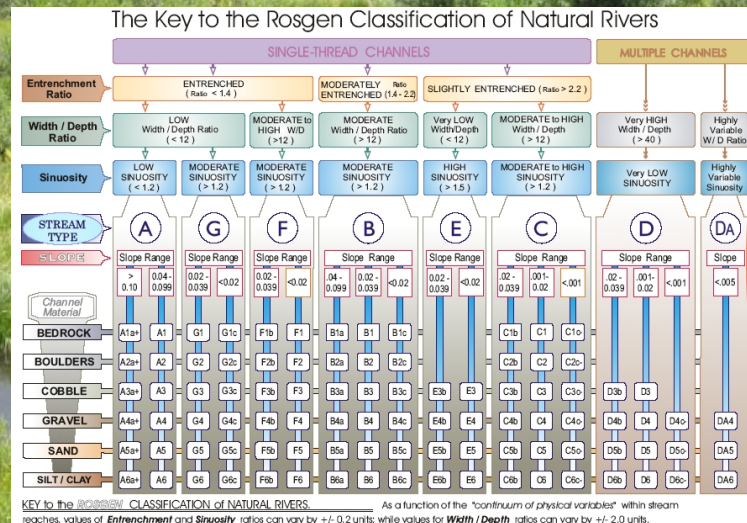




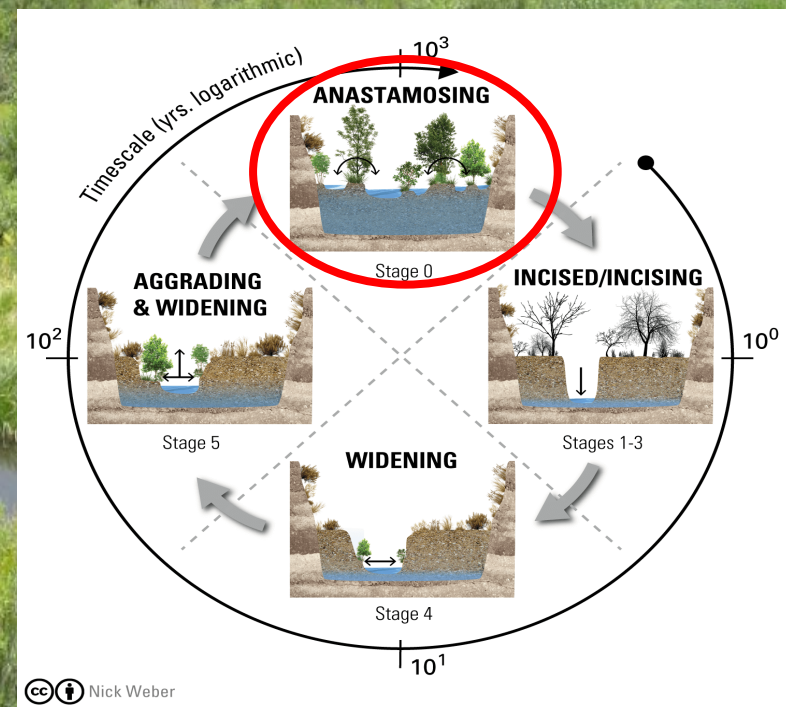
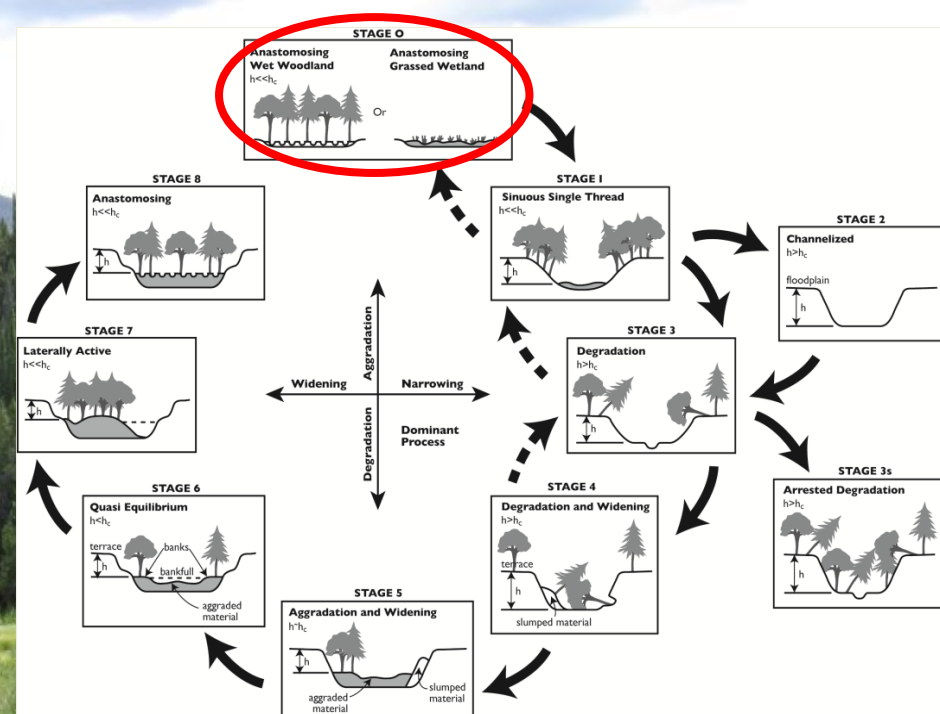
?



?



D_B

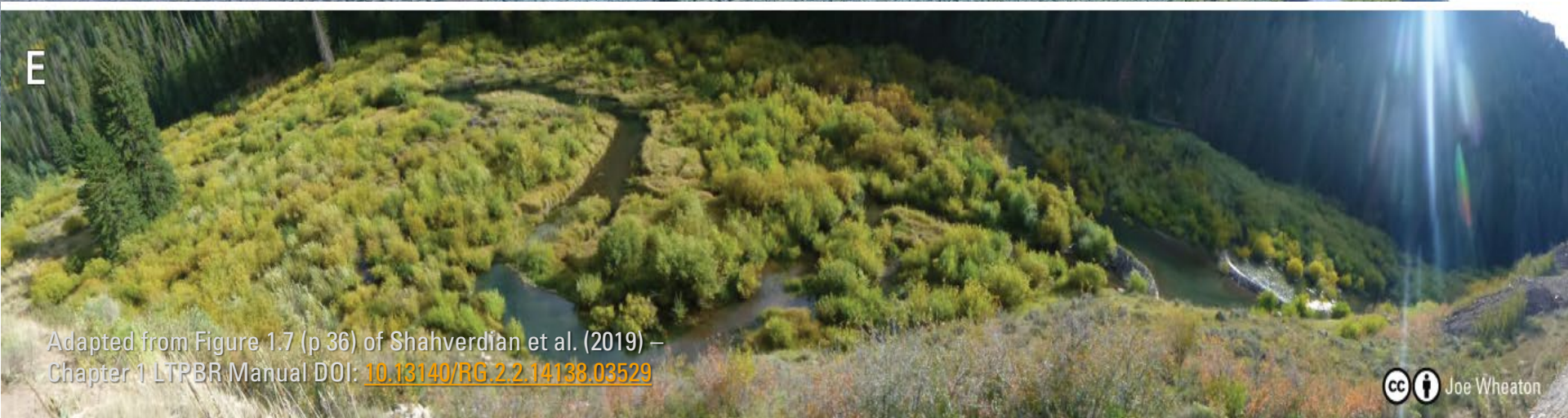


A



These are not anomalies!

E



Adapted from Figure 1.7 (p 36) of Shahverdian et al. (2019) –
Chapter 1 LTPBR Manual DOI: [10.13140/RG.2.2.14138.03529](https://doi.org/10.13140/RG.2.2.14138.03529)



We forgot what riverscapes could be!



Reimagine what riverscapes could be!

Reimagine what riverscapes could be!

The Beaver Restoration Guidebook

Working with Beaver to Restore Streams, Wetlands, and Floodplains

Version 2.0, June 30, 2017



Photo credit: Worth A Dam Foundation (martinezbeavers.org)

Prepared by

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Gregory Lewallen
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Funded by

North Pacific Landscape Conservation Cooperative

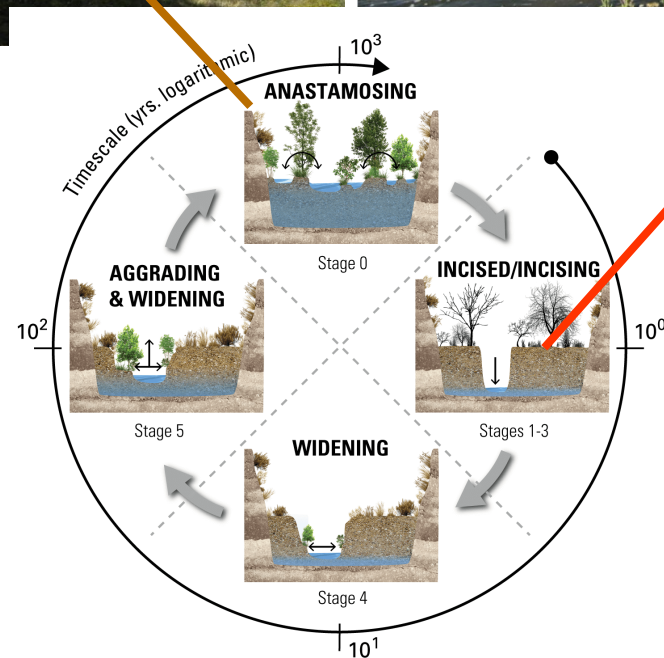
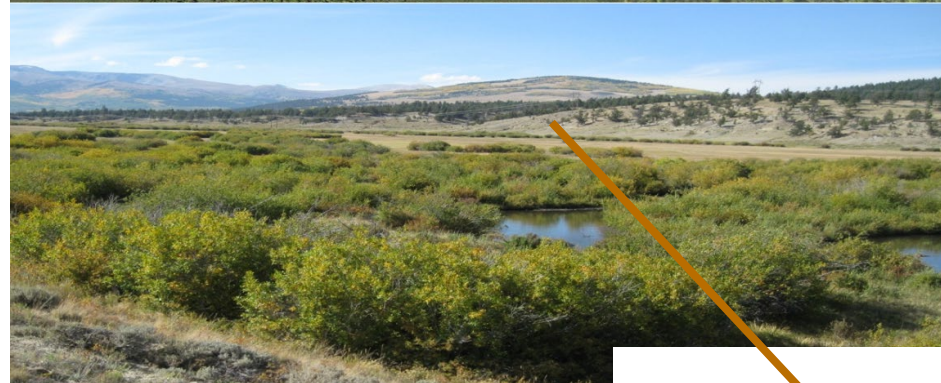


Version 2.0. Get the latest version at: <https://www.fws.gov/oregonfwo/promo.cfm?id=177175812>

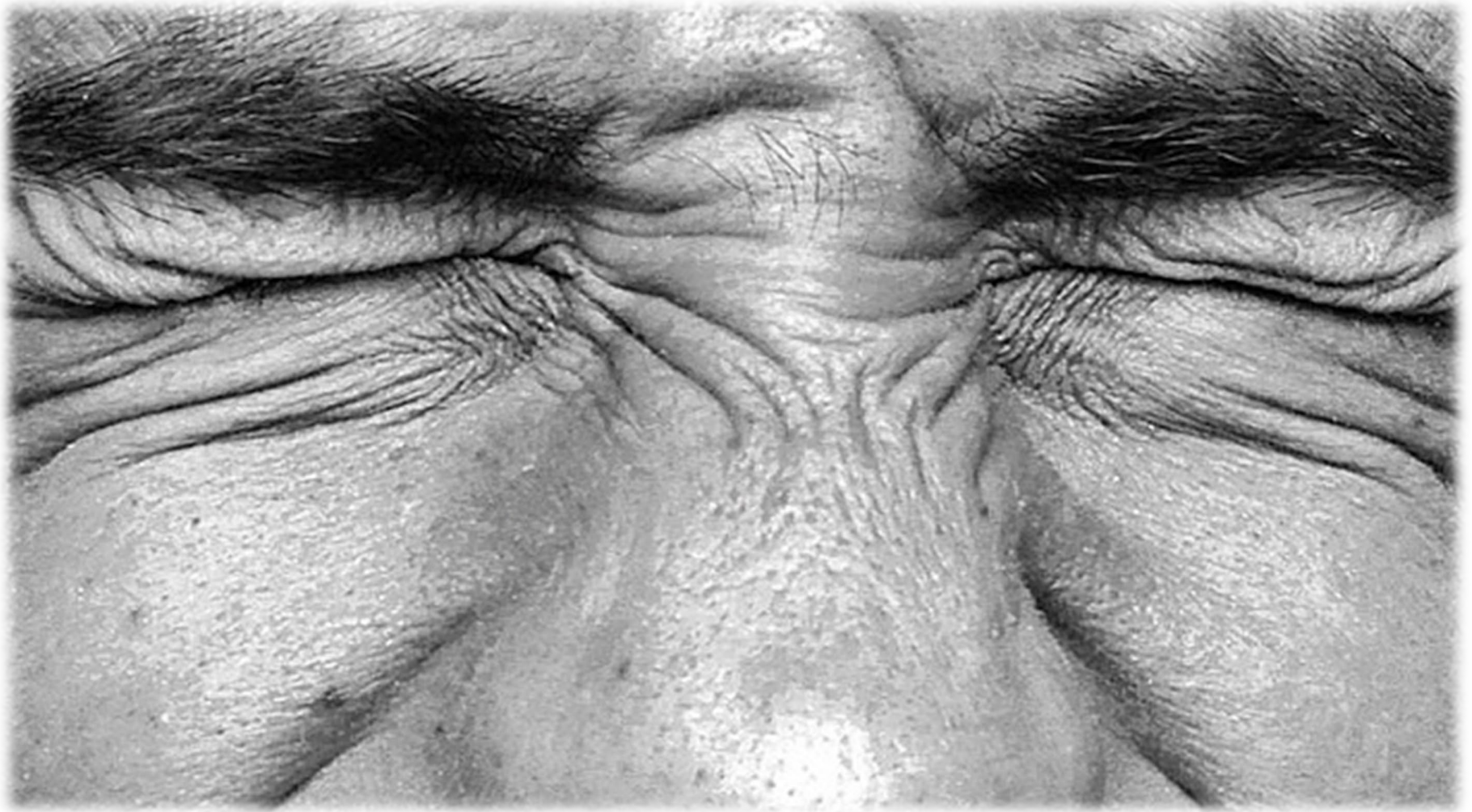
Pollock, M.M., G.M. Lewallen, K. Woodruff, C.E. Jordan and J.M. Castro (Editors) 2017. The Beaver Restoration Guidebook: Working with Beaver to Restore Streams, Wetlands, and Floodplains. Version 2.0. United States Fish and Wildlife Service, Portland, Oregon. 219 pp. Online at: <https://www.fws.gov/oregonfwo/promo.cfm?id=177175812>

Reimagine what riverscapes could be!





Close your eyes again...



Try to picture the riverscape as I read to you.







CC Mark Beardsley

On May 9th, 1933, Trout Creek Camp-F-24-C was established on this area, with an extensive work plan, to try to bring back by human effort a portion of what man had destroyed.



Photo#279055. Taken 8/9/1933. " Photo location-left side of highway going up Trout Creek Pass, 1/2 mile down from head."





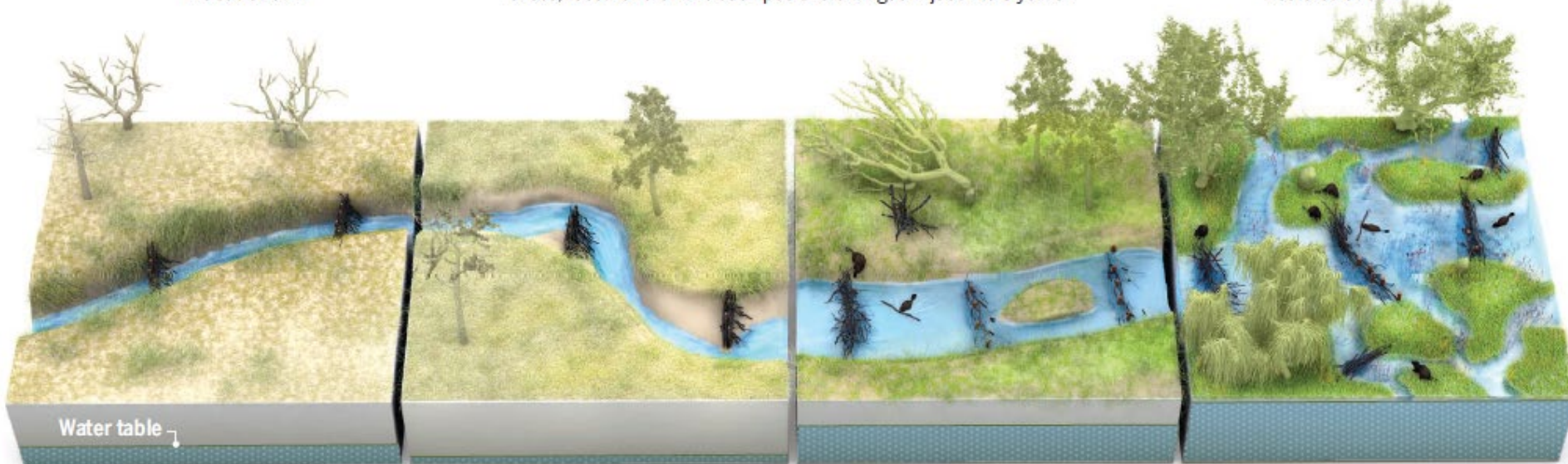
Incised stream

A stream comes back to life

Across the U.S. West, scientists and land managers are using beaver dam analogs (BDAs) to heal damaged streams, re-establish beaver populations, and aid wildlife. In some cases, researchers have seen positive changes in just 1 to 3 years.



Restored stream



Adding dams

Widening the trench

Beavers return

A complex haven

From Goldfarb (2018) Science:

<http://science.sciencemag.org/content/360/6393/1058>

NEWS

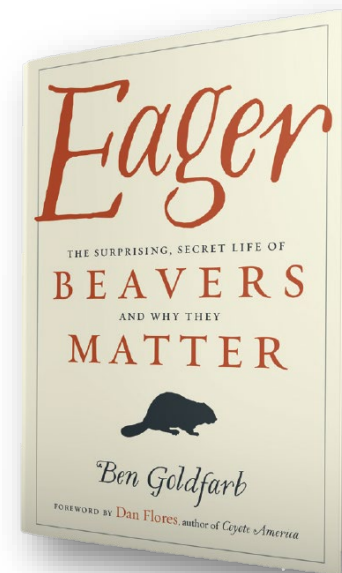
FEATURES



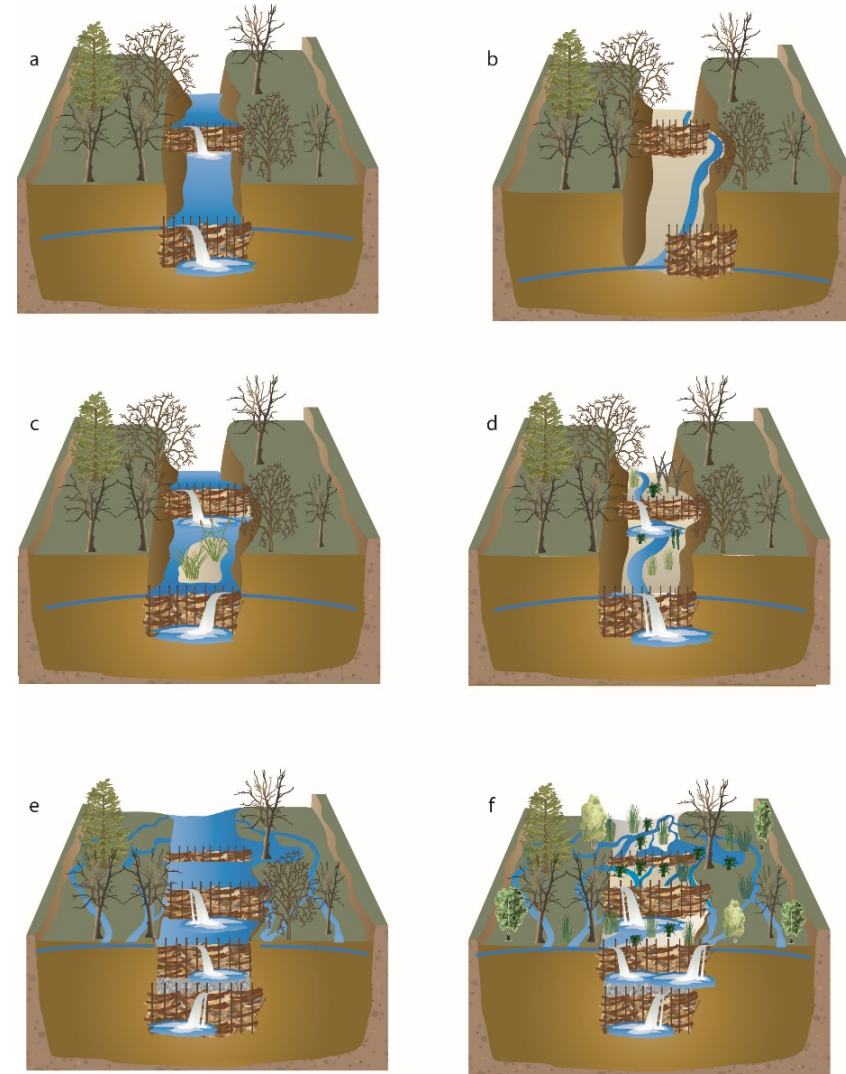
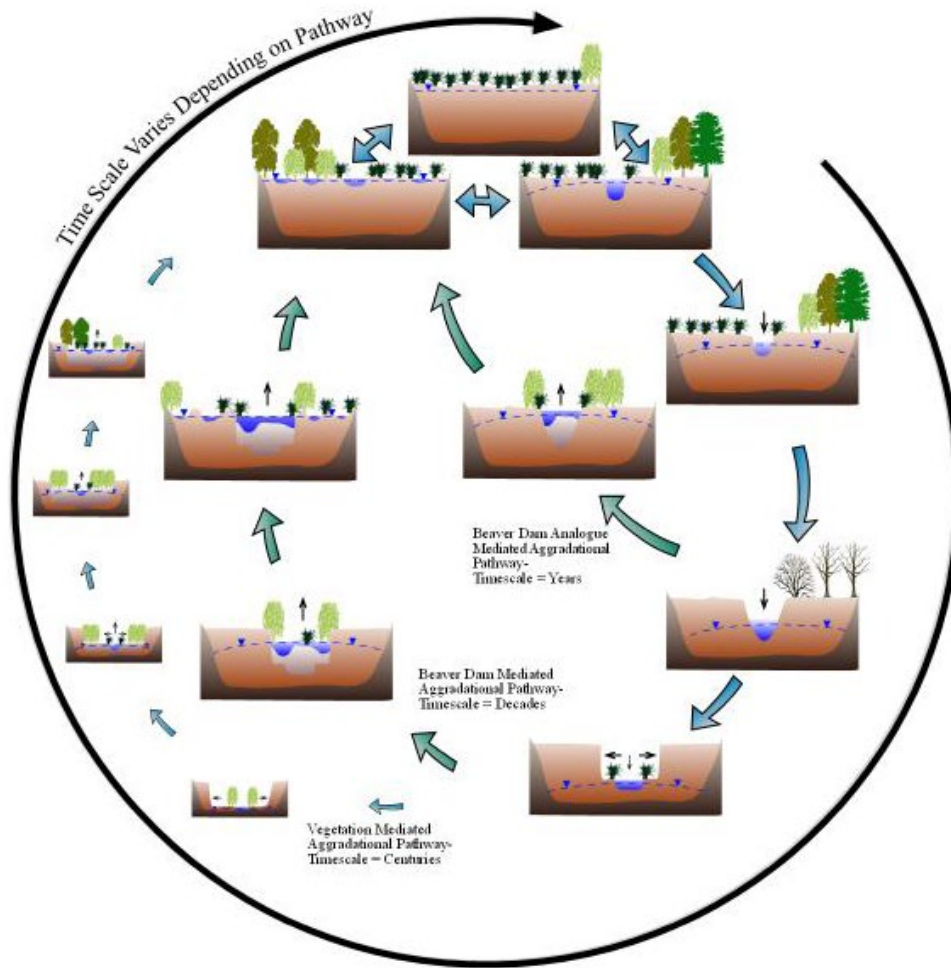
BEAVERS, REBOOTED

Artificial beaver dams are a hot restoration strategy, but the projects aren't always welcome

By Ben Goldfarb, in the Scott Valley, California

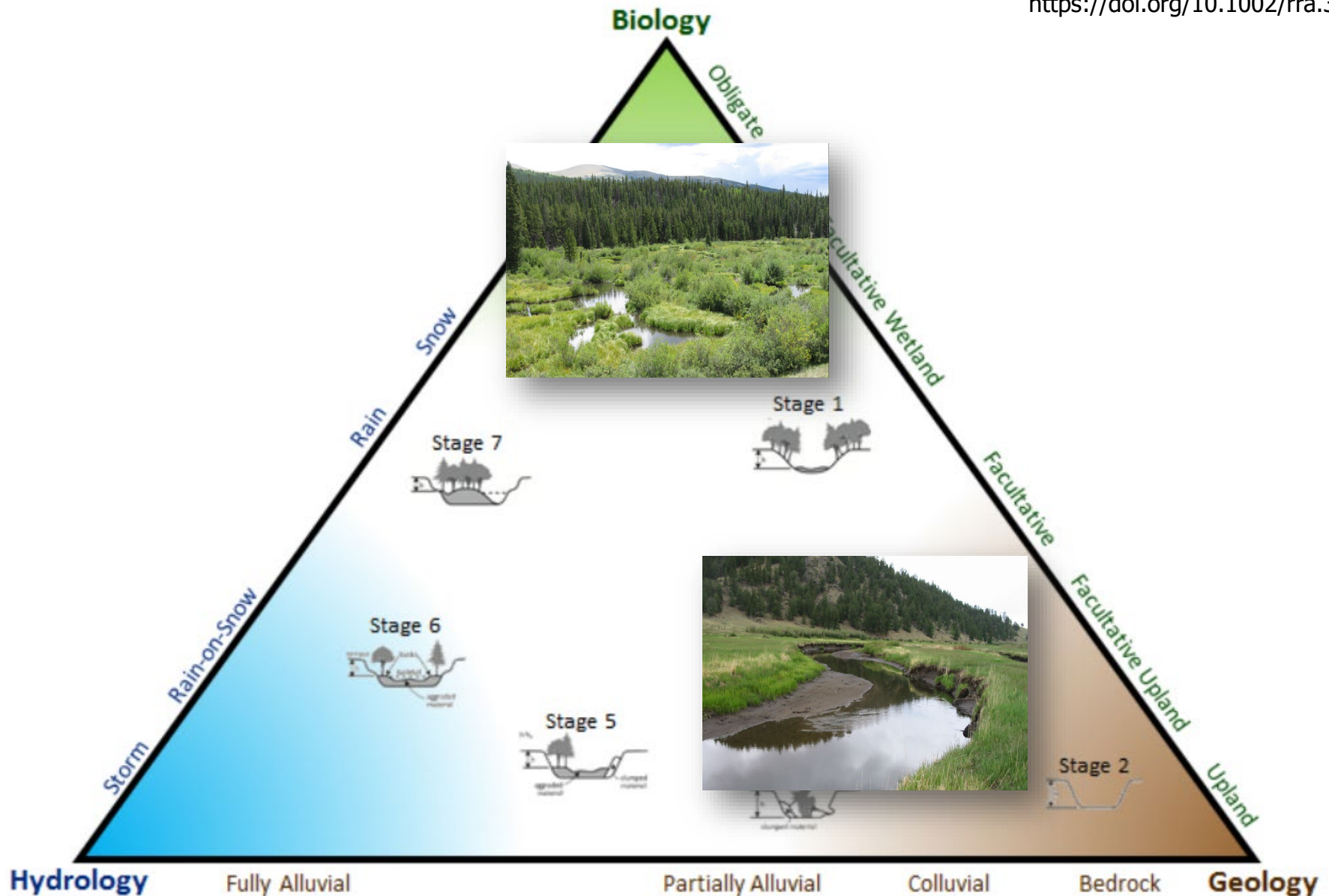


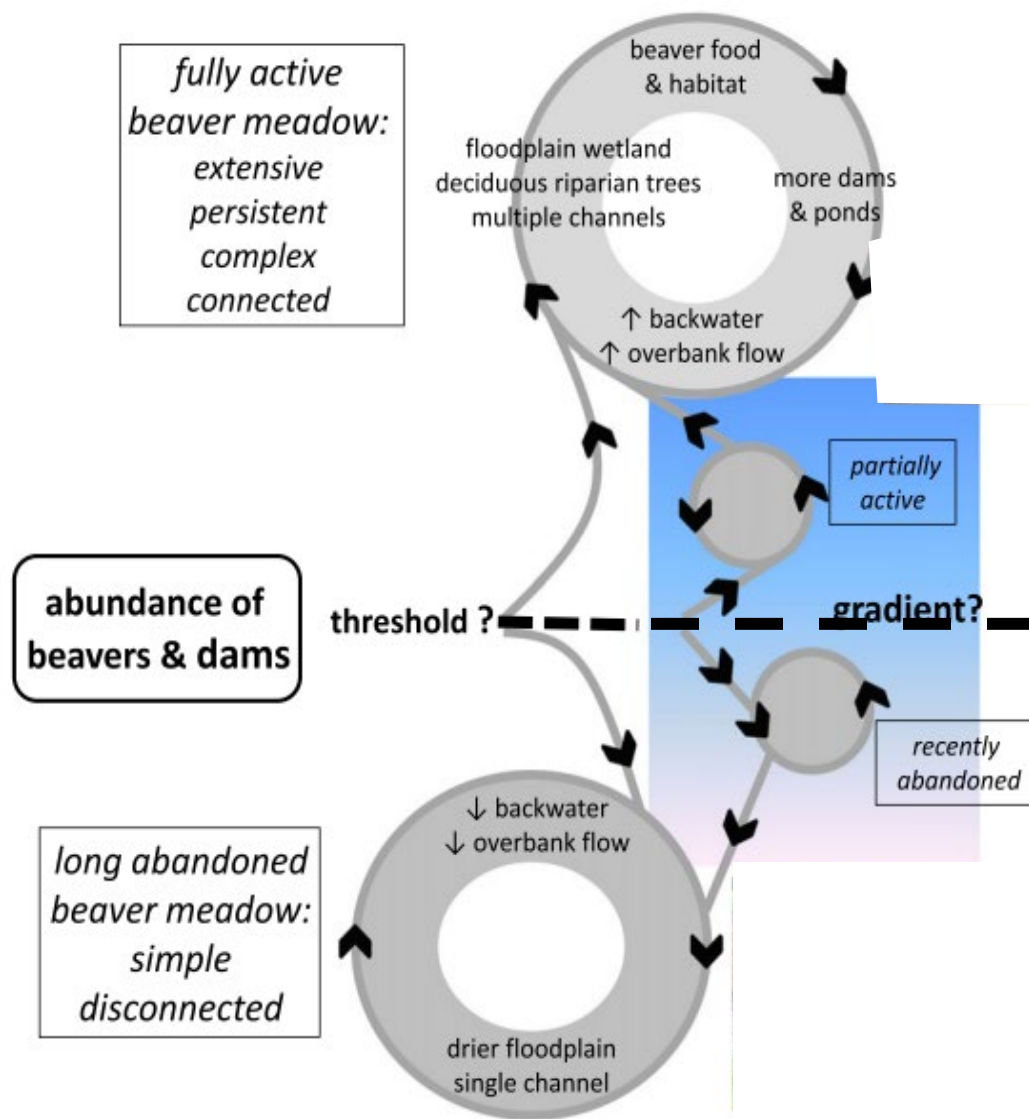
Beavers accelerate geomorphic evolution



From Pollock et al. (2014) –Bioscience

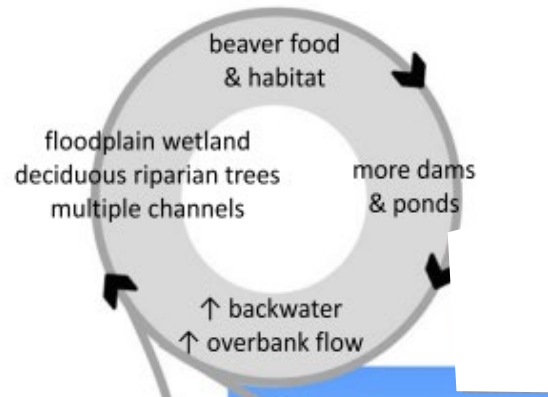
DOI: [10.1093/biosci/biu036](https://doi.org/10.1093/biosci/biu036)





Laurel and Wohl (2018) The persistence of beaver-induced geomorphic heterogeneity and organic carbon stock in river corridors. *Earth Surf. Process. Landforms*. DOI: 10.1002/esp.4486

*fully active
beaver meadow:
extensive
persistent
complex
connected*



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*fully active
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2008




Riparian Reconnect

2020

Reimagine what's possible!



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mark.ecometrics@gmail.com

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