



**June 2009**

Nez Perce Soil & Water Conservation District  
www.nezperceswcd.org

# Forever Soil & Water

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## Celebrating Twenty-Two Years of Environmental Awareness

By Jen Bruns

Photos courtesy of: Nez Perce Soil and Water Conservation District

Dirty hands and smiling faces of 400 local youth filled the Nez Perce County fair building during the annual Environmental Awareness Days on May 6-7. This year, youth from Lewiston, Idaho; Clarkston, Wash.; and Lapwai, Idaho participated in the 22nd annual Environmental Awareness Days. The fairground building came alive as students rotated through nine different environmental stations. Station topics included: soils, forestry, entomology, fisheries, soil conservation, livestock, agriculture, wildlife and geology. Local area experts in each field of study hosted these educational stations.

Students were able to learn hands-on science education by not only listening to information about the topic, but also experiencing it firsthand! Many students learned quickly that a little dirt won't hurt as they rolled up their sleeves anxious to learn about a variety of different soil types. During lunch, students were awed by a "birds of prey" demonstration given by the Washington State University Raptor Club. Teachers were impressed with how each station kept the kids active, and they were interested in how stations related their information to local examples in the Lewis and Clark valley.

*continued on page 2*



top: Cliff Swanson (right) explains ways for students to conserve water and soil at the conservation station.

above right: Student dressing up as a bear at the wildlife station.



Students gathering around "Citizens Against Poaching Trailer," provided by the Idaho Department of Fish and Game.



*Many thanks to all of the wonderful instructors that donated their time and knowledge to make this event a success!*

Students practice their tree identification skills at the forestry station.



Cover photo by Lynn Rasmussen

Environmental Awareness Days, continued from page 1

**Thank you to our 2009 Instructors!**

- Soils- Nancy Becker, Angela Scott, Bruce & Cherice- North Central Health District
- Forestry- Bill Furstenau- Nez Perce County Community Forestry Advisory Board, Lydia Clayton- Nez Perce County Extension office, JeAnn Willson- Idaho Department of Lands-Craigmont, Richard Guzman and Abbie Scuff- Potlatch Corporation
- Entomology- Frank Merickel- University of Idaho WFBARR Entomological Museum
- Fisheries- Megan Wandag- Dworshak National Fish Hatchery
- Soil Conservation- Cliff Swanson & Dave Stiller- Retired educators, Idaho Fish and Game Volunteers
- Livestock- Kerry Sanford- University of Idaho-Nez Perce County
- Agriculture- Zack Wolf- Northwest Farm Credit
- Wildlife- James Reed & Tieg Ulschmid- Idaho Department of Fish and Game
- Geology- Tom Walker- Lewis-Clark State College- Natural Science Division

To continue to offer this program to local youth, the District relies heavily on the support of local businesses, sponsors and volunteers. This year, we had volunteers from the Retired Senior Volunteer Program and Lewiston High School help lead student groups throughout the day. This year we had almost 35 individuals volunteer their time for a combined total of 336 donated hours. We could not have done it without the help of our dedicated volunteers! The District would also like to thank the entire Lewis and Clark valley for their support with youth education. This year, we received more than \$1,300 in donations from local businesses. Many thanks to everyone that supports this program and works hard to volunteer their time, knowledge, and resources to help make the event go smoothly!

Jen Bruns is the District Environmental Awareness Days Coordinator. Bruns can be reached at: (208)843-2931.



*Clockwise from left: Frank Merickel from the University of Idaho Entomological Museum shares interesting insect facts with the students. Students practicing their salmon "run" at the fisheries station. Megan Wandag explains the obstacles during migration of anadromous fish at the fisheries station. Students test their tracking identification skills at the wildlife station. Goat provided for student viewing at the livestock station.*



**2009 Environmental Awareness Days Donors:**

- Nez Perce County Fair Grounds/ Board
- Bumpers Arcade
- Coca-Cola Northwest
- Primeland Cooperatives
- Starbucks Coffee Company
- URM Cash & Carry No. 2
- Dominos
- Dairy Queen
- Orchard Lanes
- Happy Day Corporation
- Pepsi-Cola Bottling Co.
- Rosauers Supermarkets
- Hells Gate State Park
- Subway Sandwiches
- Grocery Outlet

## Kyle Wilson, Nez Perce District Treasurer

By Whitney Garrison

In the small, quaint café he sat in a far booth leaning against the window. He casually drank his iced tea, every so often pausing to adjust his dusty ball cap. A witty sense of humor and sarcasm spilled over his words as he began to speak. He spoke casually, telling stories of his life, his role as District treasurer, and his upcoming 37th harvest.

"I farm lentil crops... wheat, peas and barley," said Wilson. "No grass crops." Wilson has been farming for years; he is approaching his 37th harvest. This time of year is especially demanding for farmers like Wilson. He said April is probably his busiest month, followed by August. Many tend to think that farmers are "free" during the winter, but that isn't so according to Wilson.

*... it's not only conserving our natural resources, but, "promoting the wise use of those resources."*

He listed item after item of things to be done in the cold season. "In the wintertime, I am getting organized for the upcoming season." Wilson said.

Wilson was born in Lewiston, Idaho. He attended the University of Idaho and graduated in 1981 with a degree in Agriculture Economics. Wilson lives on Tom Beall Road, in Lapwai, Idaho, in the same house that his great-grandfather lived in.

Wilson said there are misconceptions about farming. One is that farmers are all multi-millionaires. "It takes years of net worth---generations--- to build a sustainable farming business.

Wilson is currently the treasurer for the Nez Perce Soil and Water Conservation District (District). He has served on the District board; however, for about 20 years. He first became involved with the District through a friend.

"John Hechtner told me he was going to put me on the board, so I didn't say no," Wilson said, chuckling.

Wilson said he enjoys his role as a District supervisor for two reasons: "We're not broke," he laughed, and, on a more serious note, added, "observing the results of our efforts."

Wilson said one thing he wants readers to know is, "We [District] are promoters of grass-roots conservation and not protectionism."

When asked how community members can conserve natural resources, Wilson said it's not only *conserving* our natural resources, but, "promoting the wise use of those resources."



- Name: Kyle J. Wilson
- Birth date: Dec. 7, 1958
- Occupation: Farming
- Birthplace: Lewiston, Idaho
- Favorite Book: "The Innocent Man" by John Grisham
- Childhood herolrole model: Ed Martin, past neighbor and friend

## District Board Re-Organizes

The Nez Perce Soil and Water Conservation District (District) board members unanimously voted Dec. 18, 2009, during a board meeting in Lewiston, Idaho, to re-organize the board's officers.

The District's seven-member board elected new district supervisors. The board elected existing member, Steve Becker as new supervising chair, Tracy Hill as vice-chair, and Kyle Wilson as treasurer. Terms began Jan. 20, 2009. The remaining four seats are filled by members: John Hermann, Dale Nichols, Lisa Swanson, and Todd Wittman.

Last November, county constituents had re-elected Hermann, Wilson, and Nichols as district supervisors. They served as supervisors on the Nez Perce Board until Jan. 20, 2009.

The District Board of Directors is made up of seven members: chair, vice-chair, treasurer, and four board seats. Board members lead and coordinate conservation programs. The programs and policies facilitate improvement of plant, animal and aquatic life.

The Nez Perce District board meetings are held the third Thursday of every month. Meetings are free and open to the public. Landowner attendance is encouraged.

For more information, you may contact the District at (208) 843-2931. Culdesac office: 27880 Chambers Road, Culdesac, Idaho, 83524

### Forever Soil & Water

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#### Culdesac Office

27880 Chambers Road, PO Box 131,  
Culdesac, ID 83524 208-843-2931

npswcd@co.nezperce.id.us

www.nezperceswcd.org

Whitney Garrison, Newsletter  
Coordinator, 208-843-2931

#### NPSWCD Board Members

Steve Becker, Chair  
Tracy Hill, Vice Chairman  
Kyle Wilson, Treasurer  
Lisa Swanson, Dale Nichols,  
Todd Wittman, John Hermann

Design by Melissa Rockwood, Rdesign



Nez Perce Soil and Water  
Conservation District

District Board meetings  
held the third Thursday  
of each month



Tammany Creek at confluence with the Snake River.

## Watershed Updates

By Whitney Garrison

Photos by Nez Perce Soil and Water Conservation District

### Tammany Creek:

The Idaho Department of Environmental Quality (DEQ) is reviewing and re-evaluating the original sediment TDML\* developed for the watershed in 2001. The DEQ will combine the Tammany Creek Watershed Advisory Group (WAG) and Lindsay Creek WAG to complete the review. This will streamline the water quality planning process because membership, water quality, implementation needs, and community involvement in the two watersheds are very similar.

During review, the DEQ gathered more water quality data, identifying nutrients and bacteria needed to be reduced. To implement sediment control, the DEQ will develop more TDML to address the nutrients and bacteria. The Conservation District, along with any interested community members, is working to identify projects, landowners, and grant funding needed to improve Tammany's water quality.

### Hatwai Creek:

In July 2006, the DEQ began a year-long water quality study. Every two weeks, personnel monitored pollutants at the mouth of the creek. Pollutants include: *E. coli* bacteria, ammonia, dissolved oxygen and total phosphorus. Based on that data, the DEQ will develop TDML to address nutrients, bacteria and temperature. Consultation with the Tammany/Lindsay Creek WAG begins this summer.

### Cow Creek:

The Idaho Soil Conservation Commission (SCC) and the Latah Conservation District completed the *Cow Creek TDML Implementation Plan for Agriculture* in July 2008. The plan outlines approaches to manage the TDML and to restore and protect stream segments of the creek.

The plan can be found on the SCC's Web site, [www.scc.idaho.gov](http://www.scc.idaho.gov).

Also, Genesee, Idaho is currently seeking a municipal wastewater permit to regulate the operation of the city's wastewater treatment system. This includes a lagoon, a new chlorination facility, and a six-acre agricultural site for irrigation purposes.

For more information, contact the Nez Perce Soil and Water Conservation District at (208) 843-2931

Source: Kyle Steele, water quality analyst, Idaho Department of Environmental Quality



### \*TMDL- Total Maximum Daily Load

States and tribes must develop total maximum daily load for the pollutants, set at a level to achieve water quality standards. (Idaho Department of Environmental Quality)



Hatwai Creek

Cow Creek

# Culvert Induced Erosion

## What is it?

Soil erosion by water is a common and destructive force. It makes unsightly gullies, clogs ditches, reduces downstream water quality and is a costly nuisance. In many situations, this can be attributed to flow from culverts. This is called *culvert induced erosion*.

## How does it occur?

When normal overland flow is passed through a culvert, the flow concentrates, thereby increasing the velocity and kinetic energy of the water. As the flow exits the culvert, a scour hole and/or gully sometimes occurs due to the increased energy of water.

## Curing the Problem

A reasonable solution for most culvert outlets is to provide armament at the outlet that will effectively dissipate the kinetic energy of the flow. Considerations should be given to the flow volume, downstream conditions, and harm to the environment.

Treatment is only suitable for non-perennial flowing areas in cropland fields, not for treatment of areas that have perennial flows or where a fish habitat is present.

## Methods

- 1) Impact---type energy dissipaters. These can be steel or concrete rings, buried at the outlet and filled with stone. Sometimes simply lining the scour hole with stone at the outlet will work. (Figures 1 and 2)
- 2) If there is downstream erosion occurring, a pipe or vegetated waterway may be added to safely convey the flow to a stable outlet. (Figures 3 and 4)

More sophisticated outlet and energy dissipater designs may be required for unusual sites or conditions. For more information on culvert erosion, you may contact:

Nez Perce Soil and Water Conservation District  
27880 Chambers Road, Culatesac, Idaho 83524  
208-843-2931

## Methods

A variety of proven dissipation approaches are available:



Figure 1.  
Drawing by Mike Durham,  
Area Engineer



Figure 2.  
Drawing by John Collins,  
Engineering Technician



Figure 3.  
Drawing by John Collins,  
Engineering Technician



Figure 4.  
Drawing by John Collins,  
Engineering Technician

# What is a Watershed?

A watershed is the area drained by a distinct stream or river system and separated from other similar systems by ridge-top boundaries.

To see how a watershed works, all you have to do is look at your kitchen sink. The drain-board that carries the rinse water into the sink functions on the same principle as a watershed.

Uplands often comprise more than 99% of the watershed's area, with the floodplain and stream making up the rest.

Small watersheds sustain large ones. In small watersheds, water from a few acres of land drains into small streams. These small streams flow into larger ones. The land drained by these small streams makes up the larger streams' watersheds. For example, Tom Beall is a small watershed that is part of the larger watershed of Lapwai Creek.

## Functions of a watershed

Watersheds catch and store precipitation, releasing the stored water to the stream channel.

These functions are influenced by climate, elevation, the type of soil and vegetation, steepness of the slopes and their orientation to the sun and size of the watershed.

Although climate determines the amount of precipitation entering the watershed, people can significantly influence how well or poorly the watershed functions. Land management activities impact the vegetation and soil which, in turn, will affect the quantity and timing of the water moving through the watershed.

## Good Management

Properly managed vegetation dissipates the energy of water, slowing the flow to the stream channel and allowing more water to enter the soil and percolate down into the aquifer. Less erosion occurs on well managed uplands.

In a healthy watershed, less sediment enters the stream to degrade water quality. More of the precipitation falling to the ground is available to contribute to late season stream flow, and high early season runoff is reduced.

## Poor Management

Removing or altering vegetation, to where areas of bare ground are exposed, increases the potential for erosion. Water runs off the surface before it has an opportunity to soak into the soil. Its energy is concentrated, accelerating erosion. Down-cutting within the stream channel may occur, resulting in lowered water tables.

Runoff over bare ground carries more soil to the stream, degrading water quality by increasing sedimentation. Less water soaks into the soil so it is not available for use by vegetation, for recharging the aquifer, or for groundwater storage.

## A Quick Summary

The objective of good watershed management is to maintain desirable and abundant vegetative cover so that water enters the soil, can be stored within the soil, and then be slowly released into the stream over an extended period of time. Healthy watersheds will optimize long-term benefits for all uses.



## 2009 NACD Legislative Conference

2009 NACD Legislative Conference  
July 19 - 21, 2009 in Washington, D.C.

Hundreds of conservation leaders from across the nation will meet in mid-July in Washington, D.C. for the NACD Summer Board Meeting and Legislative Conference. The conference will focus on the importance of congressional partnerships, and the future of conservation districts and natural resource conservation cooperation. The Board of Directors meeting will take place July 18-19, 2009 and the Legislative Conference on July 19-21, 2009. **Source: [www.nacd.com](http://www.nacd.com)**

If you have questions about the conference, or would like to register call (202) 547-6223, or visit [www.nacdnet.org](http://www.nacdnet.org) to download a registration form. See you in Washington, D.C. in July!

## Idahoans Pulling Together Against Invasive Weeds

NEWS RELEASE

MEMORIAL DAY WEEKEND STARTS

GREATEST PERIOD OF NOXIOUS WEED DANGER

Contact: Roger Batt  
(208) 888-0988

Meridian, Idaho – May 25, 2009

Driving home from Memorial Day weekend, an Idaho family stops to pick what they think are yellow snapdragons growing in a nearby meadow. On the way home, the bell-shaped flowers, which are actually the noxious weed Dalmatian toadflax, wilt rapidly and, 200 miles down the road, end up being tossed into a ditch.

That innocent act has just introduced this highly invasive noxious weed into a new county, accelerating its spread.

Memorial Day weekend is traditionally the start of Idaho's busy outdoor recreation season. It is also the start of the greatest period of danger for the spread of noxious weeds, officials with the Idaho Weed Awareness Campaign are cautioning.

Noxious weeds pose a serious threat to Idaho's economy, ecology and agriculture, causing the state some \$300 million annually in damage, according to Roger Batt, Campaign coordinator.

"Noxious weeds displace native vegetation and rob wild animals of their natural food supply. They proliferate from seeds carried by the wind, weather, animals and unintentionally by Idaho's citizens. An alarming number of noxious weeds will be among the first plants to flower this spring, adding a new color to a rainbow of native wildflowers that scatter the landscape," Batt said.

On a national level, noxious weeds undermine the productivity of 64 crops grown in the United States by a measure of \$7.4 billion.

Weed officials caution there are some important things recreationalists should know about noxious weeds before traveling into Idaho's wilderness.

"One of the ways to control them is to stop them from spreading. While it is not always possible to keep weed seeds from drifting down rivers, flowing in the wind or hitching rides on wildlife, it is possible to avoid spreading weeds and to help snuff out new infestations before they become epidemic," Batt said.

*Noxious weeds displace native vegetation and rob wild animals of their natural food supply. They proliferate from seeds carried by the wind, weather, animals and unintentionally by Idaho's citizens.*



Dalmatian toadflax

Weed experts say there are five simple suggestions on how individuals can help control noxious weeds:

- Learn to identify plants common to your favorite hunting and recreational areas.
- Avoid traveling through weed-infested areas with ATV's and other off-road vehicles.
- Only setup camp in weed-free areas.
- Do not pick and transport pretty wildflowers you cannot identify – you may spread the seeds of an attractive noxious weed.
- Check boats, trailers and watercraft after they are pulled from the water for signs of aquatic plant material.

To learn more about noxious weeds, log on to the Idaho Weed Awareness Web site at [www.idahoweedawareness.net](http://www.idahoweedawareness.net) or call the Idaho Weed Awareness Hotline at 1-866-IDWEEDS.



# National Association of Conservation Districts (NACD) presents:



The 2009 Stewardship and Education Committee stewardship theme is: “Dig It! The Secrets of Soil.” Stewardship Week officially ran from April 26 to May 3, 2009, but you are encouraged to celebrate throughout the year!

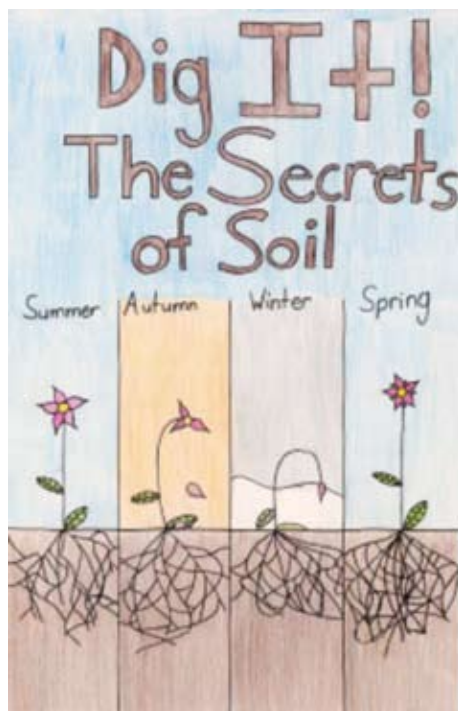
The annual National Association of Conservation District’s (NACD) poster contest applied this year’s theme, “Dig It! The Secrets of Soil,” to celebrate conservation.

The Nez Perce Soil and Water Conservation District (District) sponsored a local contest in collaboration with the NACD. Sixth-grade students from Lewiston, Idaho and Lapwai, Idaho schools submitted colorful posters having to do with land, soil and water conservation. Below are the 1st through 4th place 2009 winners, whom have the chance to be nationally recognized and have their posters displayed at the Smithsonian National Museum of Natural History from July 2009 to January 2010.

## 2009 Poster Contest Winners: Nez Perce County



**3rd Place**  
Miranda Nemeth-  
Mrs. Kolb’s/  
Kramasz’  
Class, Webster  
Elementary



**1st Place**  
Emilee Schlader-  
Mrs. Hardin’s class, McGhee  
Elementary



**4th Place**  
Kylie Badertscher-  
Mrs. Skinner’s Class, Centennial Elementary

**2nd Place**  
Miranda Lybyer-  
Mrs. Gomez’ Class, Webster  
Elementary



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The Nez Perce SWCD prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability and marital or family status.

**Best Management Practices for Jointed Goatgrass**

*By Larry Smith, Sustainable Agriculture Extension Educator, University of Idaho*

Jointed goatgrass is a major problem for wheat farmers in Nez Perce County, Idaho and the western United

States. The weed is found in 48 states and is particularly troublesome for winter wheat growers, infesting 5 million acres planted to the grain, and another 2.5 million fallow acres. The economic loss is estimated at \$45 million annually and is primarily a result of: reduced yield, increased dockage, damage or loss of export markets, decreased land value, loss of certified seed markets, and the necessity to rotate to less profitable crops.

Jointed goatgrass is closely related to wheat, and it is difficult to control once it gets established in a field. Other factors that make jointed goatgrass difficult to control include: (1) jointed goatgrass emerges in the fall with the winter wheat crop and is similar in appearance to wheat, so the problem

may not be identified in a timely manner (2) its spikelet's are similar to wheat making it difficult to clean from wheat seed, and increasing the likelihood that the weed seed may be planted with the crop the following year (3) the seed remains viable for five or more years in the soil (4) under dry conditions, jointed goatgrass is more competitive than wheat, further reducing yields (5) since wheat and jointed goatgrass are genetically related they can form hybrids, which is a concern for herbicide resistance management.

Best management practices for control include: preventing infestations, purchasing and planting goatgrass-free certified seed, the integration of Clearfield technology for weed control and more.

Consider going on line for the publication "Jointed Goatgrass Best Management Practices (BMP) for the Intermountain Region," EB2003, which amplifies information about BMP's: <http://cru.cahe.wsu.edu/CEPublications/eb2003/eb2003.pdf>

