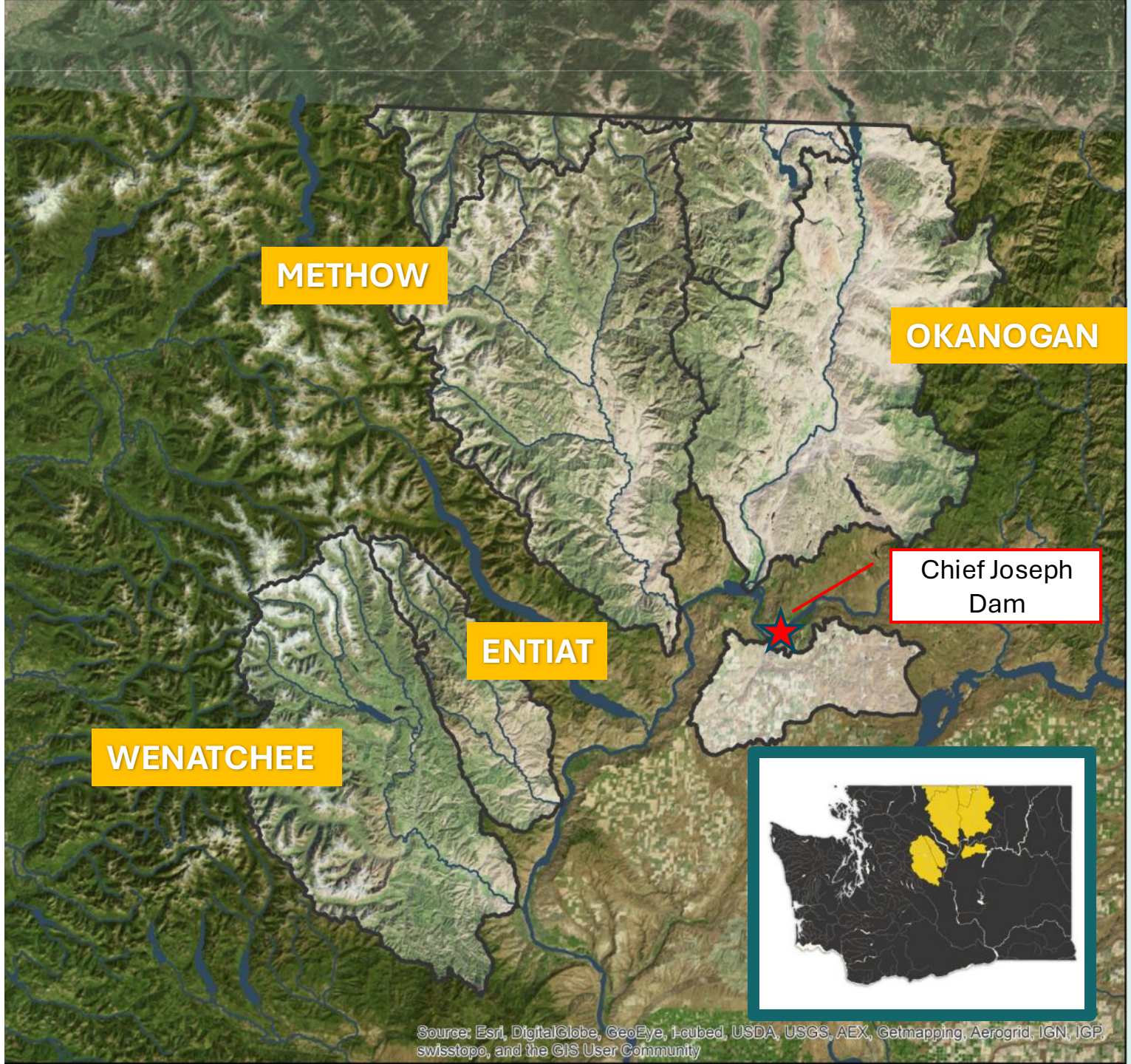
# Salmon Recovery in the Upper Columbia

July 31, 2025
Amanda Ward, Executive Director
Upper Columbia Salmon Recovery Board
Wenatchee, WA

# Upper Columbia Region




4 sub-basins
~ 10,000 square miles (5.26 million acres)
~ 70% managed by the Okanogan-Wenatchee National Forest
~ 1,050 miles fish-bearing streams

**ESA listed species:**

**Endangered**
- UC Spring Chinook
  - (1999)

**Threatened**
- Steelhead (2006)
- Bull Trout (1999)

**Since formation in September 1999:**

Regional projects
- Multiple funding sources, including SRFB and BPA

715 - Projects completed to date ($217 million)

162 - Active projects ($100 million)

144 - Planned projects ($172 million)

# Regional annual grant round process

RTT

- Regional Technical Team
  - guide regional science
  - score SRFB and BPA projects
- Functions well, experienced leadership

WATs

- Watershed Action Teams
- Project implementation

CACs

- Citizen's Advisory Committees
  - Okanogan and Chelan counties
- 7 citizens from diverse backgrounds
- Final ranking of SRFB projects

# 2025 regional SRFB funding round

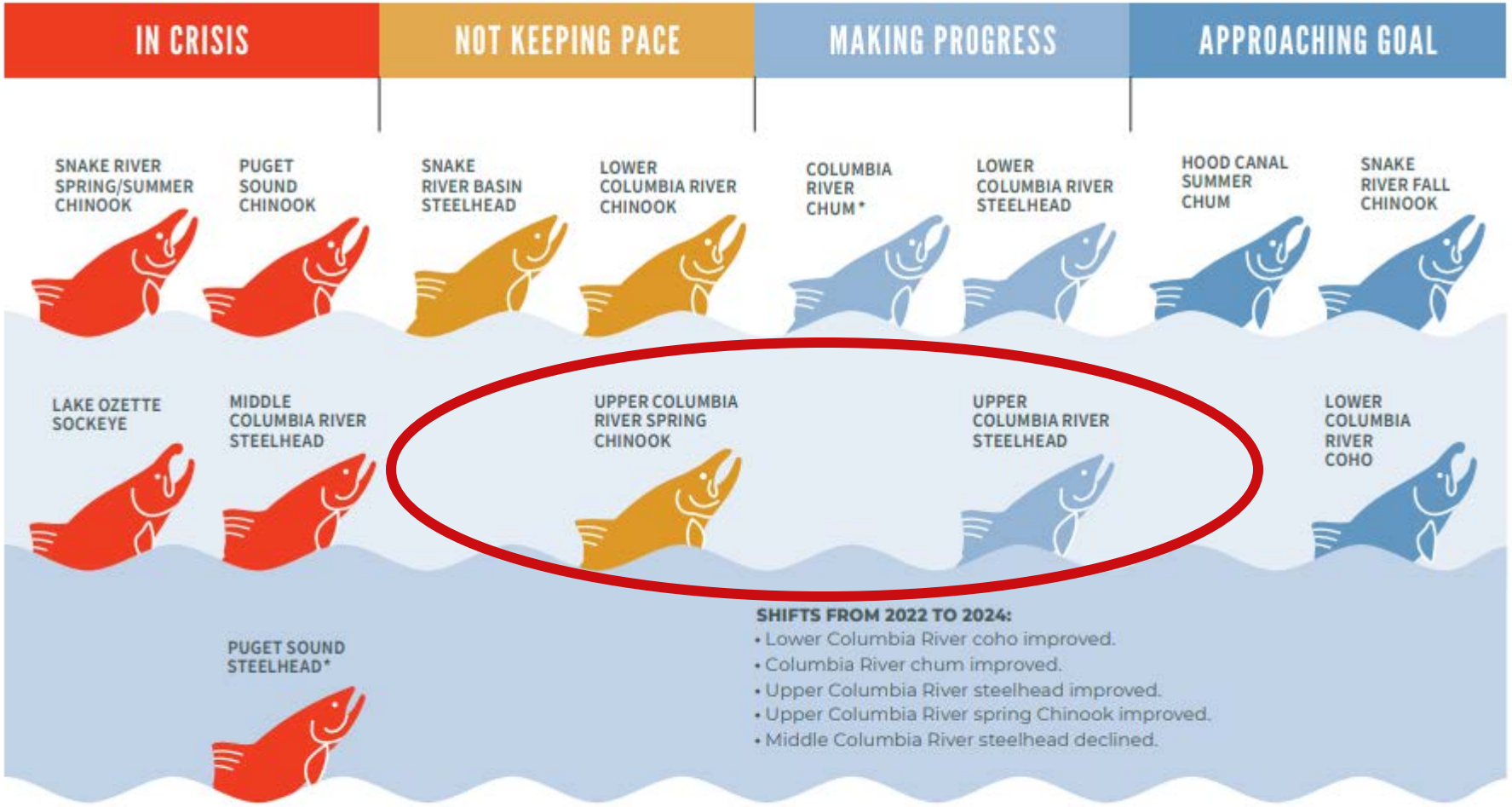
Regular

- 10 projects
  - Thermal infrared surveys to irrigation ditch efficiency
  - 6 to SRFB for final approval and full funding
  - 1 project for potential partial funding
  - $2,062,000

Riparian

- 6 projects
  - Low-tech restoration to floodplain reconnection
  - 5 fully funded
  - 1 partially funded
  - $2,246,036

# Salmon Abundance | 2024




* Lacks complete data.
Data and analysis by Washington Department of Fish and Wildlife

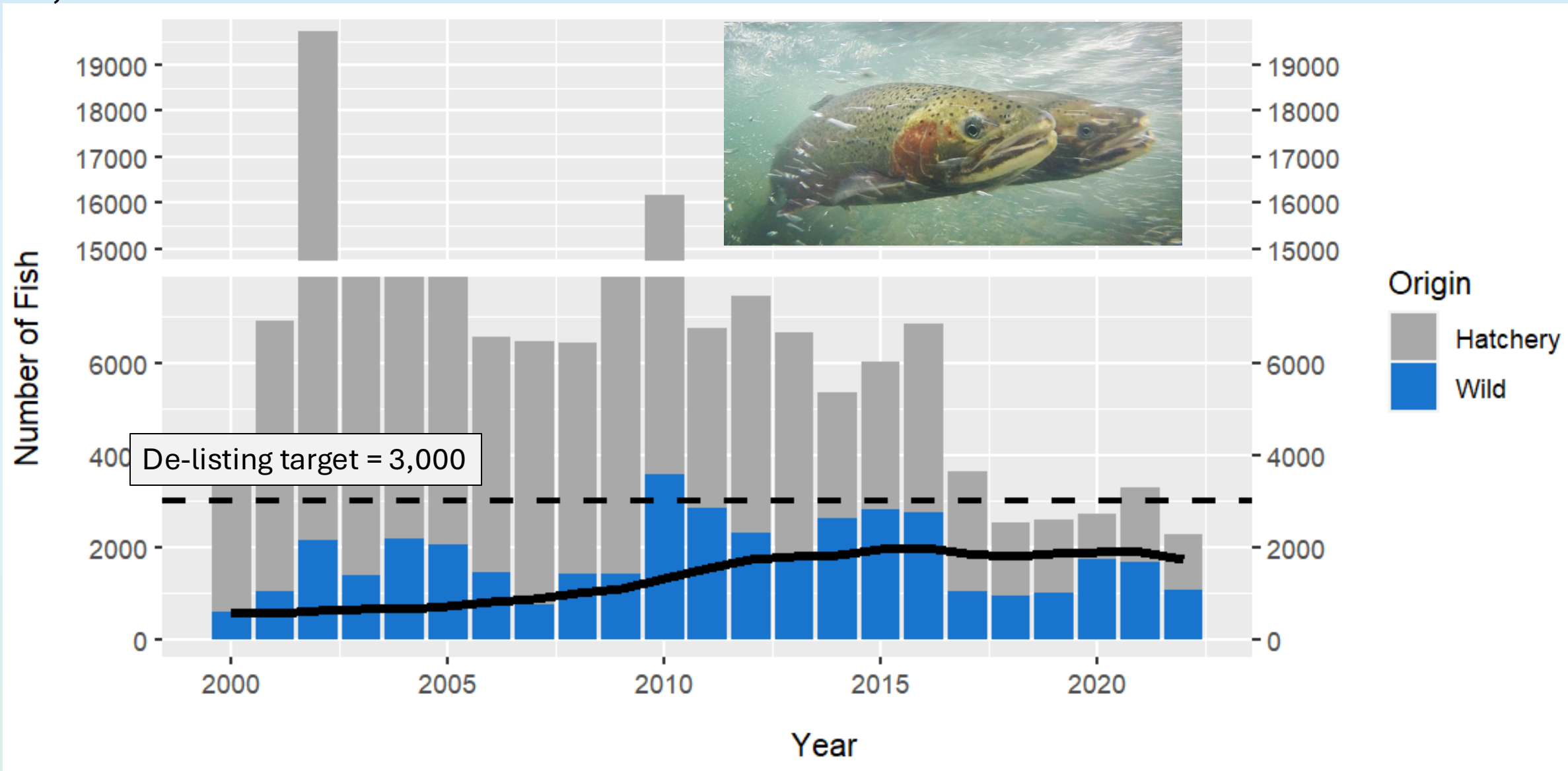
From: 2024 State Of Salmon In Watersheds Executive Summary
Stateofsalmon.Wa.Gov

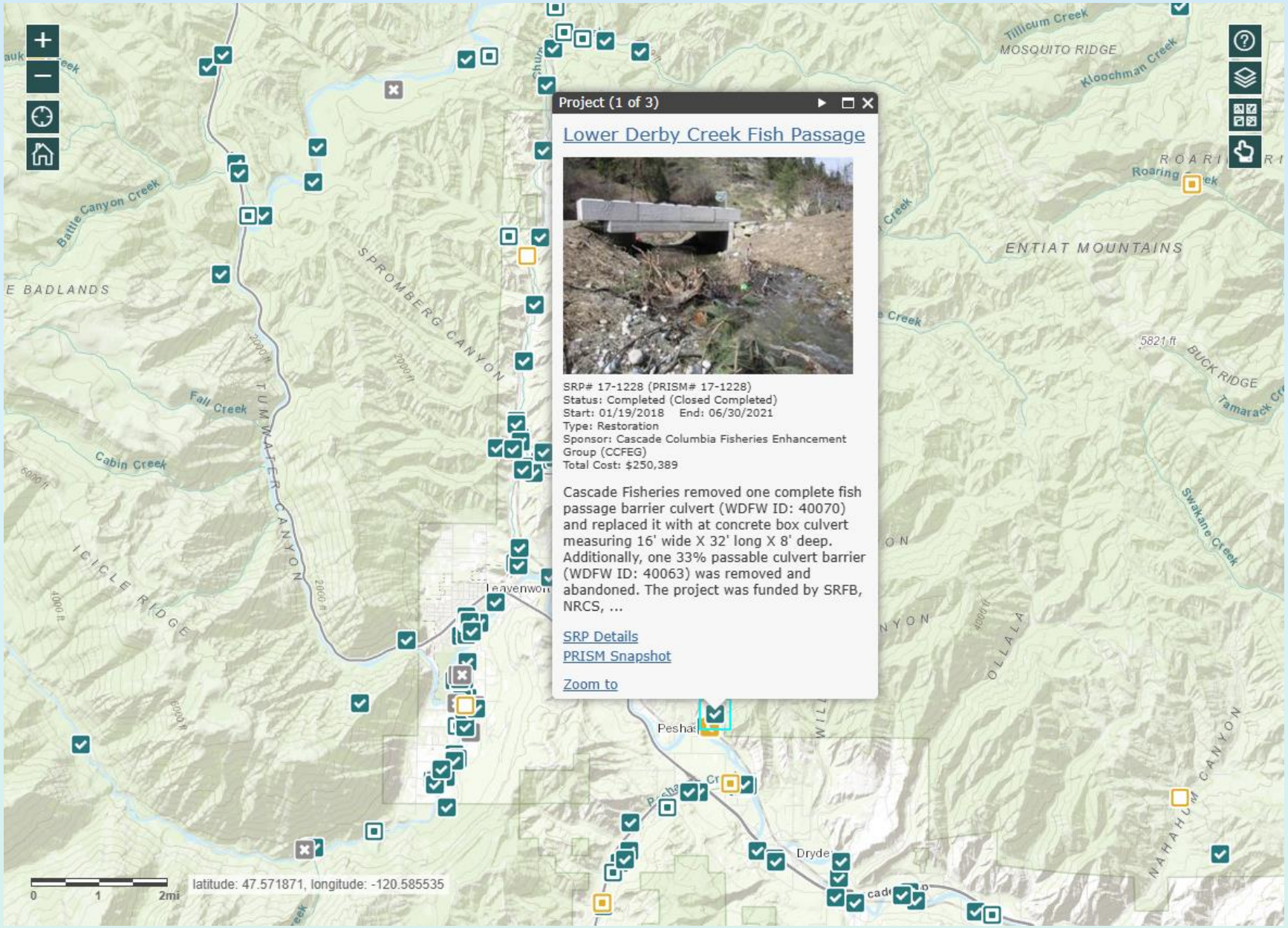
# Upper Columbia Spring Chinook (Endangered)

70,000+ Historic Wild Fish

# Upper Columbia Steelhead (Threatened)

14,000+ Historic Wild Fish






# SALMON RECOVERY PORTAL (SRP)

https://srp.rco.wa.gov

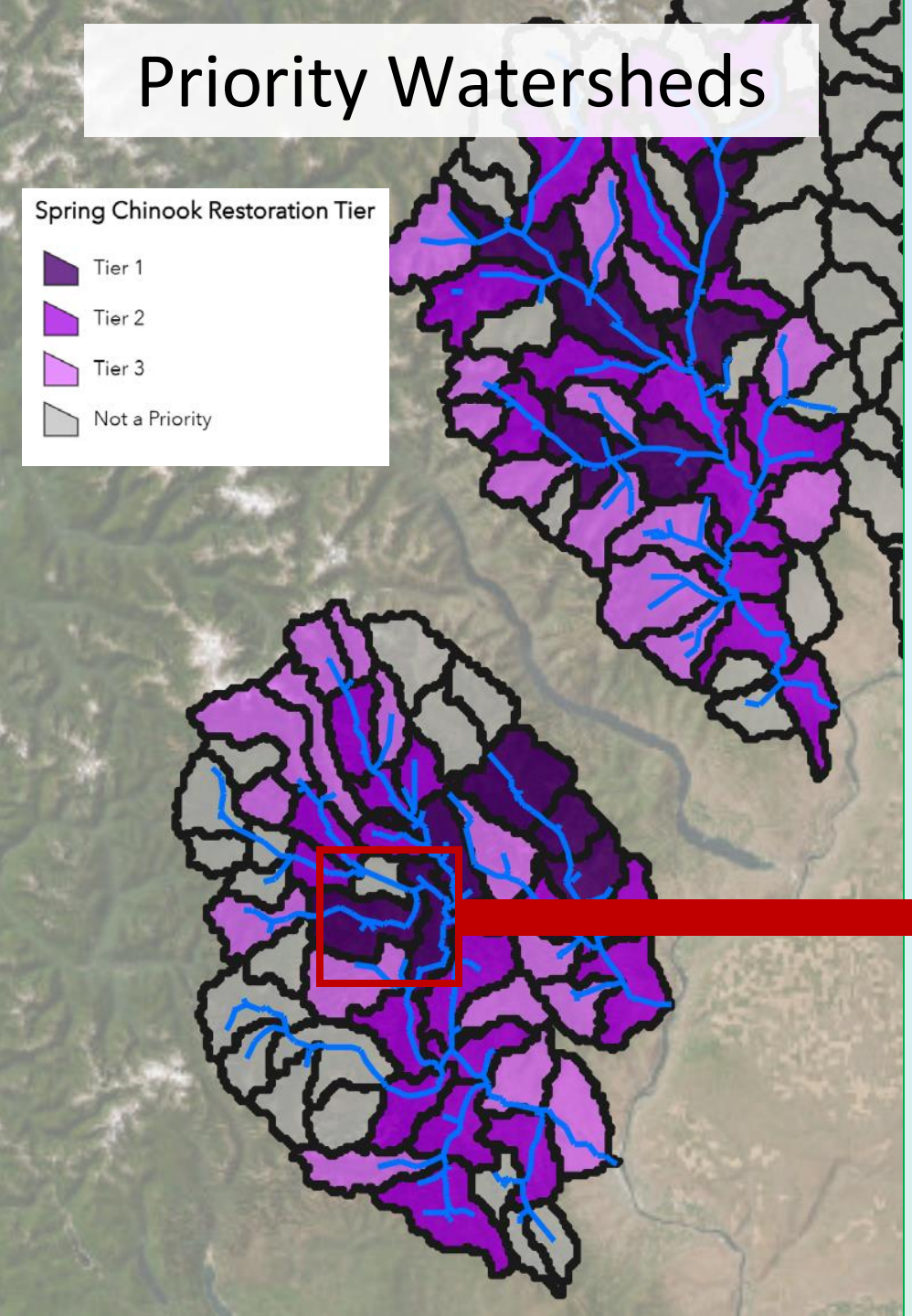
A valuable tool

All projects entered into SRP

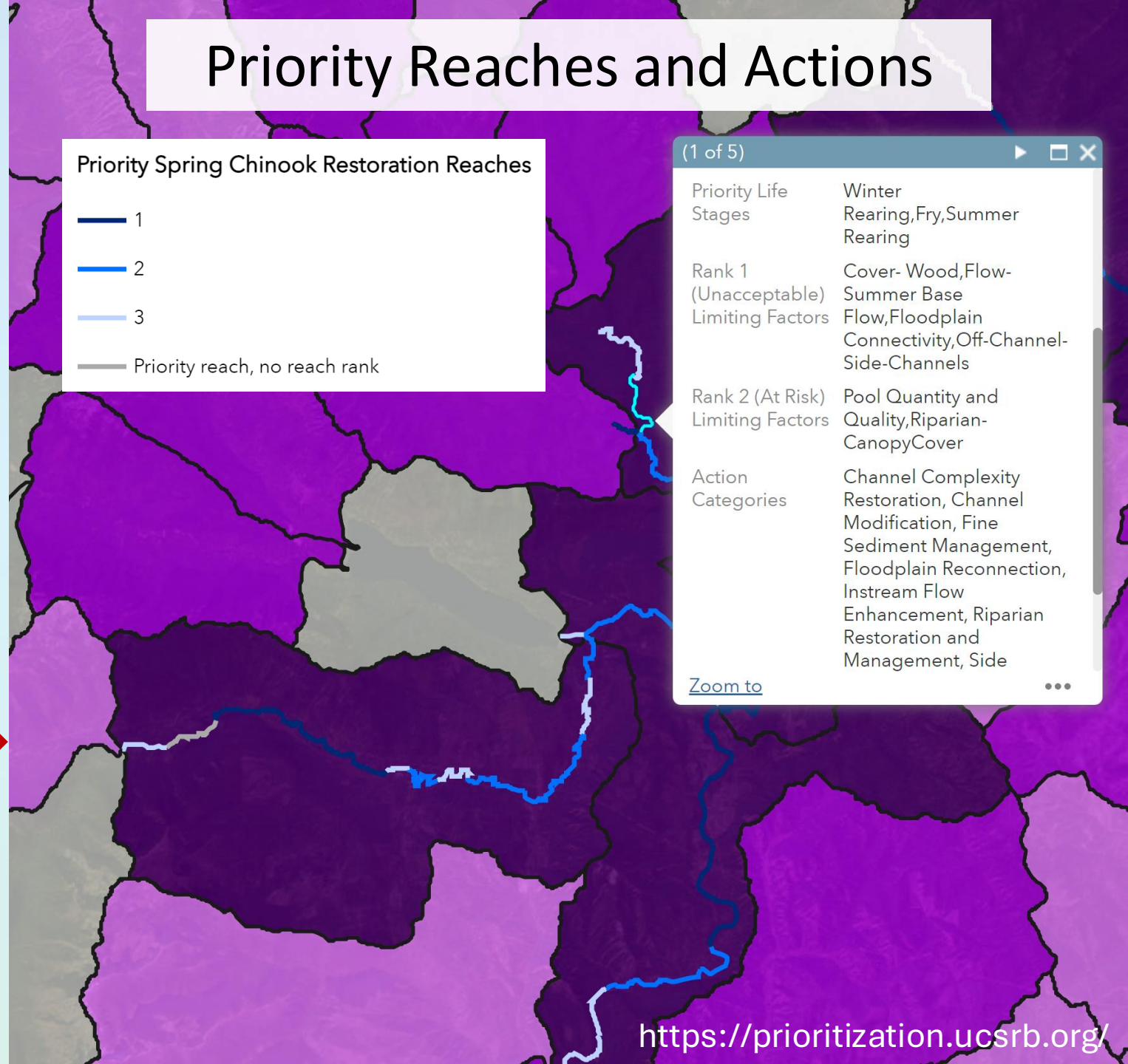
Map of projects – regional and state

- From salmon specific to irrigation efficiencies

# Priority Watersheds

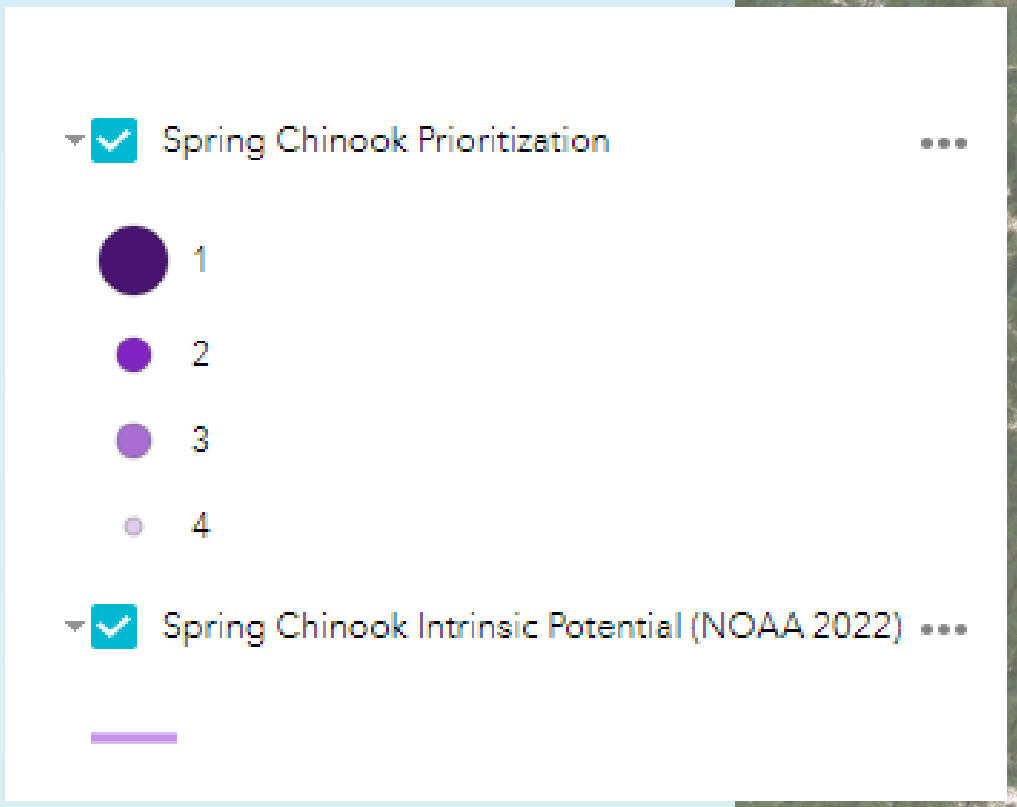


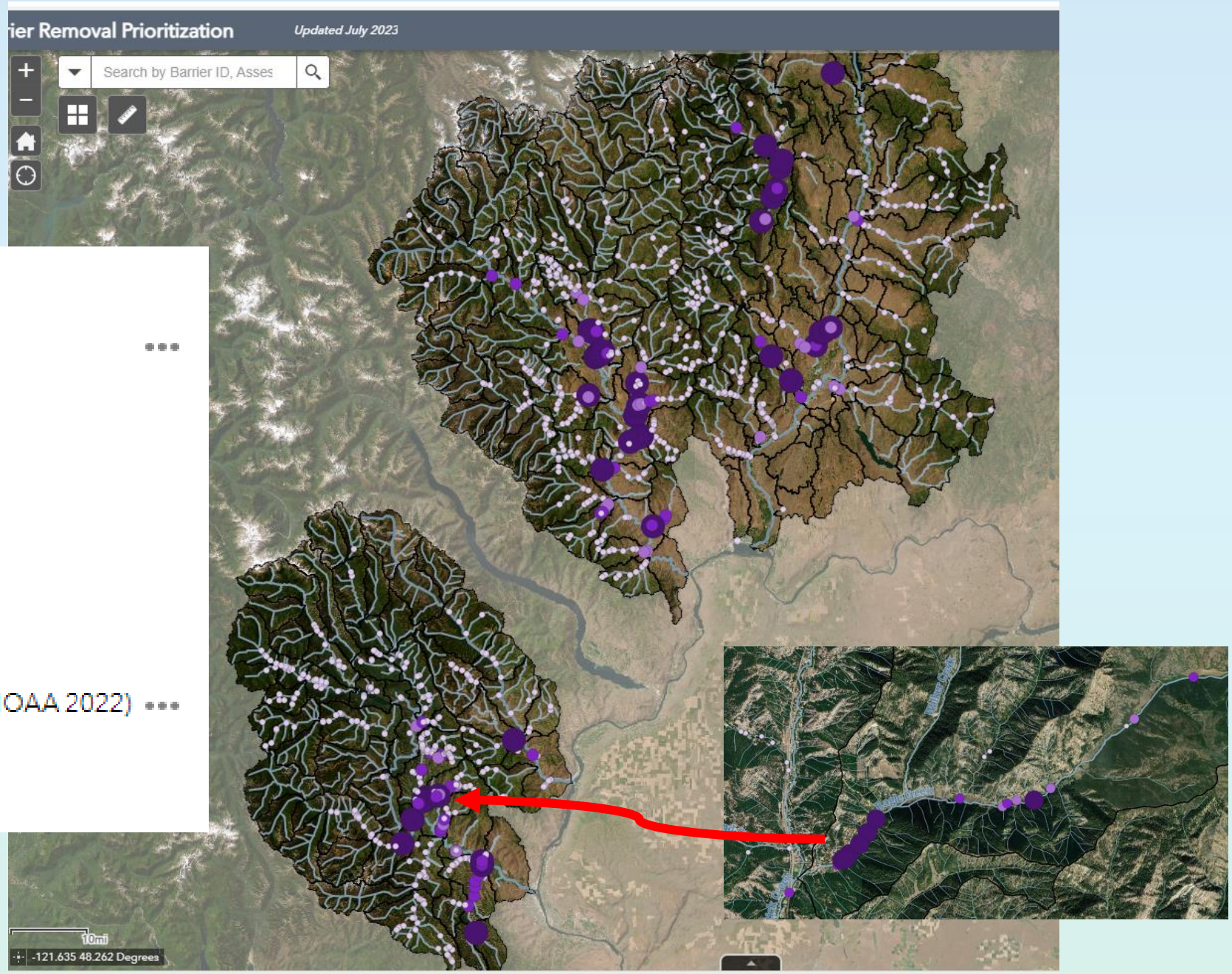

# Priority Reaches and Actions

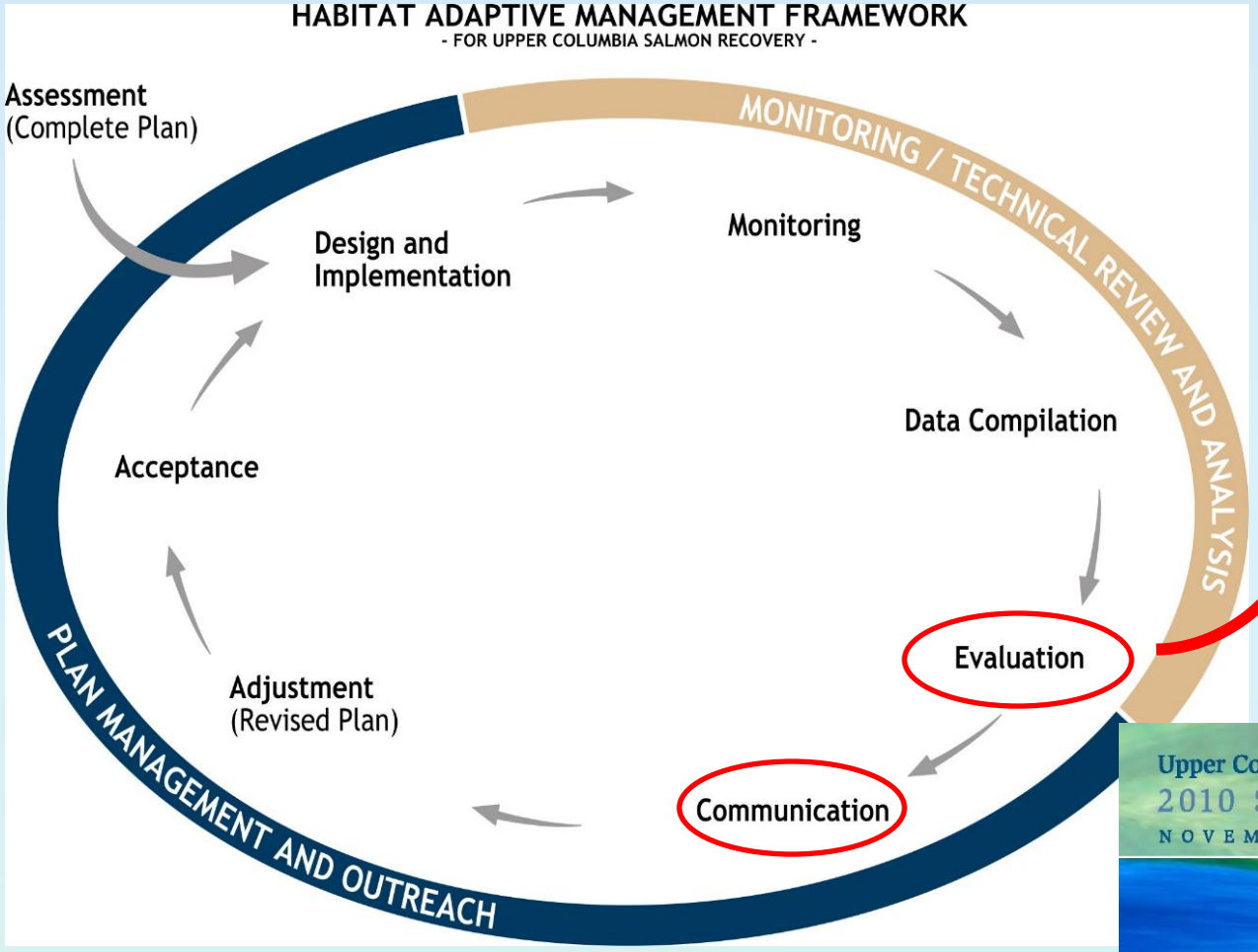


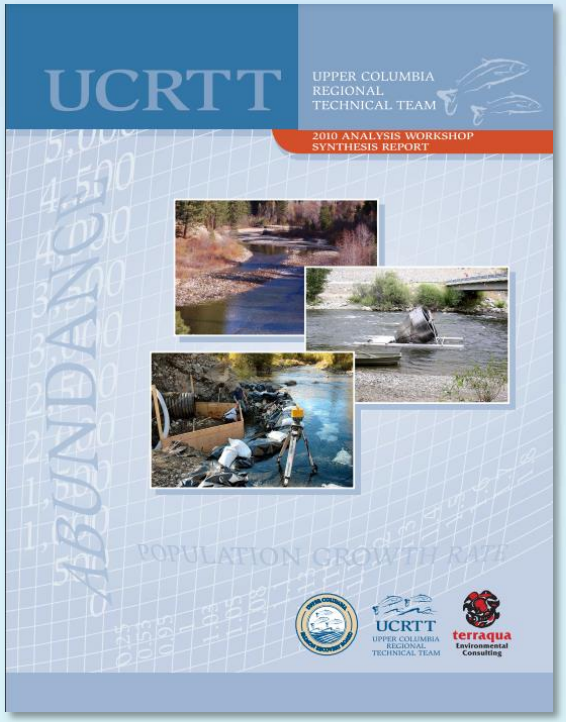

https://prioritization.ucsrb.org/

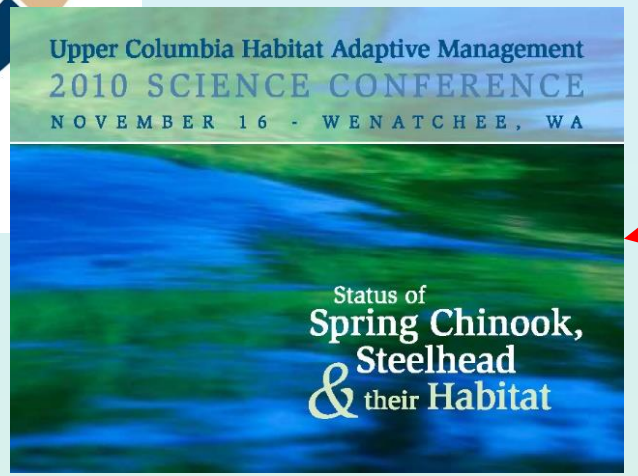
# Barrier prioritization



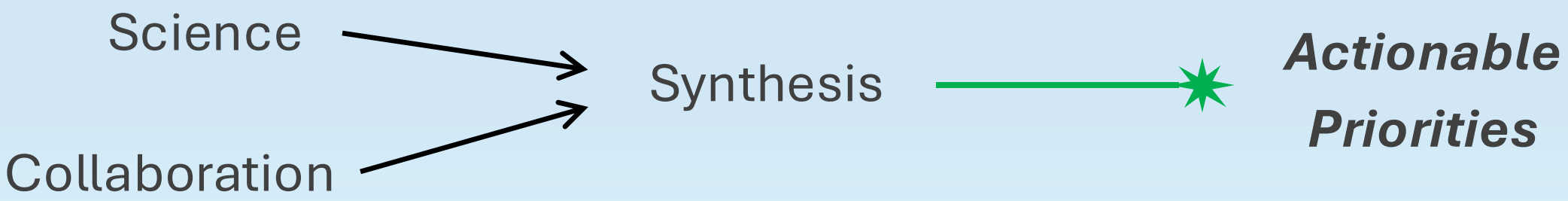




HABITAT ADAPTIVE MANAGEMENT FRAMEWORK
- FOR UPPER COLUMBIA SALMON RECOVERY -
Assessment
(Complete Plan)
Design and
Implementation
Monitoring
Data Compilation
Evaluation
Communication
Adjustment
(Revised Plan)
Acceptance
MONITORING / TECHNICAL REVIEW AND ANALYSIS
PLAN MANAGEMENT AND OUTREACH


UCRTT
UPPER COLUMBIA
REGIONAL
TECHNICAL TEAM
2010 ANALYSIS WORKSHOP
SYNTHESIS REPORT
ABUNDANCE
POPULATION GROWTH RATE
UCRTT
terraqua


Upper Columbia Habitat Adaptive Management
2010 SCIENCE CONFERENCE
NOVEMBER 16 - WENATCHEE, WA
Status of
Spring Chinook,
Steelhead
& their Habitat

# THE ADAPTIVE MANAGEMENT PROCESS




| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| Informal Interviews (complete) | Literature Review (on-going) | Workshop (June 17) | Steering Committee Synthesis | Synthesis & Priorities Report | Share results | IT Coordinates Implementation |

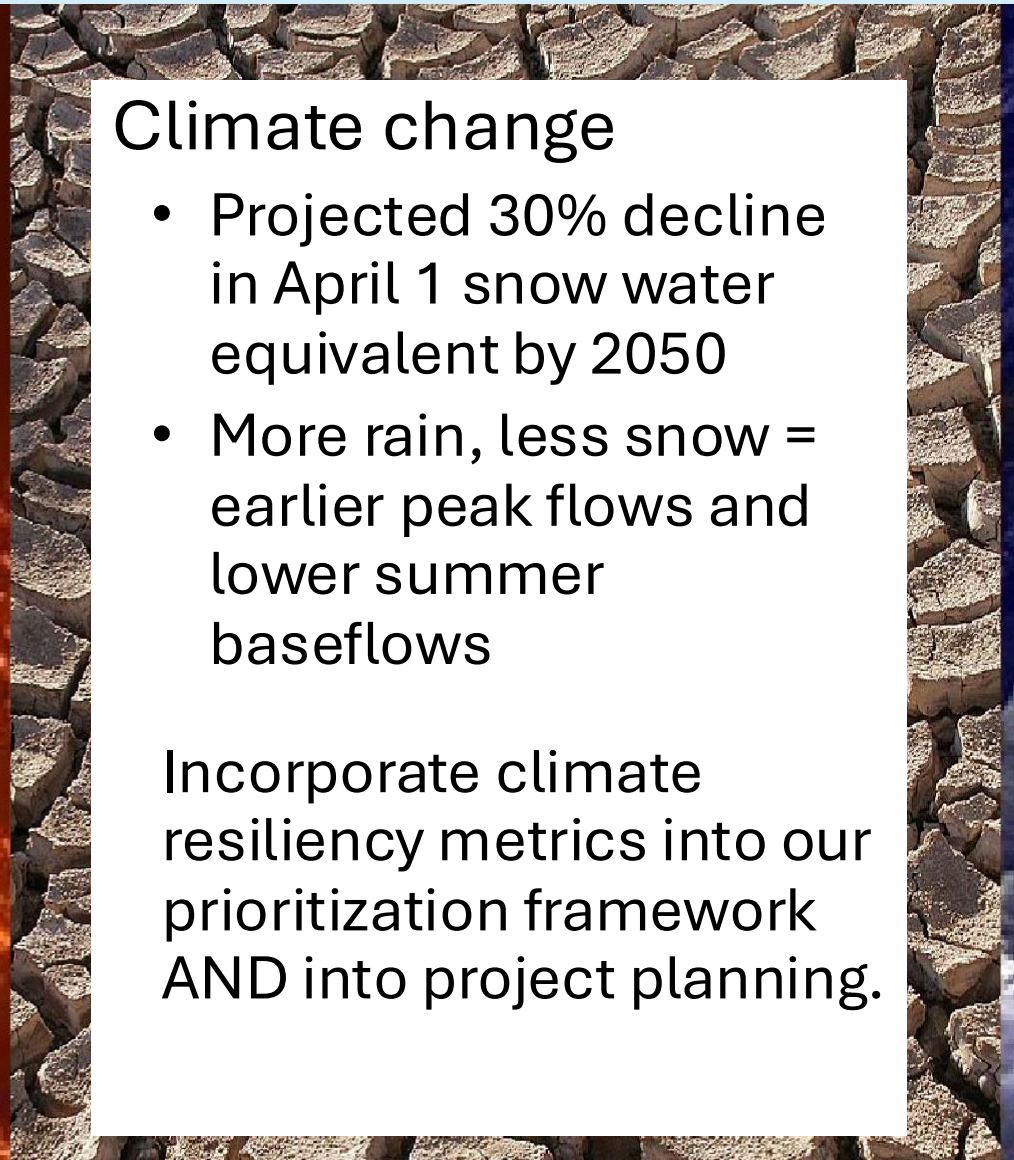
**Review Science & Lessons, Convene, Synthesize, Collaborate, Recommend**

# Adaptive Management Workshop – Habitat Focus

- Climate change is shifting the playing field
- The importance of scale in restoration and monitoring
- Life history diversity is crucial to resilience
- Floodplains and process-based restoration are key to improving water storage, complexity, food availability and temperature buffering
- Barriers to progress - bureaucracy, funding, and coordination

# Workshop outcomes

# Climate change



## Climate change

- Projected 30% decline in April 1 snow water equivalent by 2050
- More rain, less snow = earlier peak flows and lower summer baseflows

Incorporate climate resiliency metrics into our prioritization framework AND into project planning.

# Stream temperature

Stream temperatures are increasing, impacting

- pre-spawn mortality
- egg development
- migration behavior

Cold water refugia critical – identify areas to protect and restore

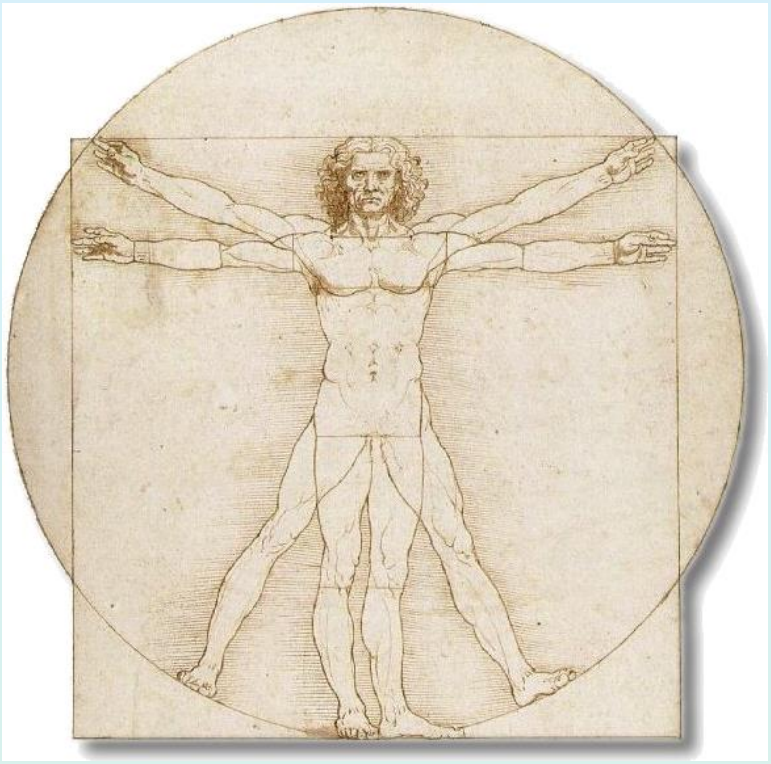
- Close areas to fishing
- Incentivize reduced irrigation withdrawals
- Trap and haul strategies during extreme events, if needed

- Recovery Plan calls for the region to address all H's
  - Habitat, Harvest, Hydro, Hatcheries

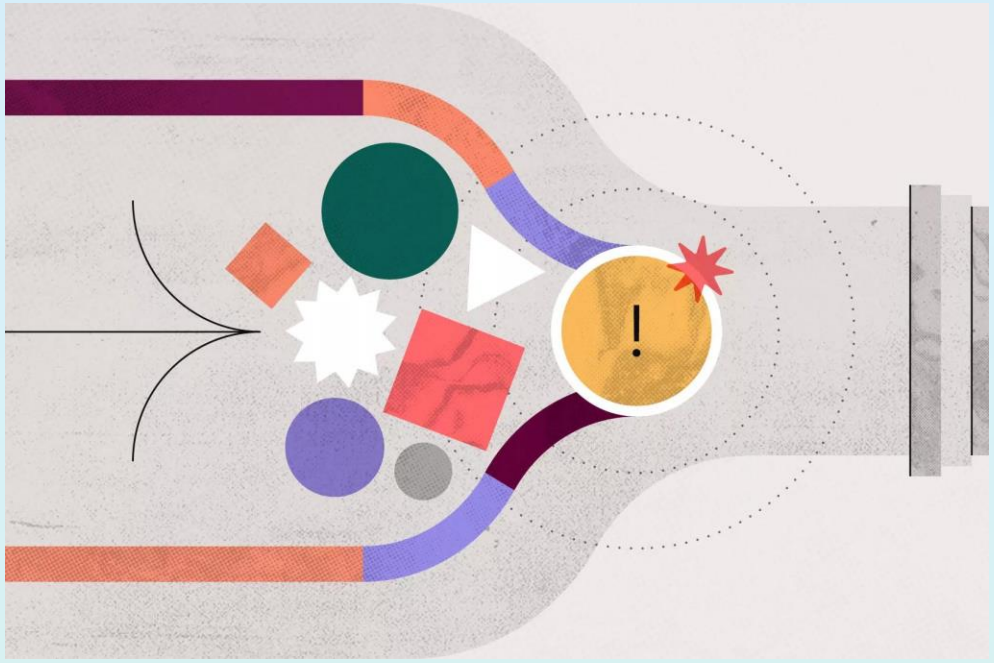
Add 5th 'H'

=

Human



# Bottlenecks



Fragmented collaboration and competition

❖ Engage, communicate, build trust

Regulatory barriers - permitting complexity

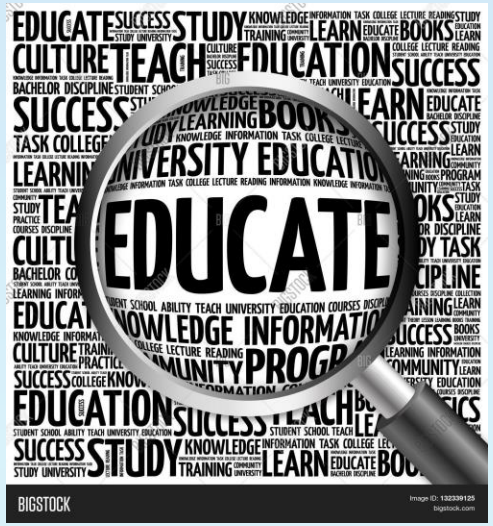
❖ Advocate for reform, streamlining

Ecological constraints

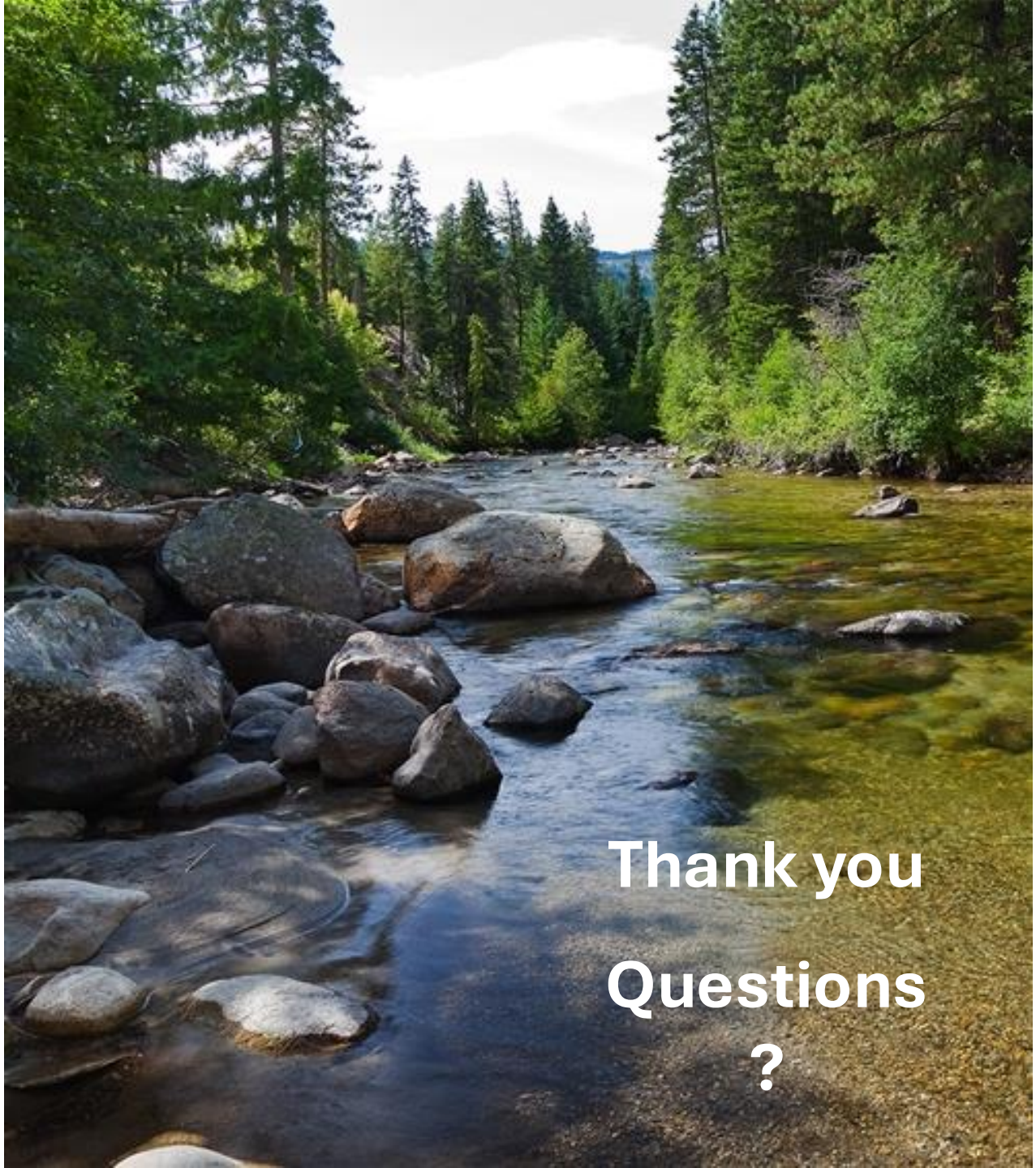
❖ Climate resilience metrics

❖ Process based solutions

engage


EDUCATE
BIGSTOCK


champi
advocate. nou
supporter, b
promoter,


Thank you
Questions
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