



Our Voluntary Conservation Community

The Science Hub & Voluntary Stewardship



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WA Conservation Commission

Our Voluntary Conservation Community

Voluntary Stewardship Program

Science Hub





ABOUT US

The Washington State Conservation Commission (SCC) is the coordinating state agency for all 45 conservation districts (CDs) in Washington.

Together, SCC and CDs provide voluntary, incentive-based programs that empower people to practice conservation and ensure healthy natural resources and agriculture for all.

Who is the Washington State Conservation Commission?



Governor
Appointee



Governor
Appointee



Dept. of
Agriculture
Appointee



Dept. of Natural
Resources
Appointee



Dept. of
Ecology
Appointee



Washington State
Conservation
Commission



WASHINGTON STATE
UNIVERSITY
EXTENSION

Washington
State University
Ext. Appointee



WACD
President



Conservation
District
Representative



Conservation
District
Representative



Conservation
District
Representative

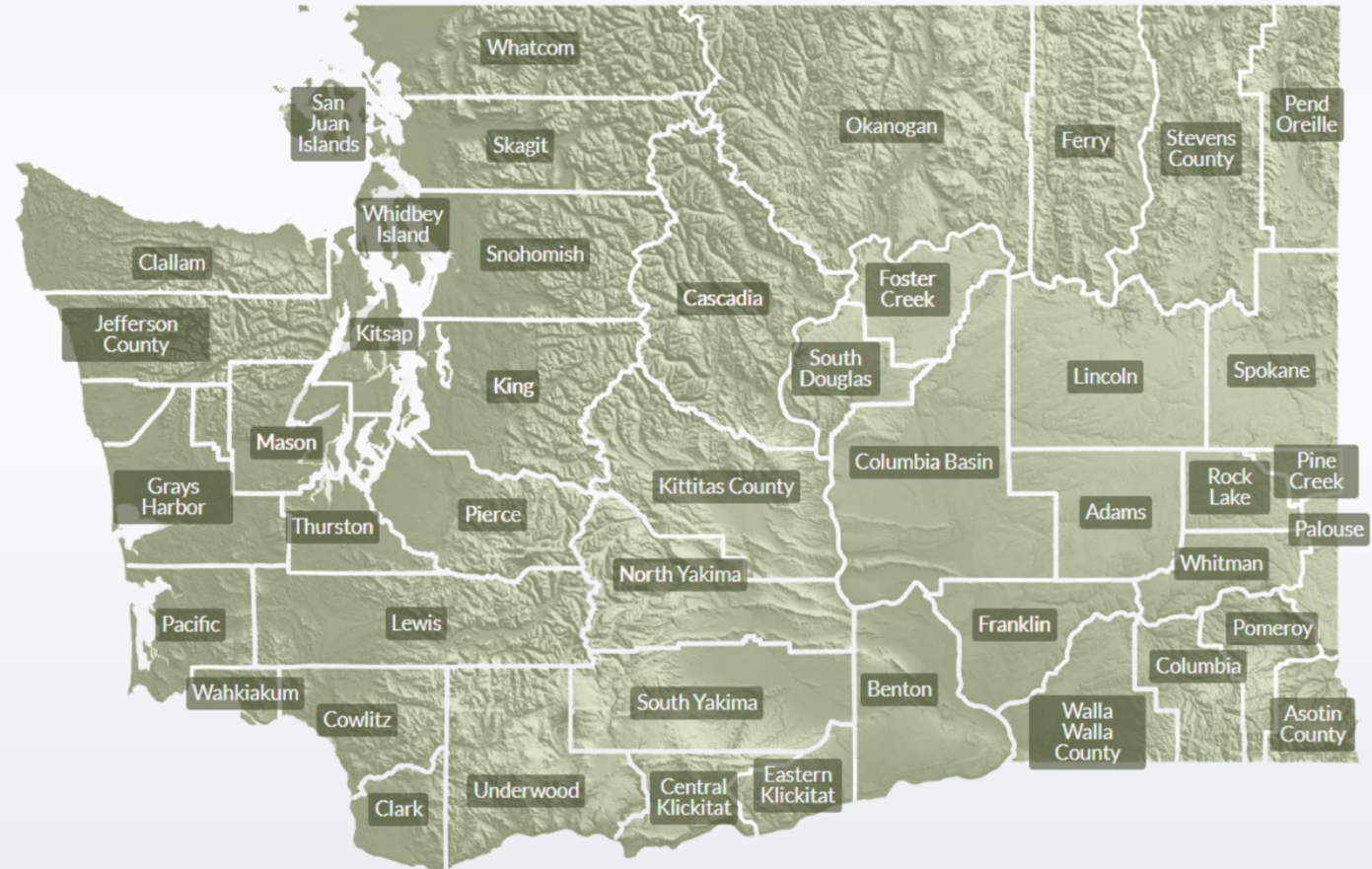
What are Conservation Districts?

Community-based hubs of
natural resource expertise & funding

Staffed and led by locals
who understand needs of
landscapes and community-members

Enhance agricultural viability and
food systems

Assist with implementing
conservation practices



Voluntary Conservation

Riparian Restoration on Working Lands

Watershed and Riparian Restoration



Whatcom CD

200+ acres along the
Nooksack River

Habitat Fencing for Livestock & Streams



Palouse CD

Rotational Grazing
& Habitat Protection

Salmon Recovery



Benton CD

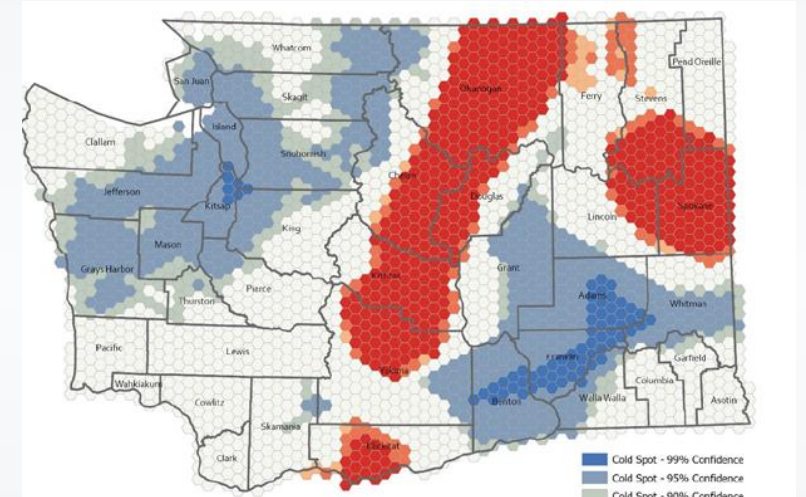
Collaboration to remove invasive species

Climate Resilience

Community Stewardship & Education



Wildfire Education & Mitigation
Planning, coordination, and preparedness



Biochar & Beyond
Climate-smart farming statewide
Biochar, shared equipment, and soil improvements
Greenhouse gas reductions & sequestration



Food Systems & Viability

Strong Farms, Healthy Communities



Recovering After Disaster

Disaster Assistance Program helps producers rebound from floods and drought

Equitable disaster recovery



Farmland Forever

2,576 acres were protected in Yakima County
40 acres in Klickitat County

Agricultural easements, preserving working lands
Making way for new producers



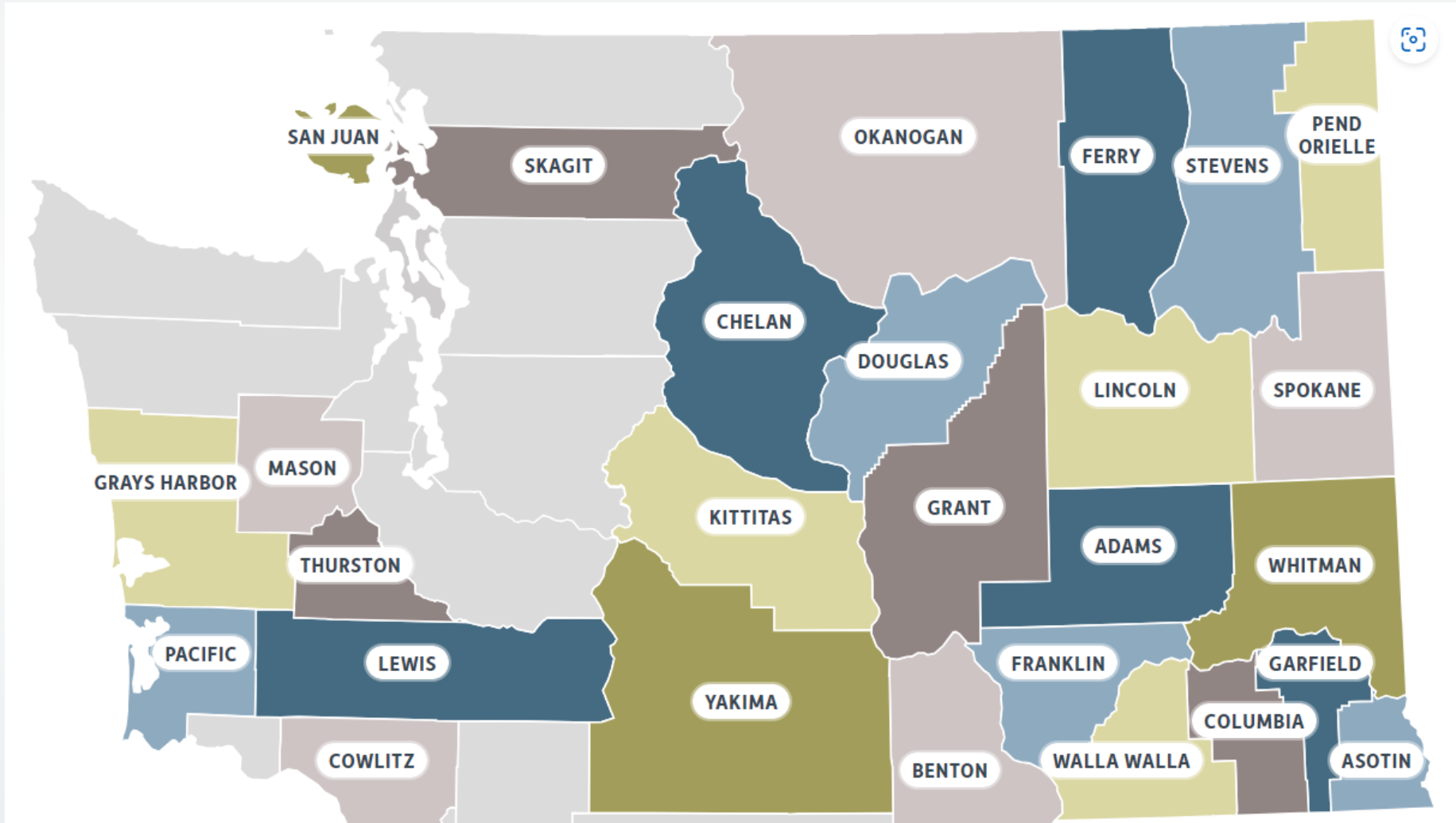
Join the Ripple Effect

Help Restore Washington's Streams & Rivers

[About Ripple Effect Campaign](#)



Voluntary Stewardship Program



Critical area *functions and values* are protected or enhanced
at the watershed scale relative to July 2011

Apply a Scientific Lens



Community & Participation



Agricultural Viability

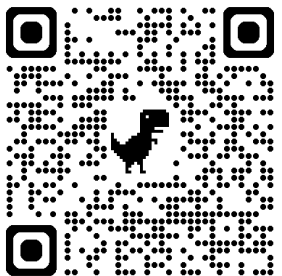
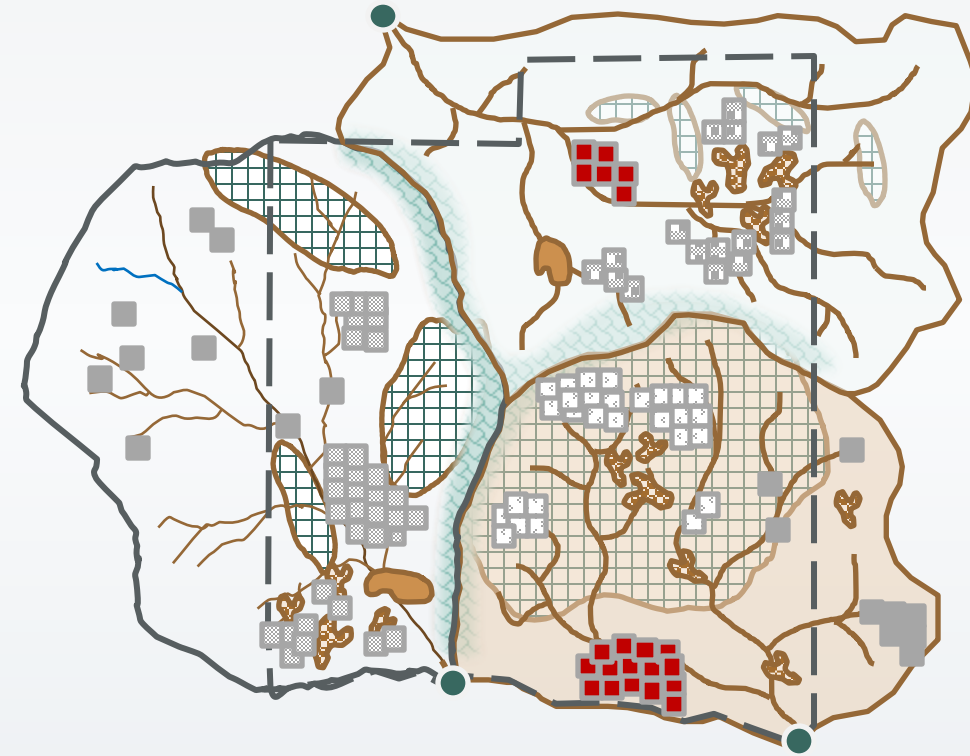


Effectiveness



Implementation

Watershed Work Groups



Spokane VSP member affiliations



What is the Science Hub?

Demonstrate co-benefits of conservation practices within watersheds



Agricultural Viability



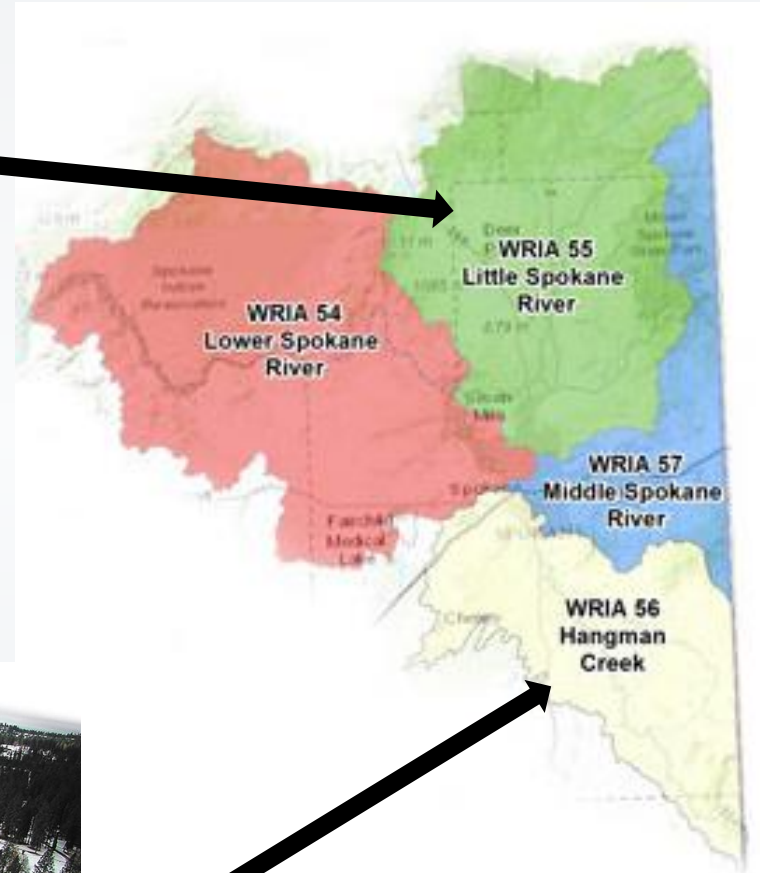
Climate Resilience



Ecosystem Health

Proviso - \$1 million (2023-2025)

Focal Watersheds

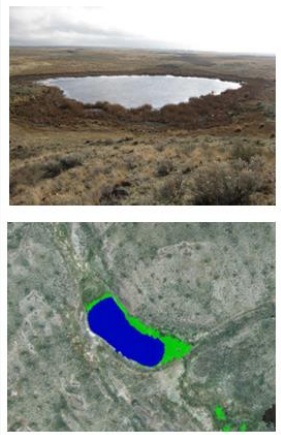


Hangman & Little Spokane Watersheds

Prioritization



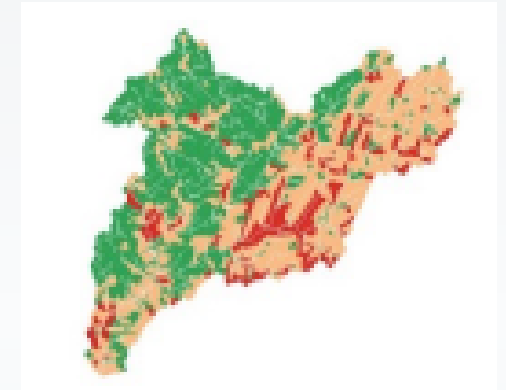
Wetlands



Food Security & Viability



Erosion & Soil Health



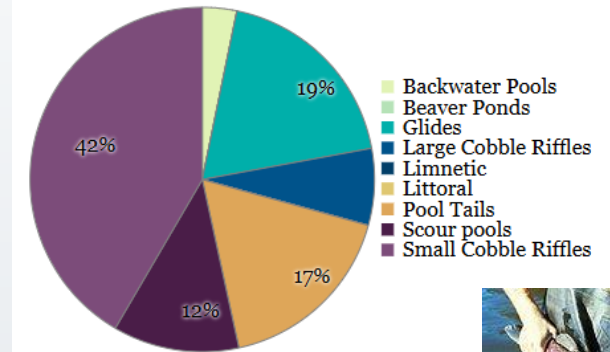
\$\$\$ & Incentives



Trust & Relationships



Fish & Habitat





Regional-scale Mapping of Tillage Practices in Areas with Crop Diversity Using a Satellite-Imagery-based Classifier

Conventional tillage (CT)



0 – 15%

Minimum tillage (MT)



16 – 30%

No-tillage/direct-seeding tillage (NT)



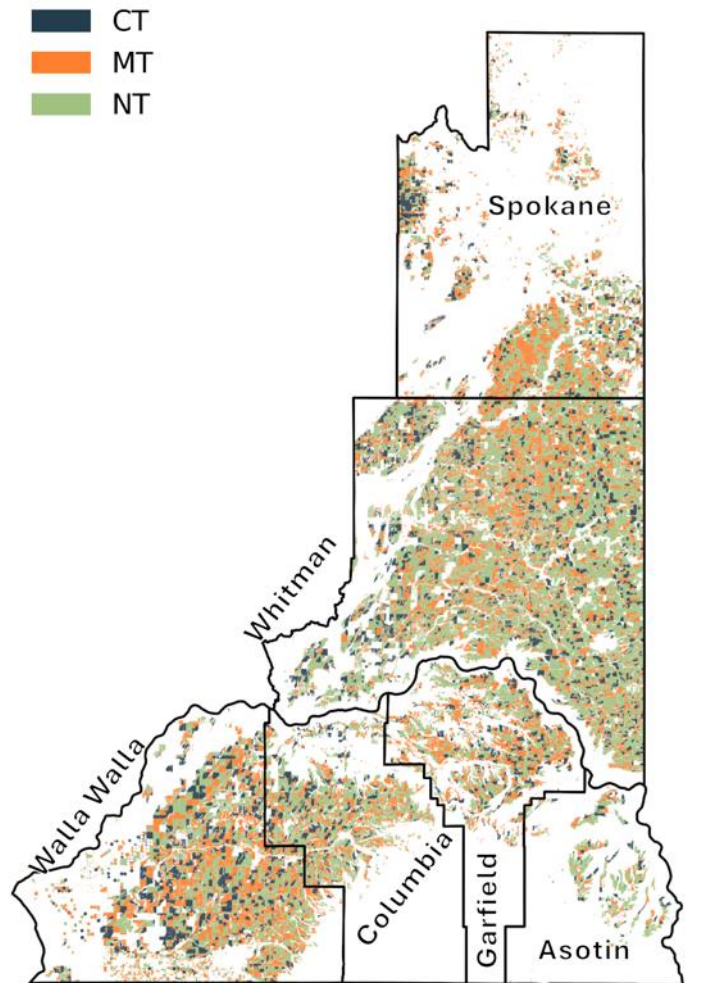
>30%

Legumes

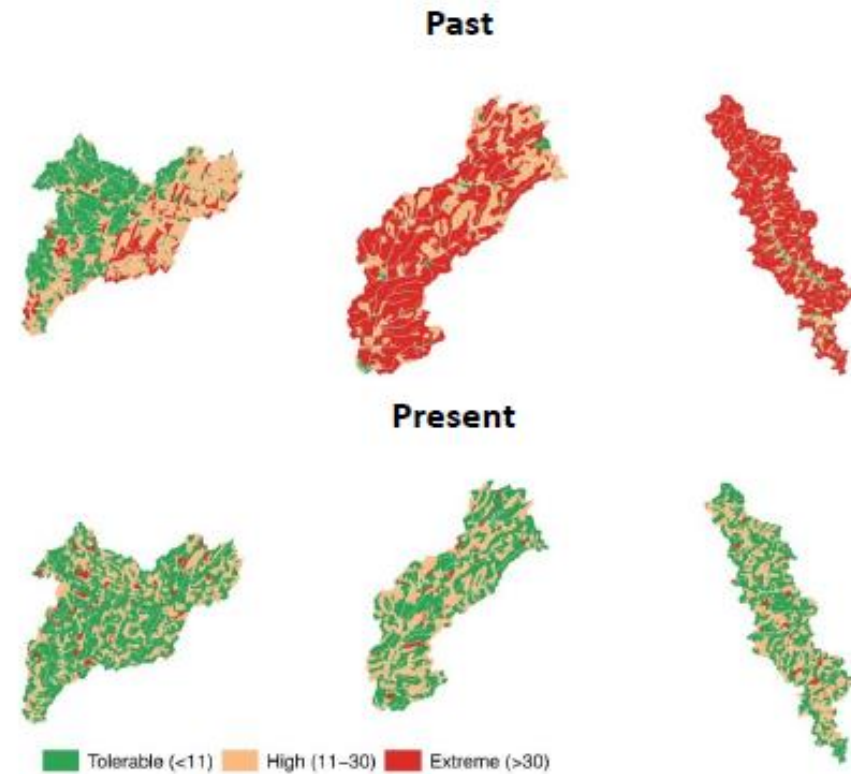
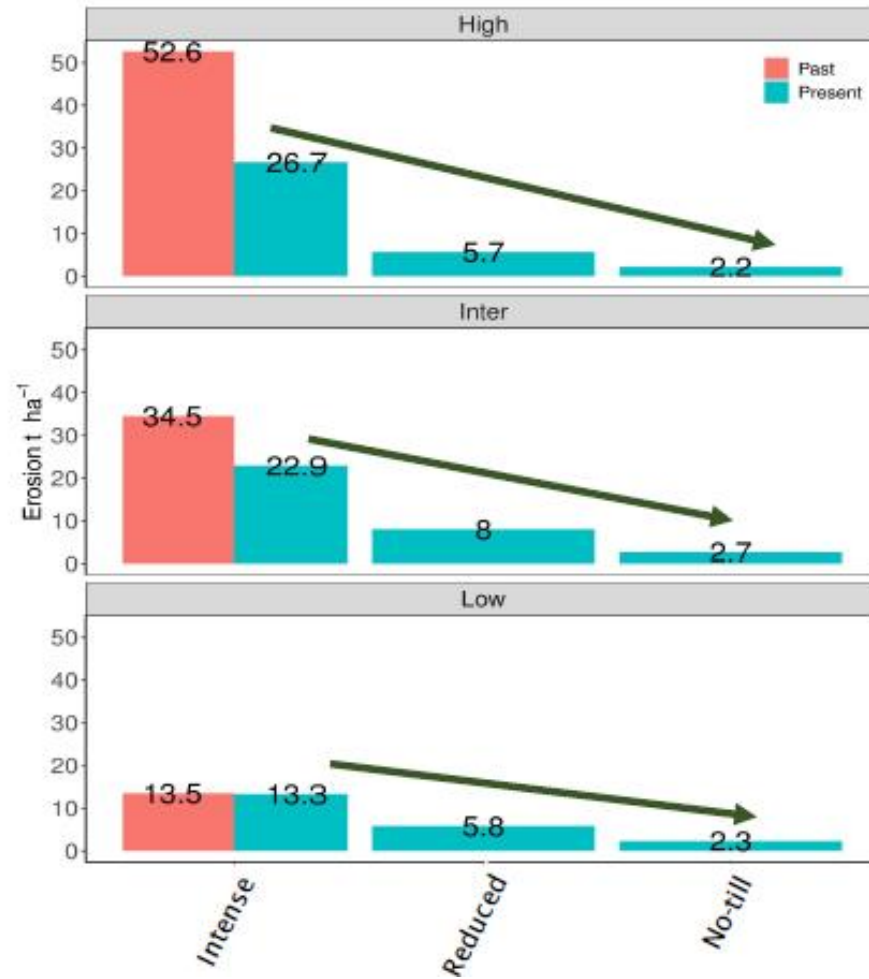


<15%

No-tillage/direct-seeding tillage (NT)



Erosion



Spokane Co. Hangman & Little Spokane watersheds

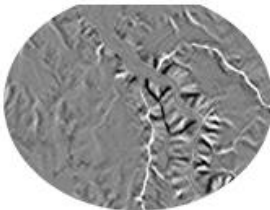
Wetland Intrinsic Potential (WIP) Tool

Halabisky et al., 2022 (In Review)

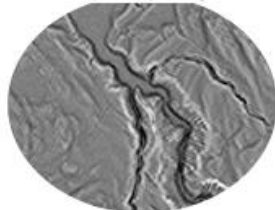
Identifying Forested Wetland Predictors:

Terrain Metrics From Digital Elevation Models (DEMs)

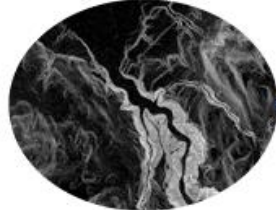
Planform Curvature



Profile Curvature



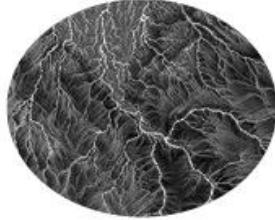
Slope/Gradient



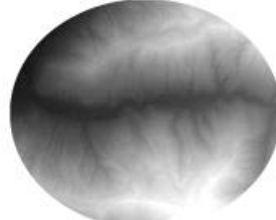
Depression Index



Topographic Wetness Index

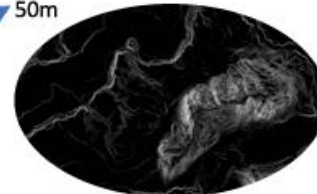


Depth To Water Index

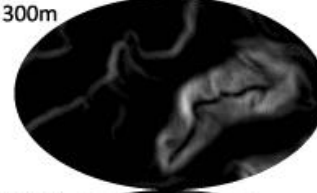


Variable Length Scale
of Terrain Metrics

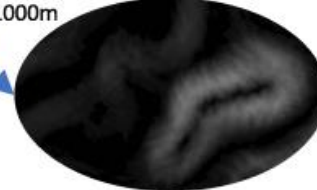
50m



300m



1000m



Maxwell et al., 2016

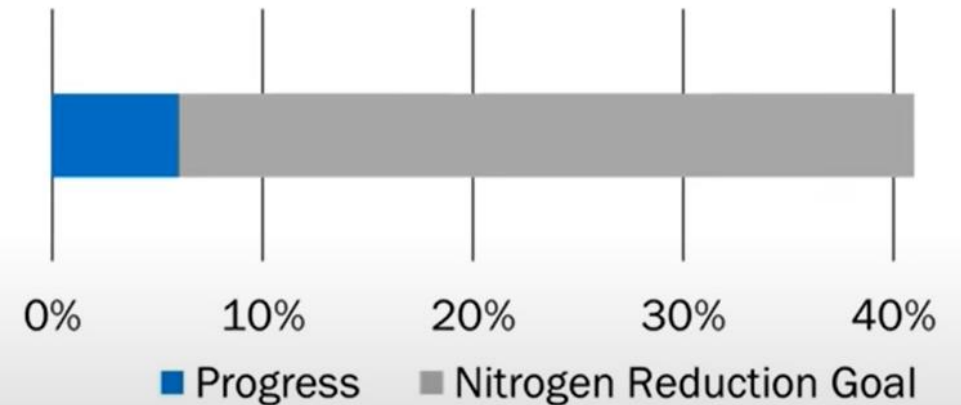
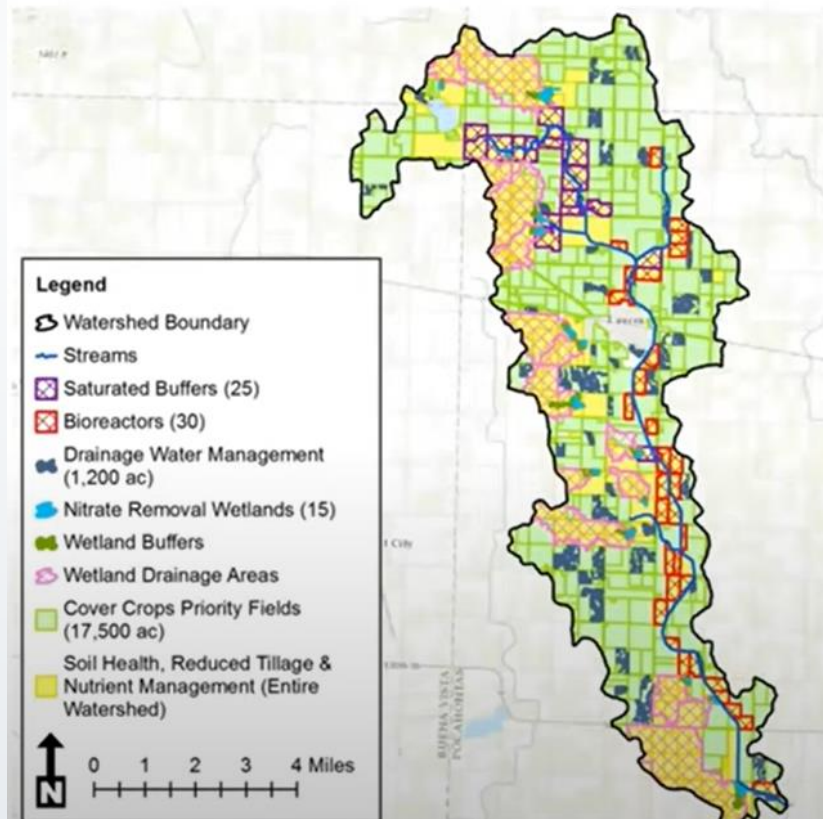


Watershed Planning & Prioritization



IOWA STATE
UNIVERSITY

The watershed implementation plan identified priorities.



Watershed Monitoring



Biofarming & Regenerative Ag

- Soil chemical & physical properties
- Water dynamics
- Soil microbiology
- Plants
- Invertebrates
- Birds
- Crops and Forage
- Economics



\$\$\$ & Economics

Riparian Incentive Programs

Opportunities for Washington State



Key Messages:

Flexible design

Adaptive management

\$\$ based on performance and lost revenues

Catalyze resources

\$\$ for outreach, education & monitoring

Coordinating partnerships

Engender trust

private owners & orgs/gov't

tax benefits and incentive structures

increase connection to local watershed





Community & Participation



Voluntary



Locally-led



Landowner
Initiated



Inclusive

Coordinated Resource Management

- A voluntary collaborative problem-solving process for resource management issues
- Built on trust & relationships





Training



Resources

Amplify what is learned

Share with each other

Apply to our work





Applying resilience thinking

Seven principles for building resilience in social-ecological systems

Broaden participation

Promote polycentric governance – from watersheds to regions

Utilize adaptive management



Manage for connectivity – across landscapes and between people & orgs

Maintain diversity and redundancy – farming practices, functional roles, approaches

Stockholm Resilience Centre
Research for Biosphere Stewardship and Innovation



Stockholm
University



Science can help us tell the story of voluntary conservation

We have the tools needed

Collaboration & strategic coordination is key

Opportunities for workforce development & training



IOWA STATE UNIVERSITY



+ more



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Thank you!

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Washington State
Conservation Commission