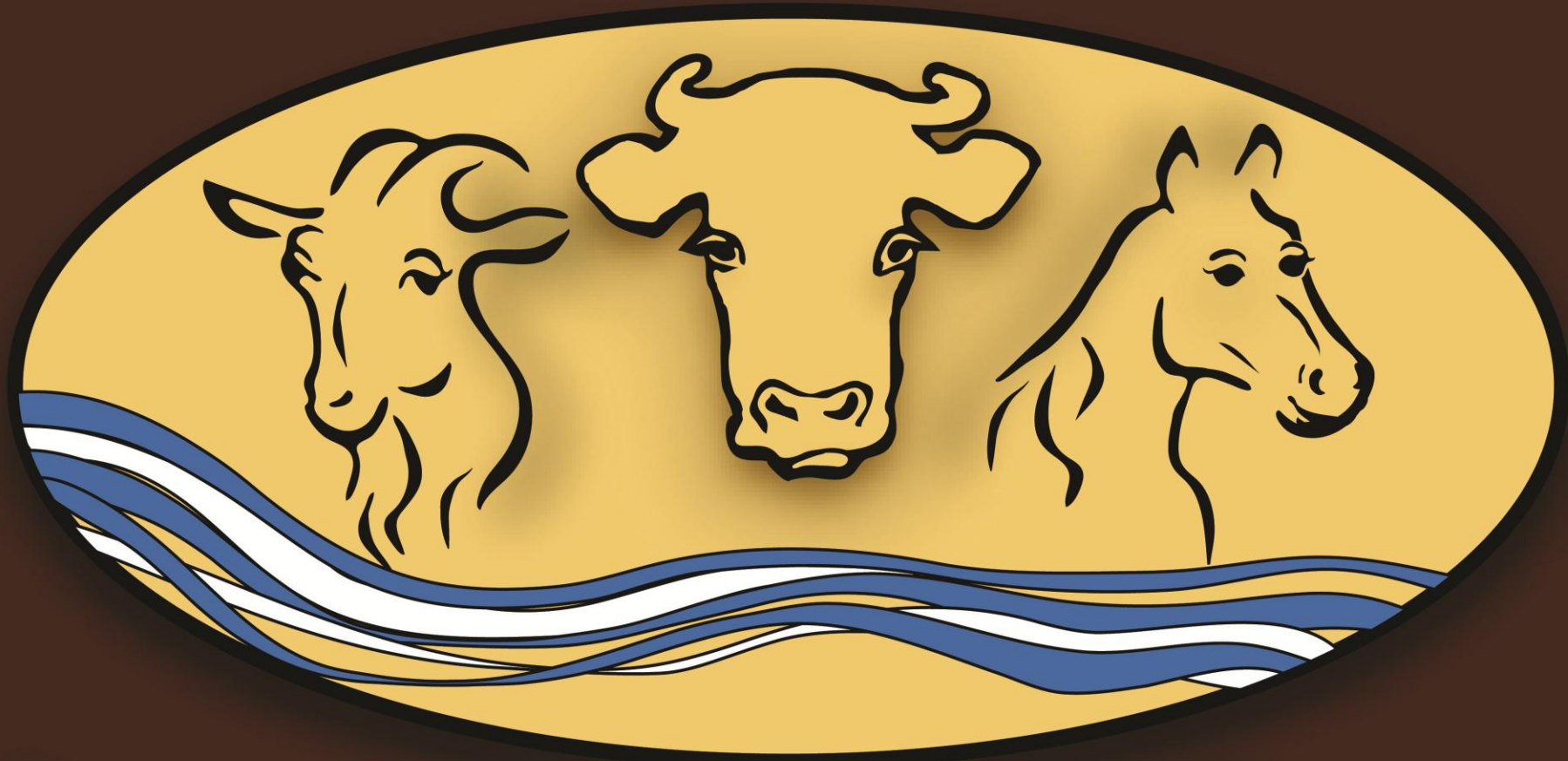




Spokane Conservation District

Non-Point Source Pollution Project Implementation

Walt Edelen, Water Resources Program Manager



LIVESTOCK AND LAND

Technical Assistance



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



The War on Mud













(27) Livestock BMP Projects



- Riparian Fence (3) -2500'
- Roof Runoff Structures (5)
- Heavy Use Areas (5)
- Off Creek Water Facility (3)
- Waste Storage Facilities
 - Static (4)
 - Aerated (4)
- Sub Surface Drainage (3)
 - 1100'
- \$60,000 in cost share



Riparian Fencing - 1275'



Riparian Fencing - 1000'



Roof Runoff Structures



Heavy Use Areas





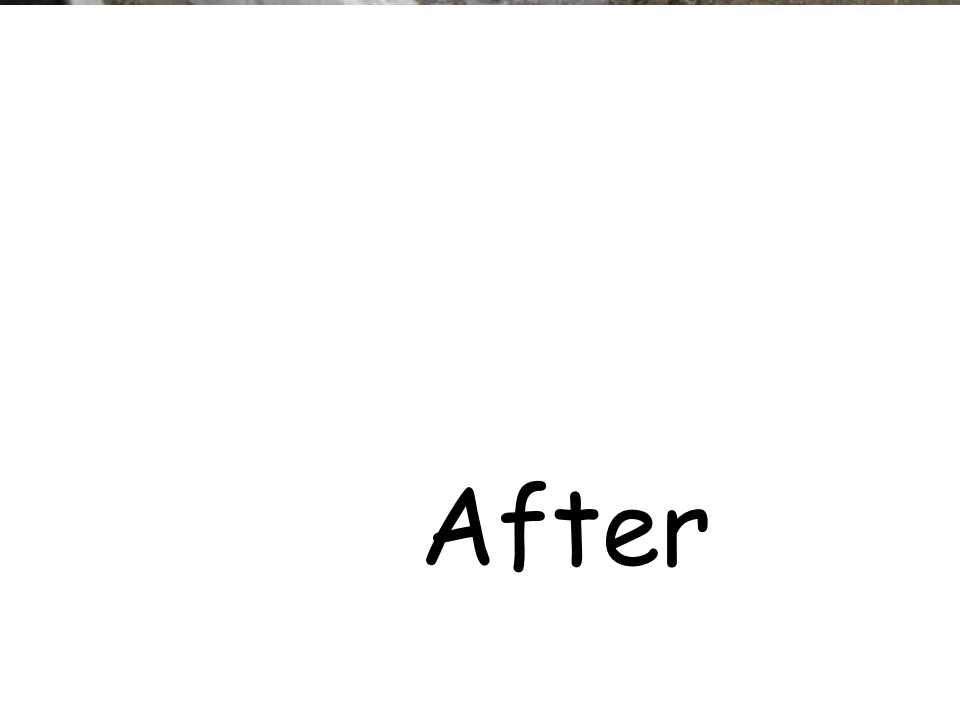








Before



After



Waste Storage Facilities



Three Bay Aerated Compost System





Example #1: Three-Bay Aerated Compost Facility



Estimated Project Costs

| <u>Components</u> | <u>Cost</u> |
|---------------------------|-------------|
| Slab - Form, Pour, Finish | \$380 |
| Supplies & Lumber | \$1,400 |
| Supplies & Piping, misc. | \$220 |
| Design and Equipment | \$2,800 |
| Labor | \$1,000 |
| Electrical, misc. | \$500 |

SCD cost-share 50%, up to \$6K

TOTAL

\$6,300

| | |
|------------------------------|---|
| Structure Dimensions: | 20' 8" X 6' |
| Number of Horses: | 2-10 |
| Projected volume/mo: | 5 cubic yards |
| Concrete Apron: | Recommended 8' |
| Bays: | 6'W x 5'4"L x 4'H. (3 with aeration chambers) |
| Structure Material: | Wood separation walls, concrete slab base w/partial back-wall |
| Roof: | No roof – recommended tarped |
| Electrical: | 110V; 20 AMP |



4-bay system up to 40 horses



Example #2: Four-Bay Aerated Compost Facility



Estimated Project Costs

| <u>Components</u> | <u>Cost</u> |
|---------------------------------|-------------|
| Slab - Prep, Form, Pour, Finish | \$2,500 |
| Lumber & Roof (gabled ends) | \$3,200 |
| Labor to Build | \$2,500 |
| Design and Equipment | \$4,000 |
| Electrical | \$500 |
| Misc. | \$500 |

SCD cost-share 50%, up to \$6K

TOTAL

\$13,200

| | |
|------------------------------|---|
| Structure Dimensions: | 34' X 10' |
| Number of Horses: | 2-10 |
| Projected volume/mo: | 8 cubic yards (each bay holds up to 9.48 cubic yards) |
| Concrete Apron: | 8' X 34' (optional) |
| Bays: | 8'W x 8'L x 4'H. 2 aeration chambers per bay |
| Structure Material: | Wood, concrete slab |
| Roof: | Hip style with gabled ends (metal). Min of 8'6" |
| Electrical Service: | 110V; 20 AMP |

Example #3: Two Bay Aerated Composting System





Approximately \$11,500

Wethey Creek Project



- U/S and D/S Post project monitoring through October of 2012 (4 months).
- No exceedances in state water quality standard for fecal coliform bacteria.

2012 Equipment Rental Program

Manure Spreader Program

Mill Creek 37+ Manure Spreader

- Improve the health of your pasture
- Protect water quality
- Reduce mud and manure issues
- Improve chore efficiency



Spokane Conservation District
210 N. Havana
Spokane, WA 99202
(509) 535-7274
www.sccd.org

- Rental ready
- \$35/day
- Soil test required
- Consultation
- May – September



Maiden Voyage!

Pine Meadows Farm, Cheney
Owner - Chrys Ostrander

.5 Acre Plot



Guys who know how to
shovel it

Organic Materials Exchange

MANURE • COMPOST • MULCH

Looking for a new home for your horse manure?

Trying to get rid of woodchips from your last job site?

Or is your fall garden lacking in good compost?

Welcome to the Organic Materials Exchange where you can find a home for your unwanted 'organic' waste or find useful materials for your garden! Currently our listings include livestock manure, compost and various types of mulch such as wood chips, coffee grinds, and more. If you have other materials you'd like to list, please e-mail or call us with your suggestions.

Sign-up to be on the Exchange List

Our mission is to reduce waste and improve water quality in Eastern Washington by giving reusable organic waste a new life.

Listing Example:

| | |
|----------------------|--------------------------------|
| Name: | Herbert Family Organic Farm |
| City: | Spokane Valley |
| County: | Spokane |
| Zip code: | 99206 |
| Phone: | |
| Product: | Manure Compost |
| Cost: | \$40.00 per load |
| Loading: | We Load |
| Delivery: | You Pick-up |
| Availability: | Year-round |

New Grant Proposal



- Ecology 319/Centennial Application
- BMP Cost-Share
- BMP Low Interest Loan Program
- Countywide

Murdoch Project

- 1600' of streambank



2009

STEPL Program

- N Reduction of 4497 lb/yr
- P Reduction of 1042 lb/yr
- Sediment reduction of 559 t/yr



2012

Newman Lake Shoreline Project

- 150' of shoreline protection
- Bio-technical design
- Wave attenuation
- Volunteers



Agricultural BMPs - Direct Seed

- Improves soil tilth
- Reduces soil erosion
- Improves water quality
- Improves air quality
- Moisture savings
- Economic benefits



Direct Seed Loan Program

- Low Interest program (equipment)
- 17 counties in WA and ID
- Mentor program available
- Assessing acres in program
- Assessing impact to region and counties



Hangman Creek AWEPP Program

- \$1.2 Million (Special EQIP Program)
- 2010 - 2015

| Practice | NRCS Code | Acres/ft |
|---|-----------|-----------|
| Cons. Tillage (Direct seed, Mulch Till) | 329, 345 | 2700/5080 |
| Nutrient Mgt. | 590 | 6,500 |
| Filter strips | 393 | 3 |
| Critical area planting | 342 | 8 |
| Riparian Fencing | 382 | 1,300 |
| Water and Sediment Control Basin | 638 | 1 |
| Grassed Waterway | 412 | 7 |
| Integrated Pest Management | 595 | 4,098 |

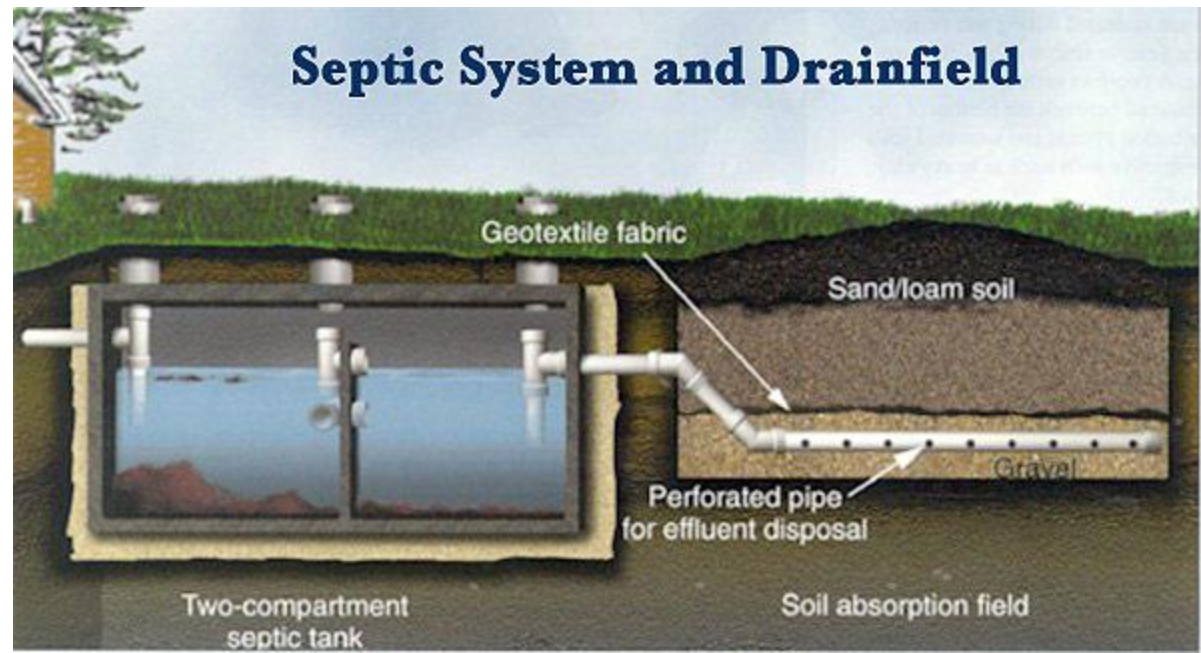
Water and Sediment Control Basin

- Two excavated basins
- Collect water and sediment
- Prevent soil and nutrient loss from fields



On-Site Septic Program

- New Ecology 319/Centennial Application
- Loan/Grant Program
- Replace or Repair existing systems
- Countywide



Hangman Creek Bi-State Water Quality Team

- Implementation Project Coordination
- Current focus on Riparian Action Plan
- Developed the AWEPP application
- Education/Awareness program

Ecology/Lands Council
Riparian Awareness
Campaign



QUESTIONS?

Walt Edelen

Water Resources Manager

Spokane Conservation District

(509) 535-7274

