

# West National Technology Support Center

## First Quarter Report FY 2012



### *A Message from the Director*

This report is for the first quarter of this fiscal year, October 1 to December 31. The number and variety of requests for assistance from the States remained high. Training continues to be a major part of our support to States. If you have not yet visited the Science and Technology Training Library, I encourage you to do so. It is located at [https://nrcs.sc.egov.usda.gov/st/ntsc\\_training/default.aspx](https://nrcs.sc.egov.usda.gov/st/ntsc_training/default.aspx) and contains recorded webinars and other training resources.

There are a number of agency initiatives underway and your Tech Center is involved in many of them. These include the regionalization of payment schedules, energy conservation, the organic agriculture initiative, the water quality initiative (a 5% set-aside in EQIP), the air quality initiative, the Sage Grouse and Lesser Prairie Chicken initiatives, CDSI, and water quality monitoring within the Mississippi River Basin. These efforts are important in keeping NRCS well-positioned to provide technical assistance on all natural resource concerns.

We welcomed two new employees this quarter. Marcus Miller joined the Core Team as the Wildlife Biologist and Sally Bredeweg joined the Core Team as the Environmental Engineer. Also, two of our staff are currently serving on an interim basis as the national lead for water erosion (Giulio Ferruzzi) and wind erosion (Rick Fasching).

As always, we appreciate the opportunity to serve you, our customers. Please don't hesitate to contact our specialists or let me know how we can better serve you.

*- Bruce Newton*



### CORE TEAM HIGHLIGHTS:

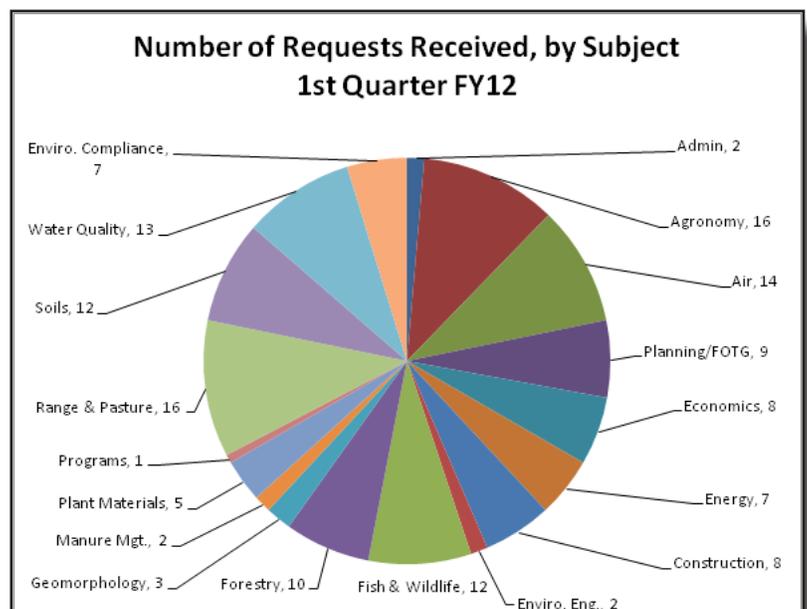
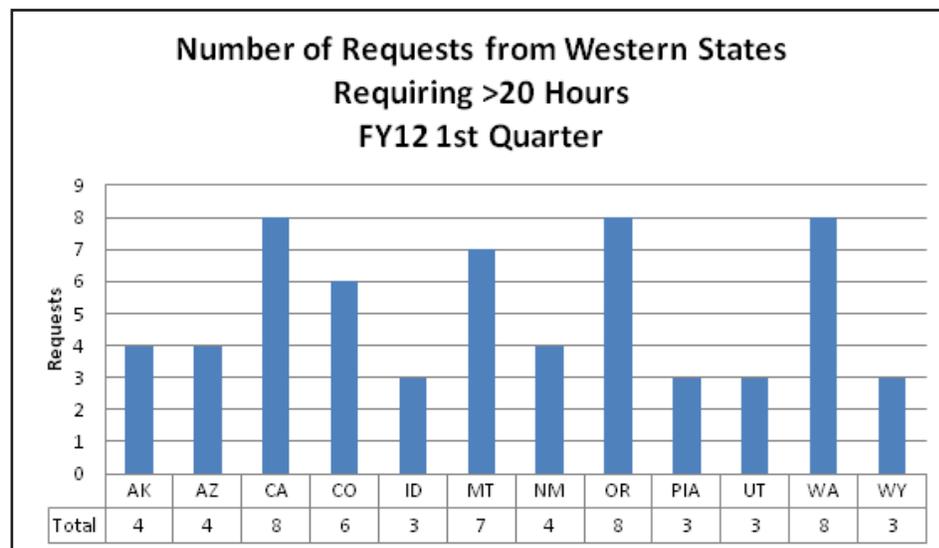
#### Two specialist join the WNTSC Core Team

In mid November Sally Bredeweg moved from the Washington State NRCS Engineering staff to fill the WNTSC Environmental Engineer position vacated by Charles Zuller. Sally's initial goal is to get to know the members of the West Region Environmental Engineering Consortia and to discern from them how the WNTSC can best provide support. Sally continues to represent the Western States on the National Conservation Practice Standard Subcommittee and is also a member of the National Improvement Team on Conservation Practice Standards. Her work has also continued for Washington to complete an Existing Waste Storage Pond Review Process which may be of interest to other states as it becomes finalized.

Marcus Miller joined the WNTSC in November 2011 as Wildlife Biologist, a position previously held by Wendell Gilgert. Marcus is a graduate of Humboldt State University and began his career with NRCS as a Soil Conservation Technician in Lovington, New Mexico in 1982. Marcus spent the last 20 years as Area Wildlife Biologist in Arizona, Wetland Biologist and Area Wildlife Biologist in Montana, State Wildlife Biologist in New Mexico, and biologist on the ESD team in Lincoln, Nebraska.

# An Analysis of WNTSC Assistance First Quarter FY 2012

| <i>WNTSC assistance provided to:</i> | <i>All Requests</i> | <i>Requests &gt;20 Hours</i> |
|--------------------------------------|---------------------|------------------------------|
| West Region States                   | 88                  | 66                           |
| Central Region States                | 5                   | 1                            |
| East Region States                   | 9                   | 7                            |
| All States (nationwide efforts)      | 30                  | 25                           |
| NHQ/NEDC                             | 15                  | 13                           |
| Total                                | 147                 | 112                          |



*For more information on Assistance Requests,  
please contact Russ Hatz, WNTSC National  
Technical Specialist  
at [russ.hatz@por.usda.gov](mailto:russ.hatz@por.usda.gov) or 503.273.2428.*

## Freshwater Mussel Conservation



In November, Kathryn Boyer worked with Xerces Society scientists Celeste Mazzacano and Sarina Jepsen to produce a 2-hour webinar on the Life History and Conservation Needs of Freshwater Mussels.

The Webinar included conservation case studies and informed field office staff about the biology and habitat of one of the most endangered group of animals in the US. The webinar, aired on December 1, was attended by conservationists in over 22 states.

The webinar and supporting technical materials are available from the WNTSC training site: <https://nrcs.sc.gov.usda.gov/st/wntsc/training/default.aspx>. For more information, contact Kathryn Boyer, [Kathryn.boyer@por.usda.gov](mailto:Kathryn.boyer@por.usda.gov).

## Agronomy

After almost two years of development, in November NRCS released the revised 590 Nutrient Management Standard, a nutrient management policy, an Adoptive Management Technical Note, and a National Instruction for properly utilizing the standard. NHQ provided training to the WNTSC agronomists Rick Fasching and Giulio Ferruzzi. Rick Fasching will provide training to western States via video teleconference outlining the major changes in criteria and planning considerations. States will have one year from the date of issue to update their Field Office Technical Guide with the revised standard along with associated planning documents needed to implement the standard (i.e. specifications, job sheets, technical notes, risk assessment tools, etc.).

Rick Fasching has been assigned collateral duty as the national wind erosion specialist upon the retirement of Mike Sporic, former national specialist. Rick travelled to Manhattan, Kansas, to work directly with ARS pertaining to revisions and technical issues related to the Wind Erosion Prediction System (WEPS) model. While there, Rick participated in the training of several Chinese researchers and students who will use the tool to address China's wind erosion issues. Rick will assist a Ph.D. candidate on future modeling improvements to address research pertaining to fine crop residues which blow off fields.

## Organic Agriculture Conservation

Sarah Brown, Joint Organic Conservation Specialist under an agreement with Oregon Tilth, is ramping up to begin her second year. Sarah's focus has shifted with the changing needs of the agency. While initially tasked with providing organic technical assistance and training, FAPD has recognized Sarah as a key ally in the development and implementation of the EQIP Organic Initiative. As 2012's Organic Initiative rolls out, Sarah is hopeful that the many steps taken to increase organic TA prove fruitful. Sarah has played a key role in training over 800 NRCS staff and she has played an important role in developing a national outreach plan. She has also helped to simplify the eligibility process and assist States in developing payment schedules.

This past quarter Sarah finalized the national organic training strategy. This document provides a template that NRCS and external partners can use to coordinate training for increasing organic technical understanding among NRCS technical specialists, conservation planners, and Technical Service Providers (TSPs). Currently, Sarah is compiling results from an organic TA survey of state organic contacts. Numerous States have requested assistance and Sarah is excited to assist them on their technical training and outreach needs.

## Nitrate Leaching Potential Soil Interpretation

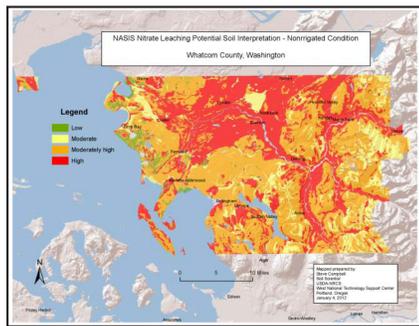
Steve Campbell, Soil Scientist, assisted NRCS-Washington in the development of Nitrate Leaching Potential soil interpretations in the National Soil Information System (NASIS). Separate interpretations were developed for non-irrigated and irrigated conditions. These interpretations are designed to be "first-tier" screening tools for conservation planning to assess the potential risk of nitrate leaching below the root zone. The interpretation ratings are based on inherent soil and climate properties in the NASIS database, without regard to management practices, similar to the soil pesticide leaching potential ratings used in the Windows Pesticide Screening Tool (WIN-PST).

The interpretation produces nitrate leaching potential ratings of low, moderate, moderately high, and high for soil map unit components, and numerical ratings that ranges from 0.00 to 1.00. The higher the numerical

*Core Team continued*

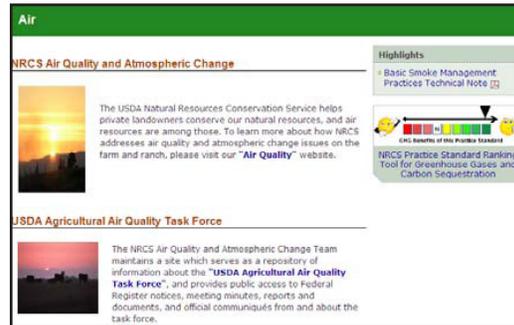
rating, the higher the predicted nitrate leaching potential. The interpretations use the following factors in the rating criteria:

- Mean annual precipitation minus mean annual potential evapotranspiration
- Water travel time through the entire soil profile, based on thickness and saturated hydraulic conductivity of each horizon
- Available water capacity (water holding capacity) of the entire soil profile
- Depth and duration of a water table
- Slope gradient with an adjustment for hydrologic group to estimate runoff potential



*Nitrates Leaching Potential map of Whatcom County, WA*

The NRCS Air Quality and Atmospheric Change Team, with assistance from National Headquarters and the Water Quality and Quantity Team, has completed migrating the Air Quality and Atmospheric Change website and the Agricultural Air Quality Task Force website to the new NRCS web tool and protocol. This required significant effort, especially with regards to the AAQ Task Force materials. Please visit our new website at: <http://www.airquality.nrcs.usda.gov>.

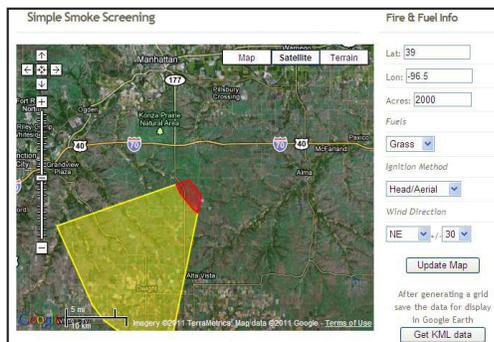


### National Air Quality Initiative for FY2012

### AIR QUALITY AND ATMOSPHERIC CHANGE TEAM:

Susan O’Neill, in collaboration with NRCS Rangeland Specialists and Forest Service Smoke Management Specialists, has written a Technical Note on Basic Smoke Management Practices (BSMPs) in support of modifications to the NRCS Prescribed Burning Practice Standard (338). The Tech Note describes six BSMPs along with an appendix on meteorological information and how it applies to smoke dispersion. The Tech Note is getting wide distribution not only within NRCS and the Forest Service but also to other Federal Agencies (FWS, NPS, DoD, BIA), the National Association of State Foresters, and several Prescribed Fire Councils.

The Air Quality and Atmospheric Change (AQAC) Technology Development Team has been active in developing the technical details for the 2012 NRCS Air Quality Initiative (AQI). The Initiative, announced by NRCS on October 18, is intended to help address agricultural-related emissions of particulates and ozone precursors in non-attainment areas in nine states (AZ, CA, CO, IL, MT, NY, OH, PA and TX). NRCS allocated \$37.5 million for this purpose through the Environmental Quality Incentives Program (EQIP). The AQAC Team developed a list of conservation practices that address PM10, PM2.5, ozone precursors (oxides nitrogen, or NOx, and volatile organic compounds), ammonia (NH3, a PM2.5 precursor), and greenhouse gases. AQI States are required to offer these practices under the initiative. The team has assisted several States identify field operations specific to the implementation of AQI. The team also developed the criteria for the NRCS Comprehensive Air Quality Management Plan (CAQMP—no. 126), which is a required effort in AQI states. The team also trained Technical Service Provider managers in the AQI States on the technical and programmatic requirements for the CAQMP.



## WATER QUALITY AND QUANTITY TEAM:

The Water Quality and Quantity Team has been busy in first quarter in fiscal year 2012. One of the team's major focus areas is working to ensure existing water related technology is included and embedded in the Conservation Delivery Streamlining Initiative (CDSI). The WQQT team has three members detailed to the CDSI effort emphasizing pest and nutrient management. Specifically, these team members are utilizing results and methodology from the Conservation Effects Assessment Project (CEAP) to inform and streamline the planning process. Additionally, the team continues to participate in the preparation and maintenance of the Science and Technology Transition Plan for CDSI. This plan attempts to create a roadmap of the current computer programs and technology required today and describes how and when they will be incorporated by the CDSI tools of the future.

The Water Quality and Quantity Team is also involved with a number of other initiatives including the Mississippi River Basin Initiative, the Great Lakes Initiative, the Chesapeake Bay Initiative, the Water Quality Initiative, the Drainage Water Management Initiative as well as others. The team continues to lend their expertise in the areas of monitoring, modeling, resource assessment as well as water quality and quantity while engaging the states to provide training and direct assistance on water issues.

