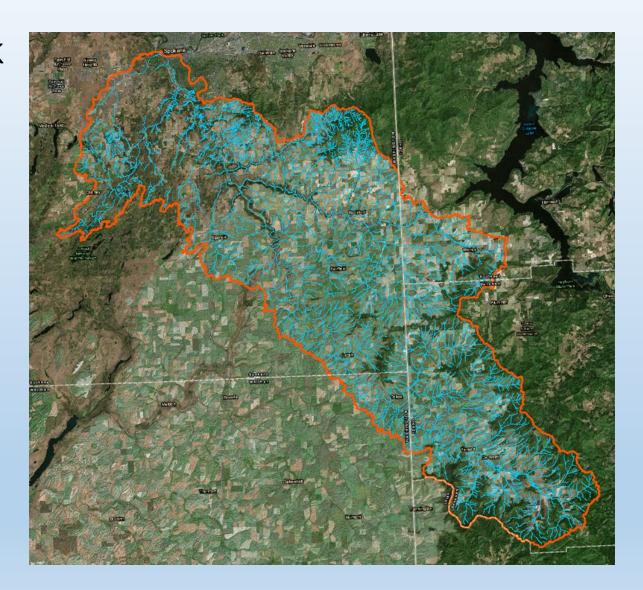


## Hangman Creek Watershed

- Approx. 441,000 acres
- Land use 70% agriculture
- 1/3 of area in Idaho
- Forest cover reduced by 50% - 86%



### Hangman Watershed History

- 2009 -- Fecal Coliform, Temperature, and Turbidity TMDL Approved by EPA
- 2011 Hangman TMDL Implementation Plan completed
- 2015 Lawsuit alleges EPA arbitrary and capricious in approval of TMDL
  - Reasonable assurance challenged
- Ecology participated in settlement discussions
- 2018 Signed the "Agreement Between Washington Department of Ecology and Spokane Riverkeeper relating to the Hangman Creek TMDL."



Hangman (Latah) Creek Watershed Fecal Coliform, Temperature, and Turbidity Total Maximum Daily Load





**Water Quality Improvement Report** 

June 2009 Publication no. 09-10-030

# Elements of the Agreement

#### Riparian Assessment

 Forest, Agriculture, Suburban Areas, Golf Courses, etc.

#### **Tillage Watershed Evaluation**

 Prioritize 10 sites for contact

#### Livestock Watershed Evaluation

• Prioritize 5 sites for contact

**Education and Outreach** 



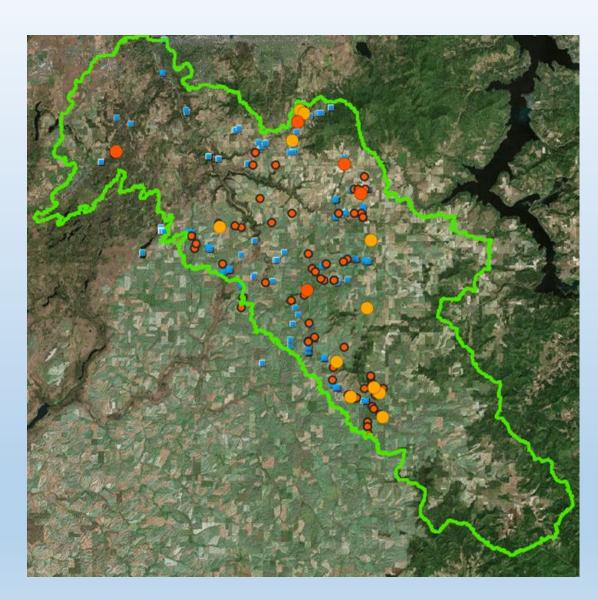
## Partnerships & Stakeholders

- Spokane Conservation District
- Spokane Falls Trout Unlimited
- Spokane Tribe of Indians
- Pacific Northwest Direct Seed Association
- Spokane Riverkeeper
- Washington Association of Wheat Growers
- USDA Natural Resources Conservation Service
- Spokane River Forum
- The Lands Council
- Spokane County
- Coeur d'Alene Tribe
- Inland Northwest Land Conservancy
- USDA Farm Service Agency
- WSDOT and WDFW
- City of Spokane

#### Flow Chart for Addressing Agricultural WQ Problems in ERO 1-Watershed Selection Water Quality and Ag Impact Evaluation Evaluate and select watersheds based on: 2—Outreach on Ag and WQ Issues WQ Assessment Listings Coordinate watershed specific education and outreach TMDL & STI Implementation with CDs and/or Ag groups (workshops/listening ses-Ag Impacts to Water Quality sions, producer publications, mailings, CD meetings) Relationships in Watershed 3-Provide CD Option Ecology Only or Partnership Ecology Only Partnership 4—Watershed Evaluation 4-Secure Resources for Assistance Site Prioritization ECY grants and federal cost-share Available labor? Identify Ag & WQ problem sites (CD and ECY) Prioritize based on severity and extent 6—Watershed Evaluation 5—First Contact Site Prioritization WQ Problems and Need for TA and FA Identify Ag & WQ problem sites. Provide details on WQ Prioritize based on severity and extent. observations and Timelines. (ECY first contact within 60 days) Include offer for a site visit Provide access to site information First Contact with Lessee if known 30 days to contact ECY 7—Optional 1st Contact from CD Courtesy phone call or letter May result in TA site visit 6—Second Contact Remind Producer of WQ Problems 8-ECY First Contact Heads up phone call where possible & Available TA/FA May include phone calls Second contact after 30 days WO problems and need for TA and FA Provide WQ observations/timelines Include offer to for a site visit Provide access to site information First contact with lessee if known 30 days to contact ECY 10—Warning Letter Immediate Action is Needed 9-Additional Contacts Remind Producer of WQ Problems & TA/FA. 8—Issue Order and/or NOV May include additional phone calls Develop & Implement Plan Second contact after 30 days Include ECY Requirements To ECY Only if TA & FA Failed 11—Develop Plan Plan that Includes ECY Recommendations 9—Issue Notice of Penalty (ECY, CD, and Producer) Failure to Comply and/or Water Quality Violation 12—Implementation of Plan

## Watershed Evaluations

- Document from right-of-way
- Prioritize 15 sites annually
- Technical assistance phone calls
- Technical assistance letters
- Site visits
  - Follow up letters
- Landowner assistance from Spokane CD, Ecology, or other third party







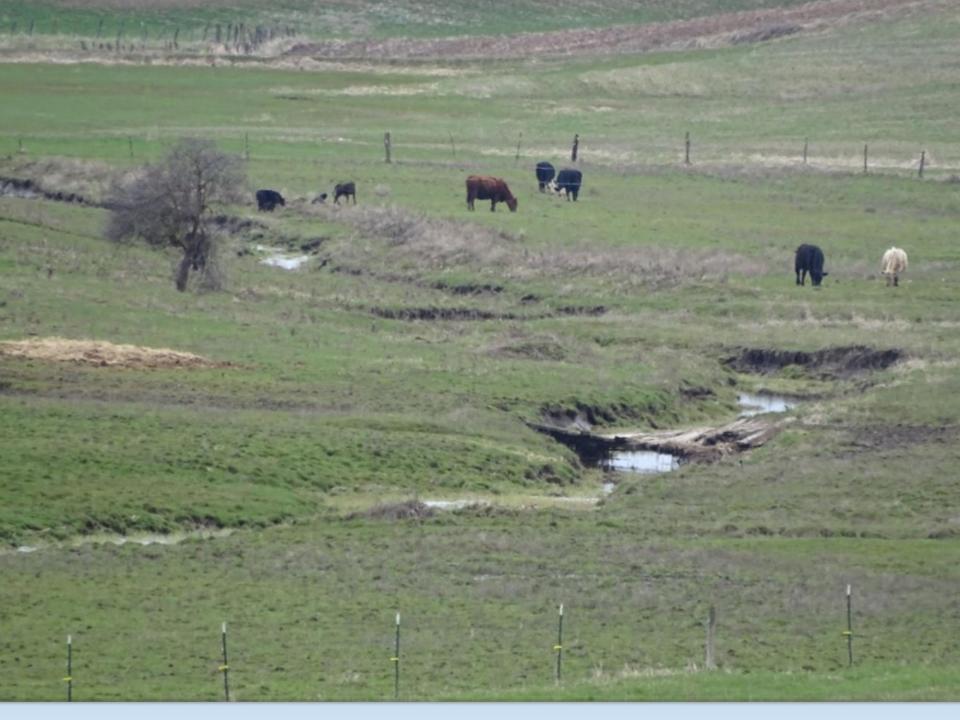












## Best Management Practices (BMPs)

#### Tillage Suite

- Land use setback
- Conservation tillage
- Riparian buffer
- Bank stabilization

#### Livestock Suite

- Land use setback
- Exclusion fencing
- Off-stream watering
- Riparian buffer
- Bank stabilization
- Manure storage plan/facilities





### Hydrology Considerations

#### Issues

- Ditched/straightened waterways
- Tiling drainage
- Lack of riparian and wetlands
- Lack of woody debris
- Highly erodible soils

#### **Impacts**

- Flashy system <1cfs 20k</li>
- Turbulent velocities
- Exacerbated natural erosion
- Disturbed riparian corridor





## Effectiveness Tracking

- BMP's implemented on priority sites:
  - 3 years 25%
  - 5 years 50%
  - 8 years 75%
- Priority Sites Results to Date

Fixed -2

Currently being implemented – 4

In queue for implementation – 2

Currently working with Ecology & CD on plans/funding – 4

Sites in communication but plans still being negotiated – 9

Unresponsive/Unwilling – 9



14 New TA Contacts for 2020

# Sources of BMP Funding

- Ecology Centennial/319 Grants and Loans
- Regional Conservation Partnership Program (RCPP)
- NRCS Environmental Quality Incentives Program (EQIP)
- Continuous Conservation Reserve Program (Continuous CRP)
- Commodity Buffer Program
- Terry Husseman Coastal Protection Account
- Washington Conservation Commission Grants
- Direct Implementation Fund (DIF)
- Conservation Reserve Enhancement Program (CREP)?



# Other Activities

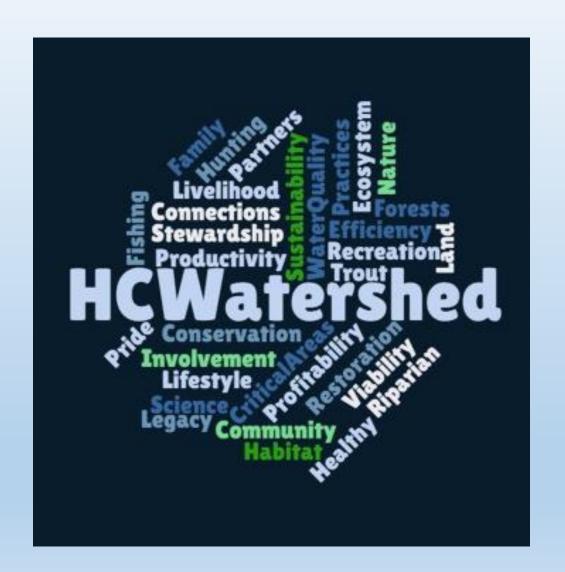
- Stakeholder engagement
  - Grant funding awards
  - Energize and diversify stakeholders
  - Annual stakeholder meeting
- Outreach
  - Supporting SPS Spokane River Rally
  - Public survey on conservation
  - Educational videos
  - Interpretive sign at Hangman Valley Golf Course
  - Highway signs identifying Hangman Watershed streams
  - BMP/Watershed Tours



Hangman Valley Golf Course Riparian Planting

# Challenges to Success

- COVID delays
- Tiling and hydrology
- Idaho portion of the watershed
- Funding for BMPs
- Unwilling/Unresponsive landowners



## Questions?

