Finding Collaboration:

Getting Environmental and Agricultural Interests "On The Ground"

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Today's Agenda

- Environmental challenges/common goals
- Collaborating efforts
- Things to AVOID
- Develop and test complimenting programs
- Tie it with a bow and roll it out!

Spokane Environmental Challenges

- Non-Point Source Pollution
- Source Water Protection
  - Local TMDLs
  - Ag land erosion and nutrient runoff
  - Conflict over buffers and widths
- Balancing environmental regulation with agricultural viability & reality
- Negative publicity, loss of public trust

Common Goals

- Maintaining Ag viability
- Protecting the natural resources
- Protect sole source aquifer
- Caring for the land
- Utilizing programs to help mitigate the impacts of implementing BMPs
- Efforts to resolve issues

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Spokane Valley – Rathdrum Prairie Aquifer

Muddy waters: Hangman Creek cleanup essential to Spokane River health


Spring 2017

Riverkeeper sues EPA over Hangman Creek cleanup

Water Quality Report Card

Spokane RIVERKEEPER®

Hangman Creek
Overall Grade:

During our first year of water quality monitoring, we monitored water quality primarily in Hangman Creek, but sampled the Spokane and Little Spokane Rivers as well. We found Hangman Creek to be heavily polluted with nutrients, sediment, and high temperatures, while the Spokane and Little Spokane Rivers were much cleaner. Our complete report can be found below. If you'd like further information about this report or the Spokane Riverkeeper, please contact us!
Thanks,

Jule Schultz
jschultz@cforjustice.org

Sediment from Hangman Creek pollutes the Spokane River in May, 2015.

Indicator	Grade	Notes
Temperature	F	Water Temperature in Hangman Creek reached highs deadly to trout for much of the summer.
Turbidity (Water Clarity)	F	Water clarity in Hangman Creek was poor, especially during spring runoff. Heavy sediment runoff in May, 2015 polluted Hangman for weeks.
Dissolved Oxygen	C	Aquatic organisms need oxygen to breathe and without it they can become stressed or die. While Dissolved oxygen at the mouth of Hangman met standards throughout the year, the station at Waverly failed water quality standards during the critical summer months.
Nutrients (Nitrate)	D	Hangman Creek contained high levels of nitrate during winter and spring, although the relatively dry year may have reduced nutrient pollution.

PCBs enter the Spokane River via a number of sources, including stormwater discharge (shown above).

PCBs: Polychlorinated Bi-phenyls (PCBs) are man-made carcinogens which are highly toxic to humans and wildlife. Found in the Spokane River and Hangman Creek at levels far above legal limits, PCBs contaminate local fishes increasing cancer risk in consumers.

Help Hangman Creek, the Spokane River and Little Spokane River!

- Contact your local legislator and tell them you support efforts to clean-up our surface waters.
- Report pollution problems to the Washington Department of Ecology.

Thanks to Jerry White and Amy Shaffer for providing valuable editing and content in this report.

- Negative Publicity
- Local Agenda
- Public Perception of Ag


Spring 1998


Fine, clay soils in upper watershed

Coarse, sandy soils in lower watershed

Date	Sediment Discharge (tons/day)	Estimated Bedload (tons/day)	Total Sediment (tons/day)
2/20/99	1950	192	2142
2/21/99	302	159	461
2/22/99	156	156	312
2/23/99	521	189	710
2/24/99	20700	415	21115
2/25/99	15400	447	15847
2/26/99	2010	288	2298
2/27/99	420	208	628
2/28/99	23800	510	24310


Typical ponded reach

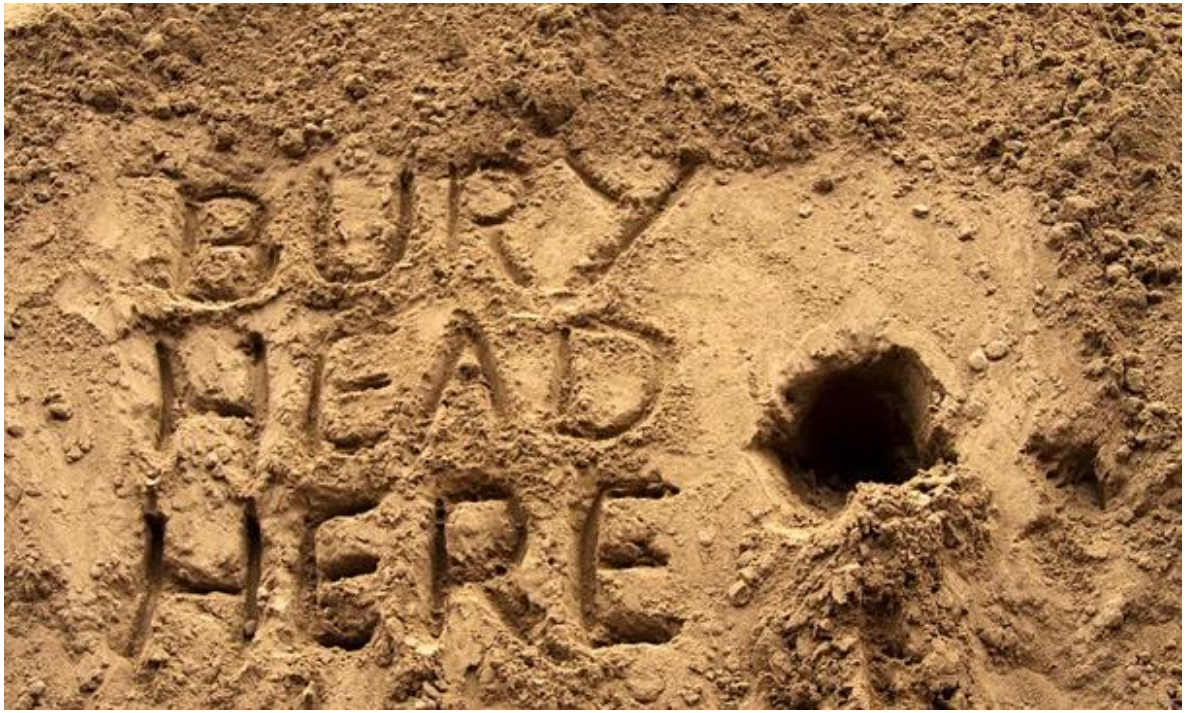
Conservation tillage vs: Conventional

Farm impacted reach

Law Crusade Helpful?

- No genuine collaboration or coordination with local agencies
- No experience of the “reality” on the ground
- Little understanding of the watershed history and current efforts/work throughout the watershed
- Lawsuit to settlement – ineffective finger pointing and some very irritated landowners

What Should A Farmer Do?



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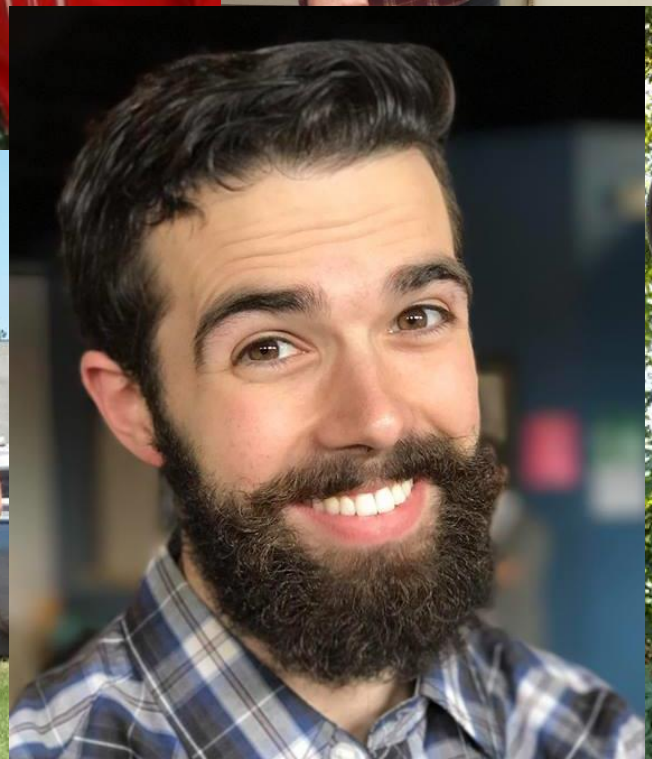
You Were Contacted By Ecology?

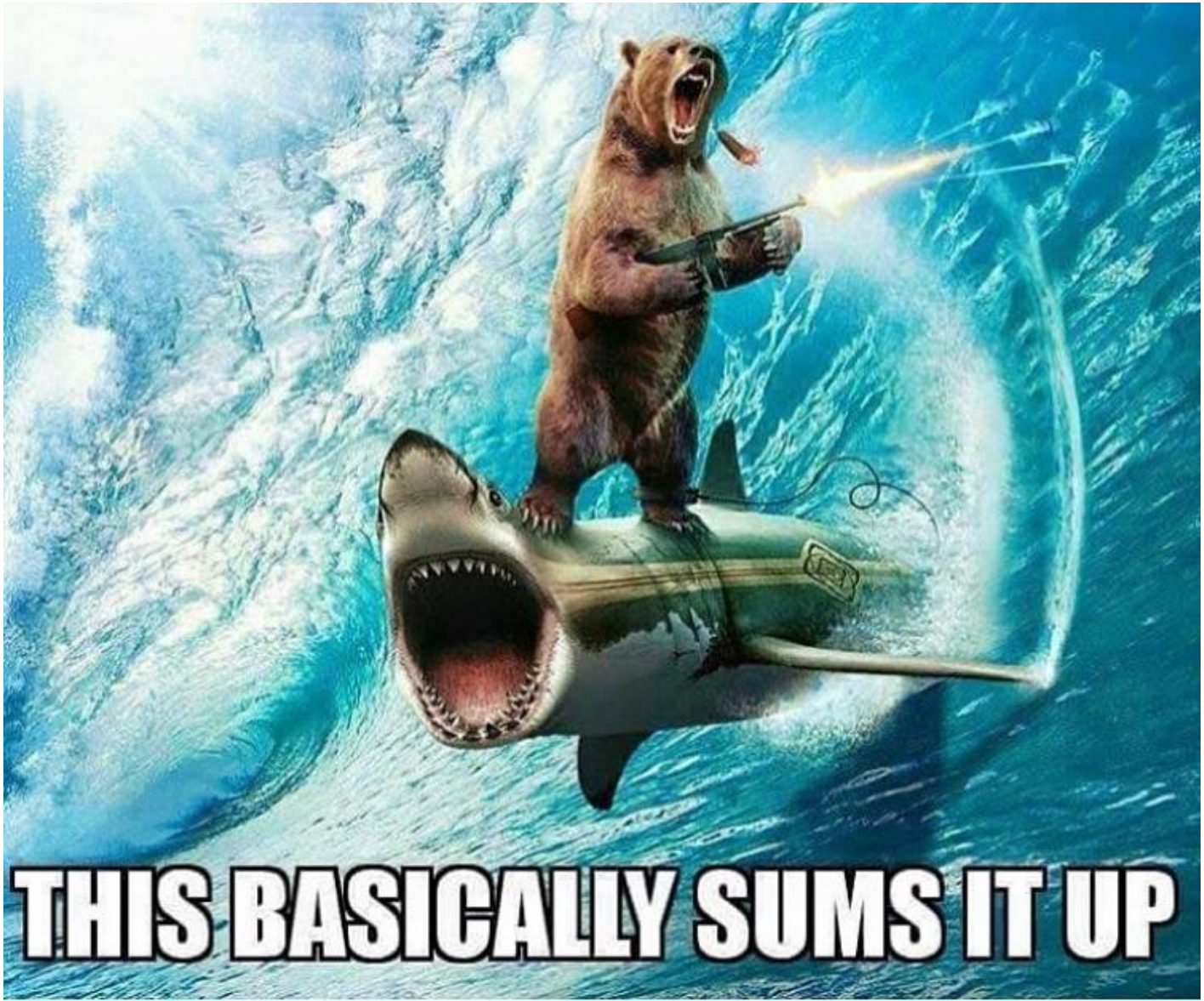
SCD Landowner Programs

- Every single one is **Voluntary**!
- Livestock Operations
- Streambanks
- Revegetation/Riparian
- Septics
- Forestry
- Agricultural (large and small tract)

You need to surround yourself with great people!



How good are they?



SPOKANE CONSERVATION DISTRICT

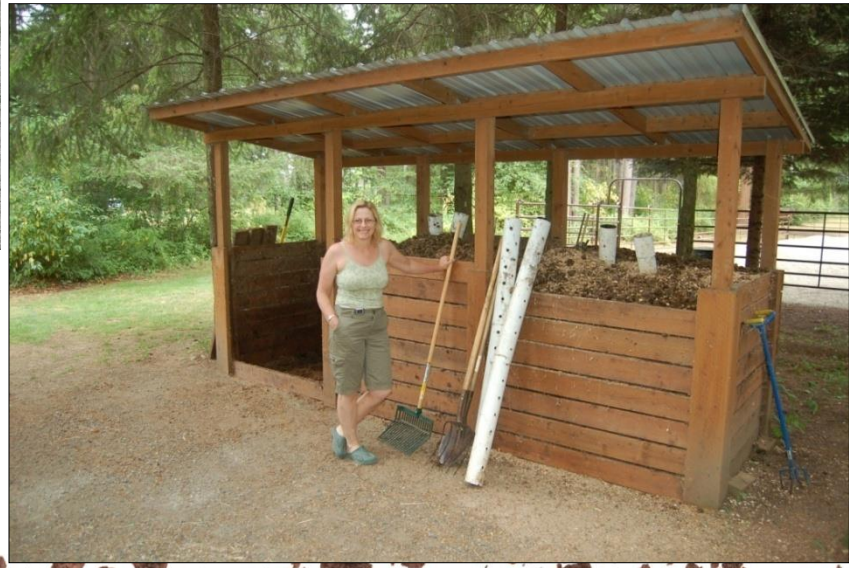
FROM THE GROUND UP

LIVESTOCK AND LAND

Technical Assistance

- BMPs/cost-share
- Funding
- Free site visits and consultations
- Workshops/trainings
- Volunteers
- Demonstration projects
- Publications and brochures
- Peer to Peer assistance

Waste Storage Facilities



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Riparian Fencing

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Off-Creek Watering

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Heavy Use Areas

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Livestock and Land 2017

Livestock and Land 2017

- 5750’ of riparian fencing
- 4 off creek watering sites
- 4 heavy use areas
- 1 roof runoff structure
- 1 waste storage facility
- 1000’ riparian planting

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Stream Bank Stabilization

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Stream Bank Stabilization

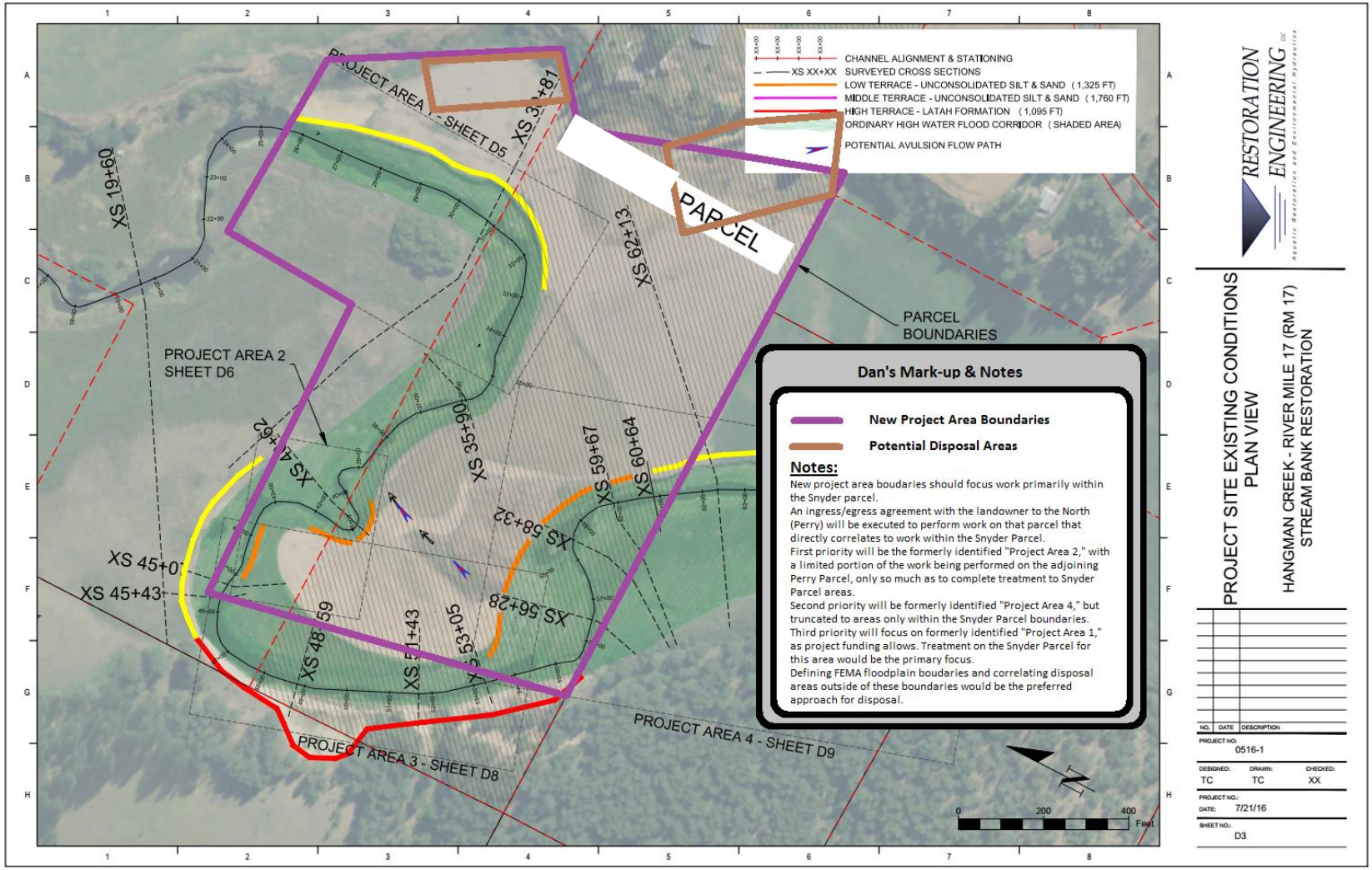

Project Site 2013

Project Site 2000

Project Site 2013

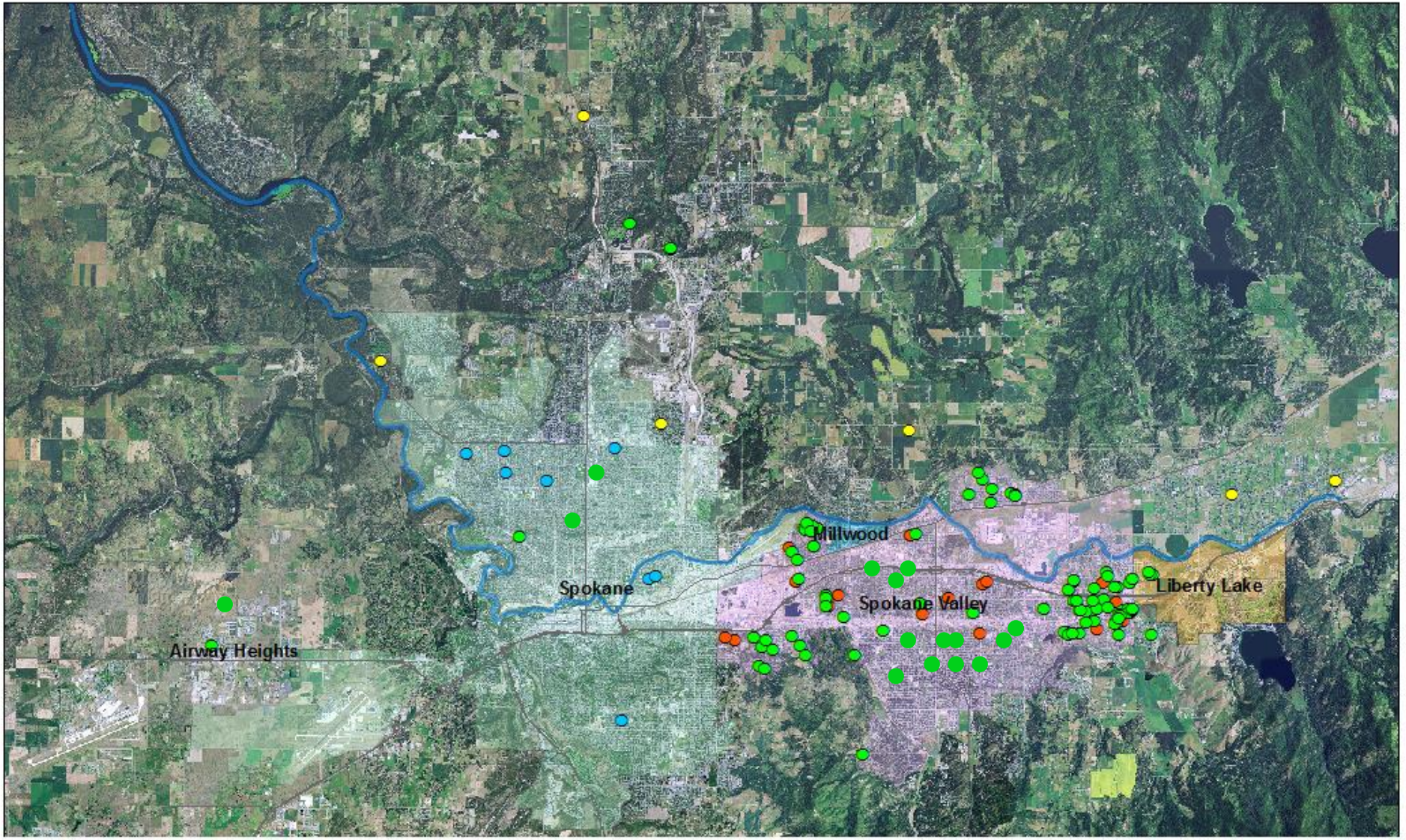
Project RM 17 – Valleyford
(3,000'of bank)

Project RM 17 - Valleyford



On-Site Septic Program

- Connections, repairs, replacements
- 1st project completed July of 2014 in City of Spokane Valley
  - Ecology Program (2014), SCD Internal Loans (2015),
  - CDBG Funds (2016)
- To date (6/18) SCD has completed **146 projects!**
- **$515,500 (loans); $54,500 (grants)**



On-Site Septic Program Participants

Legend

January 2018

- Connections
- Side Laterals
- Repair/Replace
- CDBG Program

N

Miles

0 1.25 2.5 5 7.5 10

SPOKANE CONSERVATION DISTRICT

Regional Conservation Partnership Program

- Address non-point source pollution issues in Spokane River Basin (bi-state proposal)
- Nationwide competition for funds (284 apps)
- Innovative programs encouraged
- Requested $10 million and were awarded $7.7 million (1:1 Match leverage)
- Once in a lifetime opportunity!

What is RCPP?

It is Not a **GRANT**!

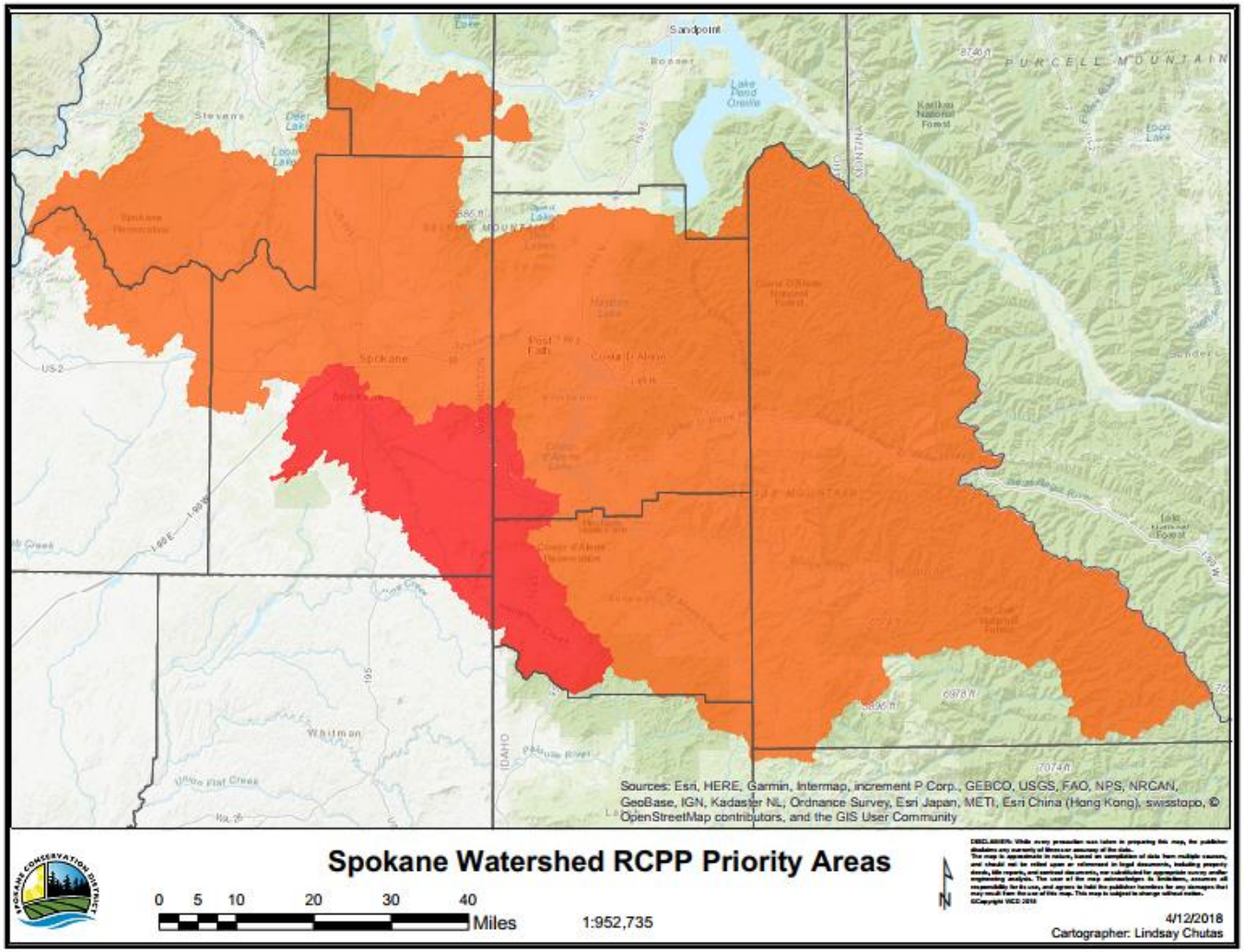
The Regional Conservation Partnership Program (RCPP)

It promotes coordination between NRCS and its partners to deliver conservation assistance to producers and landowners.

RCPP Partners

- Partners from former watershed groups and many new ones (over 20 partners)
- Spokane and CDA Tribes
- Idaho Dept. of Lands
- Conservation CDs
- Lands Council
- Pacific Northwest Direct Seed Association
- Many others

Project Area



6,640 sq. miles

- **2,295 – WA**
- **4,345 – ID**

4,249,600 acres

Big Objectives

- Approximately 150,000 acres of conservation
  - 120,100 acres of conservation tillage
  - 20,000 acres of precision ag.
  - 750 acres of riparian buffer/filter strips (commodity)
  - 400 acres of conservation easements (ag and forest)
  - 8,750 acres of forest stand improvements
- Reduction of 600,000 tons of soil erosion by 2021.
- Improve water and air quality, soil health, and habitat.
- **Timeline**– 2016 through 2021

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2017 RCPP Projects

Washington

- Forest Thinning/Pruning
- Conservation Tillage
  - No-till incentive 19,990 acres
  - Reduced-till 6,560 acres
- Precision Nutrient Placement
  - 6,311 acres
- Stream Buffer Incentive
  - **139 acres or 31 miles**

33,000 Acres Treated

Idaho

- Forest Management Plans
- Forest Thinning/Pruning
- Tree Planting
- Conservation Tillage
- Precision Nutrient Placement

8,800 Acres Treated

2018 RCPP Projects

Washington

- Forest Thinning/Pruning
- Conservation Tillage
  - No-till incentive 38,400 acres
  - Reduced-till 25,300 acres
- Precision Nutrient Placement
  - 10,456 acres
- Stream Buffer Incentive
  - **211 acres or 49 miles**

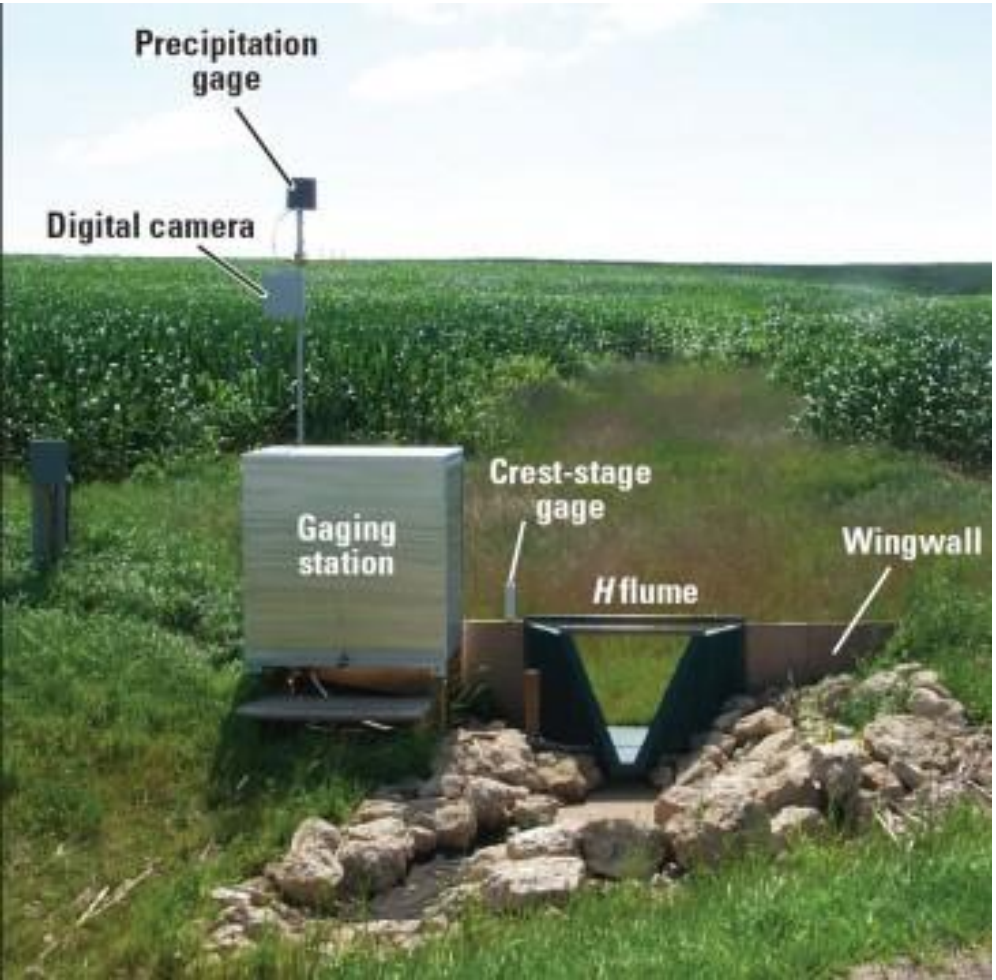
74,367 Acres Treated

Idaho

- Forest Management Plans
- Forest Thinning/Pruning
- Tree Planting
- Conservation Tillage
- Precision Nutrient Placement

5,400 Acres Treated

RCPP Innovation
Edge of Field Monitoring

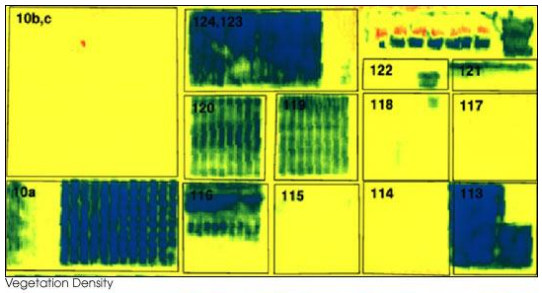


- Research on farms provides an important link between plot and watershed scale research.
- Also a way to actively engage farmers in discussions on local water quality issues.
- Some of the critical issues are effective monitoring and identifying the best approaches to monitoring from individual farms.

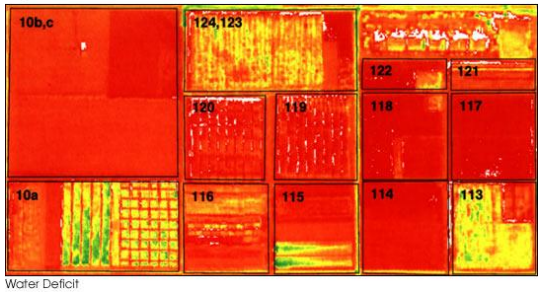

KNAACK

RCPP Innovation
Drone Services

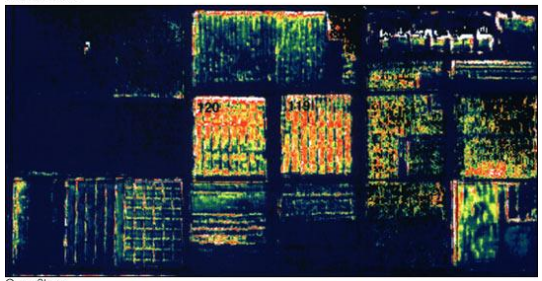
- Qualitative and quantitative imaging
- Precision Ag services



Vegetation Density



Water Deficit



Crop Stress

RCPP Innovation
“FARMED Smart Certification”

RCPP Innovation
"The Commodity Buffer"

- Buffers are a foul-tasting medicine producers have to swallow in order to protect water quality. They are contentious due to loss of most productive bottom land.
- Our effort is to reverse the thought process from "I can't do buffers" to "Why wouldn't I buffer the stream?"

Commodity Buffer

SCD research shows that buffers work better in a system than stand alone.

Our new program CAN do the following!

- Fairly compensate a producer annually for value of buffer area out of production.
- Protect a producer's bottom line.
- Make the buffer an asset instead of a liability.

Commodity Buffer Funding

- The SCD Commodity Buffer Program does not currently fit within NRCS or Ecology Programs.
- Washington State Conservation Commission has agreed to assist in financial assistance for WA.
- We still need $ for Idaho Commodity Buffer Program.
- 2017 = 139 ac.
  - 31 miles of buffer!
- 2018 = 211 ac
  - 50 miles of buffer!

RCPP Buffer Video