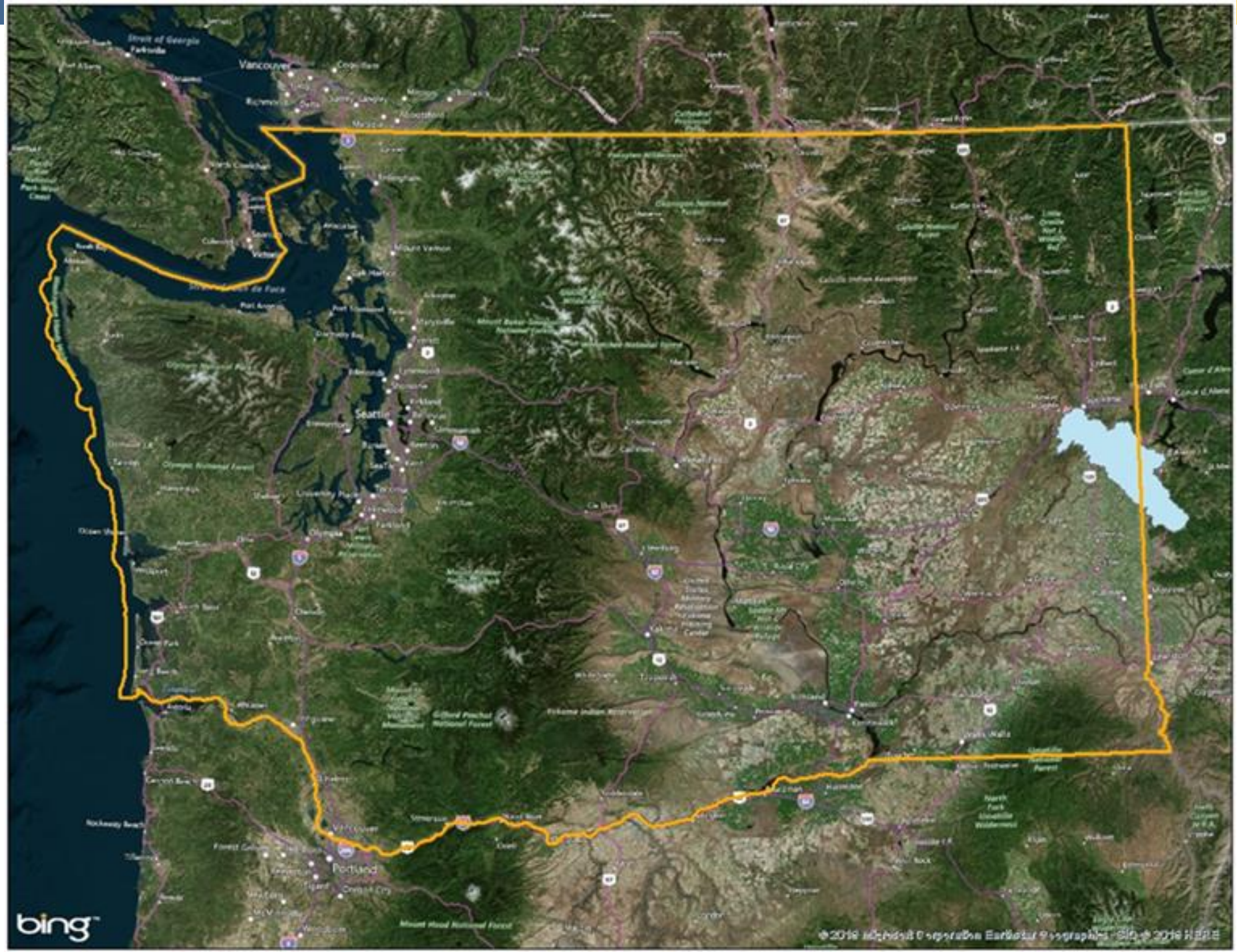
DEPARTMENT OF ECOLOGY
State of Washington

Hangman Settlement Agreement Implementation

Mitch Redfern – WA Department of Ecology's Water Quality Program


Vancouver
Seattle
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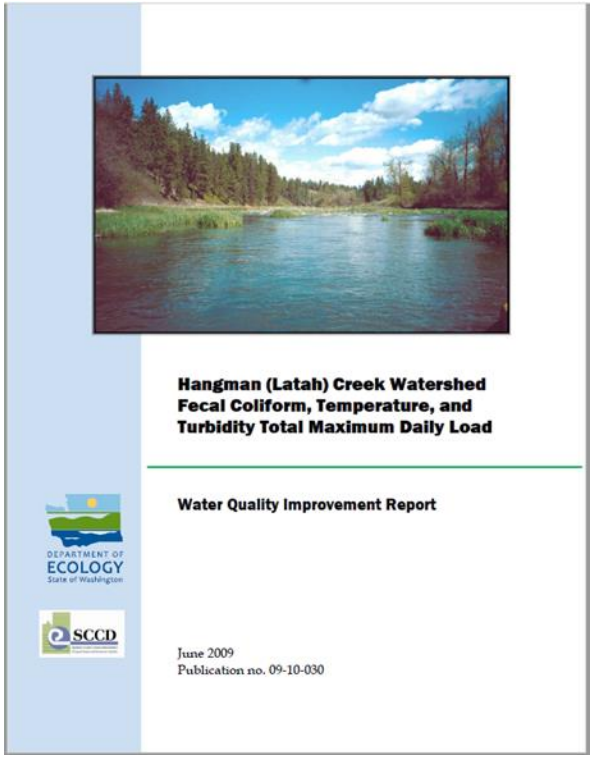
Hangman Settlement Agreement

- Spokane Riverkeeper v. EPA
  - 2015 Lawsuit
  - Nonpoint reasonable assurances challenged
- Hangman Settlement Agreement (2018-2028)
  - Conduct GIS based riparian assessment
  - Education and Outreach
  - Perform watershed evals
    - Prioritize sites annually
    - Dryland agriculture and livestock landuses



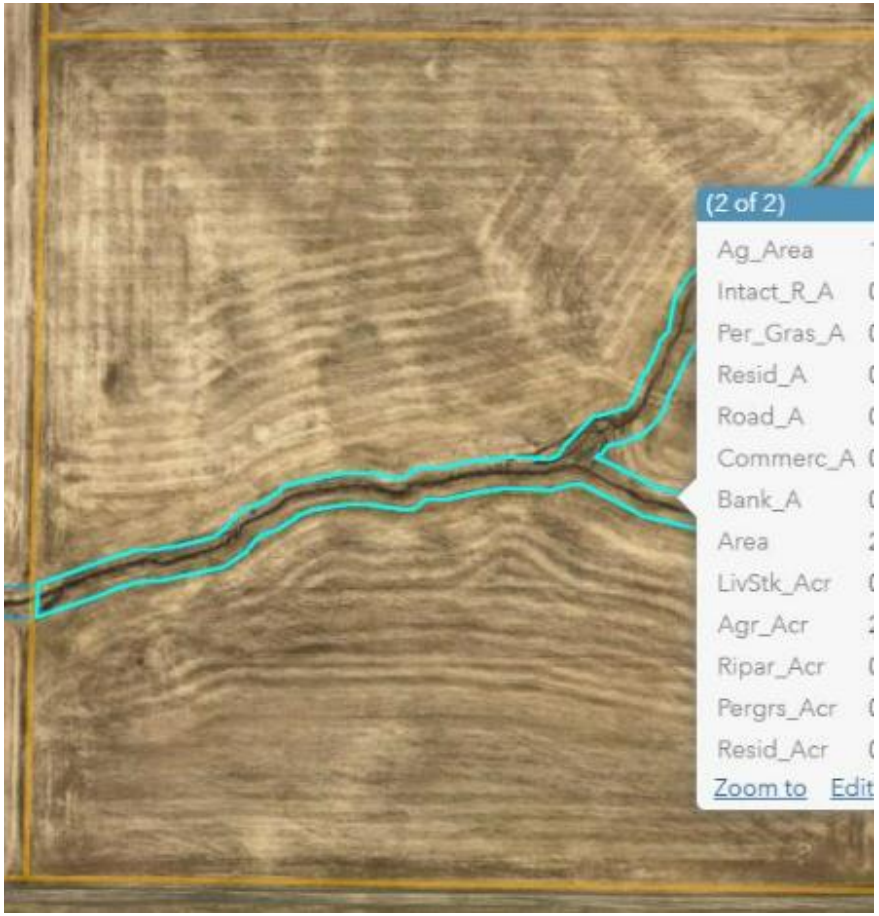
AGREEMENT BETWEEN WASHINGTON DEPARTMENT OF ECOLOGY AND SPOKANE RIVERKEEPER RELATING TO HANGMAN CREEK TMDL

Riparian Landuse Assessment

Landuse Type	Acres	Percent
Dryland Agriculture	2,888	34.3%
Perennial Grass	2,807	33.4%
Intact Riparian	2,145	25.5%
Livestock	371	4.4%
Other	203	2.4%
Total	8,414	100%

Landuse by type within riparian buffers of the Washington portion of the Hangman watershed

>2/3 “riparian” area with little to no structure.



Hydrology Considerations

Anthropogenic

- Ditched/straightened waterways
- Riparian forest and wetland removal
- Lack of woody debris
- Tiling drainage
- Conventionally managed soils for crop production

Natural

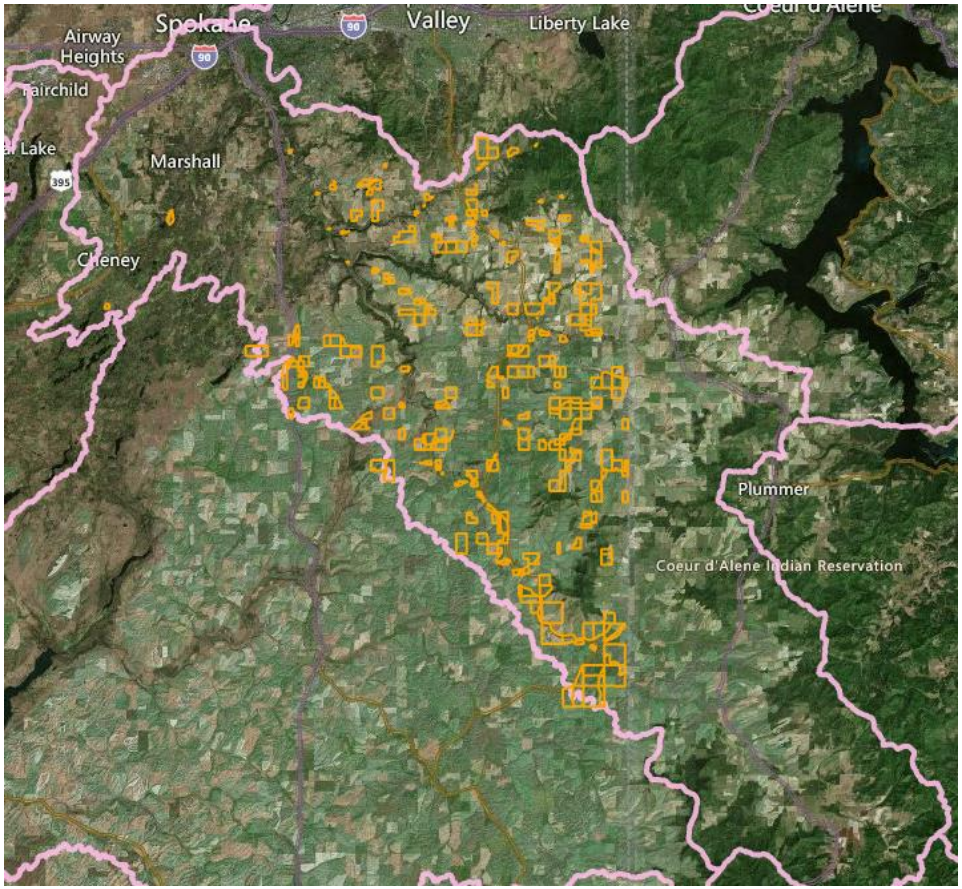
- Highly erodible soils

Effects

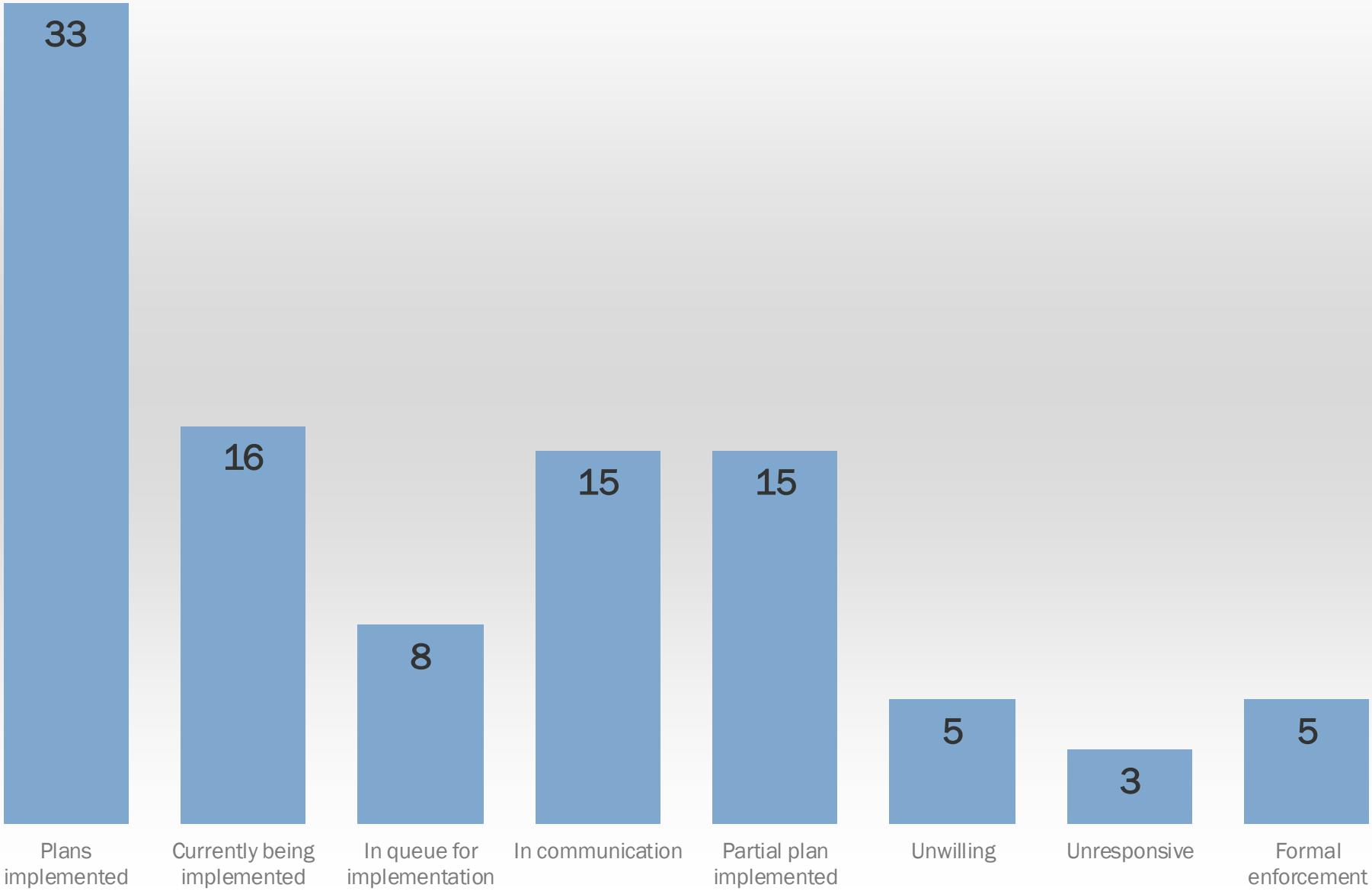
- Less water storage capacity
- Flashier system <10cfs – 20k
- Turbulent instream velocities
- Exacerbated natural erosion
- More challenging project installations & higher degree of engineering needed

Hangman Settlement Agreement

- Results to date
  - 650 site evaluations
  - 100 sites prioritized
  - >300 letters
  - Conducted >125 site visits
    - 1 on 1 trying to get people to implement practices that fully protect water quality
  - Track and report on prioritized site status

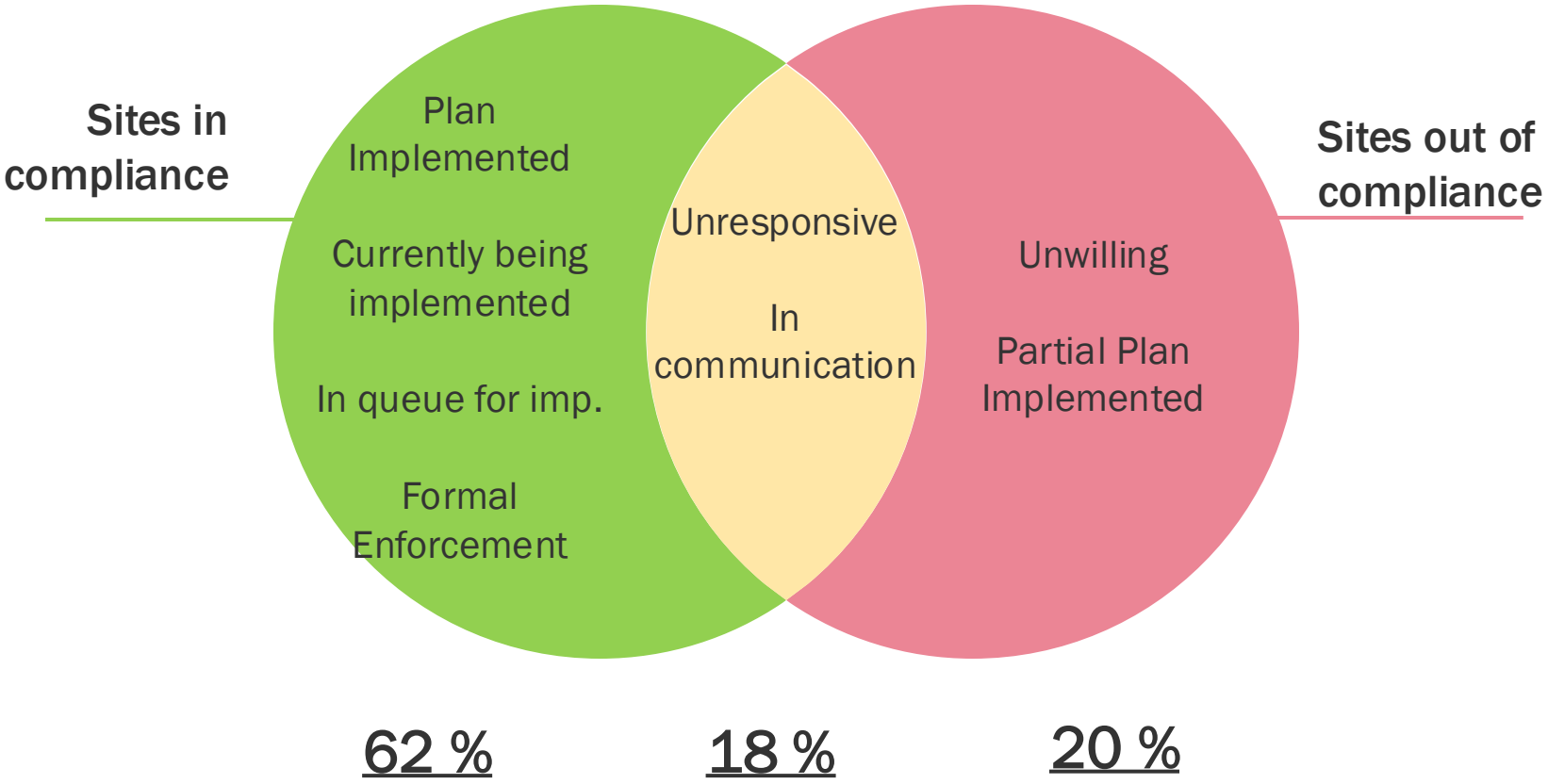


Site Status – 100 sites 2018-2025



Effectiveness Tracking

- 3 years – 25%
- 5 years – 50%
- 8 years – 75%



2021 Status

- Issues:
  - Woody vegetated buffer requirement
  - Most productive farm ground
  - Business model
  - Normalized for generations
  - Lack of existing programs
  - Compliance

46 %

Hangman Riparian Pilot Program

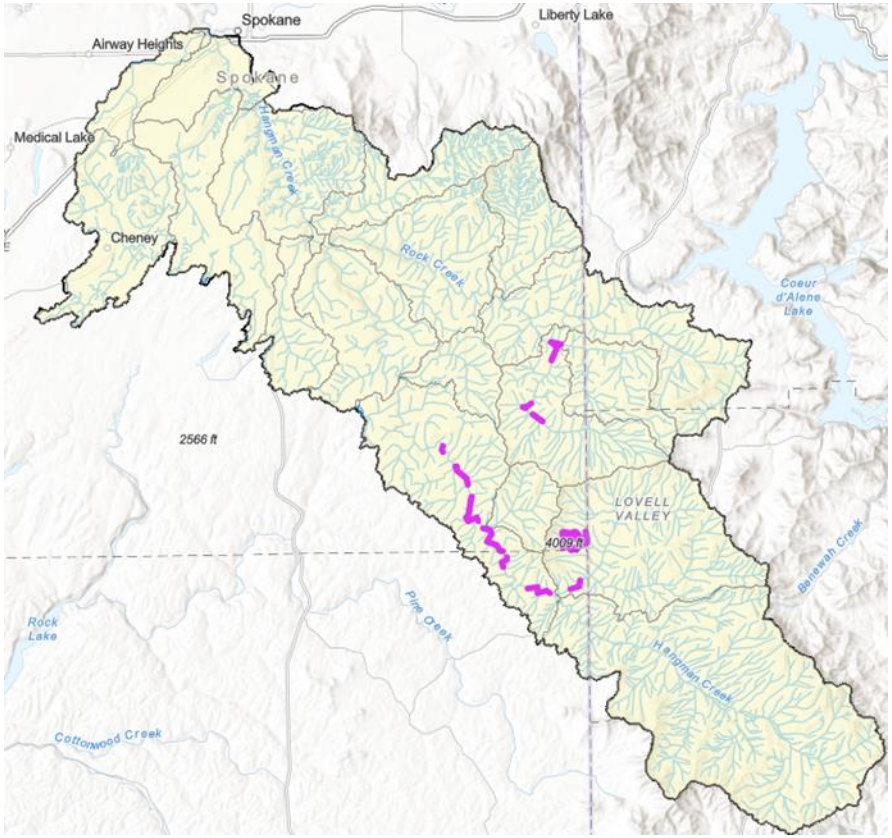
- Early 2021 got an opportunity from HQ
- We drafted a $1M pilot project proposal
- Partnered with Spokane Conservation District

Key Program Elements

- Eligibility Criteria
  - Hangman watershed
  - Identified and contacted by Ecology as part of Settlement Agreement
    - On hook for compliance
- Program Basics
  - $300/acre – annually ($350 for SPTH)
  - 15-year contracts
  - All components covered by program i.e. installation, maintenance, etc…
  - Set up for success – normalize practice

Status

- Total funding under contract now = $5.4M
  - 304 acres/36 miles enrolled
- New funding = $2.8M
  - 125 acres
  - Projects earmarked
- Spokane CD implementing
  - Heavy lift (400+acres)



Future Work

- Education and outreach
  - Marnie Miller-Keas
- Continue to maintain and build funding programs
- Continued watershed evals & working with existing sites
- Regulatory pressure
- Continue working w/partners
  - Idaho & CDA Tribe
  - Spokane and Whitman Counties
  - Municipalities
  - All existing partners
- Increase water storage capacity = WQ benefit

Agriculture is important

Agriculture is the foundation of our regional economy and the fabric of many of our communities. By working together, we can have clean streams and rivers as well as healthy farms. Our goal is to promote practices that provide benefits to agriculture and the environment.

DEPARTMENT OF ECOLOGY State of Washington

Working together

Ecology is committed to working with producers to implement practices that help water quality and agriculture. Funding is available to establish stream setbacks, plant riparian buffers, install livestock fencing, develop off-stream water facilities and help offset the financial risk to try conservation tillage. Ecology staff can work with you to identify practices that protect water quality and fit with your operation. Contact us to discuss funding opportunities.

Conservation tillage at work. Image credit: PCD

Turning talk into action

Many landowners have already implemented the following practices, but there is more work do. Depending on the specifics of the operation, intensity of land use and landscape, Ecology may ask for:

Riparian planting
A major goal of restoration is planting trees and shrubs to reduce stream temperatures, stabilize stream banks, and intercept runoff and pollution from adjacent land use (like grazing or crop production).

Livestock fencing
Fencing can protect streams from livestock impacts, such as manure and damage to riparian areas and streambanks. An off-stream water source and manure management may be needed.

Stream setbacks
Current setback recommendations range from 35' to 75' depending on stream type/size.

Conservation tillage
Conventional tillage practices disturb the soil's surface, leaving it at risk for wind and water erosion. Conservation tillage practices, like direct seed or no-till, result in less soil disturbance, keep soil in place and help infiltrate water.

**A combination of practices may be necessary to address site-specific issues and/or operator goals.*

A stream without a land use setback or riparian buffer.

A stream setback with riparian plantings (credit PCD).

Questions?
Connect with our Eastern Region Water Quality Program
509-329-3534
NonpointERO@ecy.wa.gov
ecology.wa.gov

Protecting and restoring Hangman Creek is important.
Together, we can clean up the watershed.

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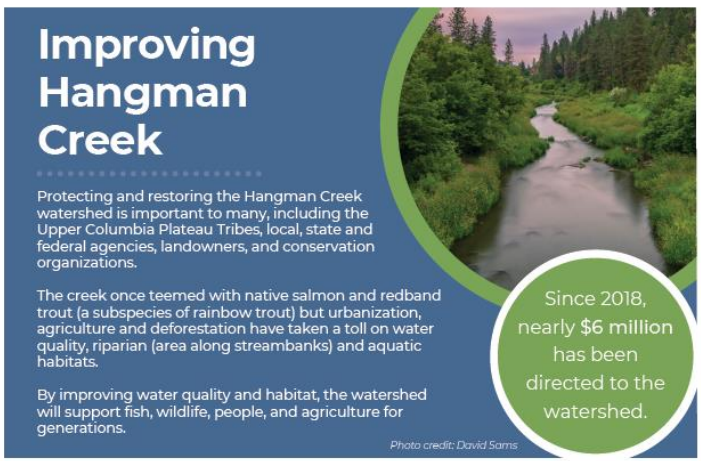

Improving Hangman Creek

Protecting and restoring the Hangman Creek watershed is important to many, including the Upper Columbia Plateau Tribes, local, state and federal agencies, landowners, and conservation organizations.

The creek once teemed with native salmon and redband trout (a subspecies of rainbow trout) but urbanization, agriculture and deforestation have taken a toll on water quality, riparian (area along streambanks) and aquatic habitats.

By improving water quality and habitat, the watershed will support fish, wildlife, people, and agriculture for generations.

Since 2018, nearly $6 million has been directed to the watershed.

Photo credit: David Sams

Thank you

"Dirty Mother" surf wave – mainstem Hangman creek