

West National Technology Support Center

Second Quarter Report FY 2012



A Message from the Director

This is our Quarterly Report of the second quarter of Fiscal Year 2012. We provide these reports to help keep our customers informed about what we do to support conservation technology. As you might imagine, the projects that we highlight in these reports are only a small fraction of the work that we do. For example, many of our specialists are currently working almost full time to develop national payment schedule model templates and allowable cost component lists. This is a huge investment but it will probably not end up being highlighted in a quarterly report.

Maintaining the technical capacity of our agency to carry out conservation planning is a big job. We have a good system of Area, State Office, and national specialists supporting the field. However, CDSI will begin altering the way we do business and will result in more effort at the field going toward conservation planning and less going towards administrative tasks. This will be a significant change for many employees. Getting our field employees and technology infrastructure ready for this transition will stretch our technology support system. CDSI implementation will get rolling this summer and we are prepared to work with the States to help make it successful.

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

- Bruce Newton



CORE TEAM HIGHLIGHTS:

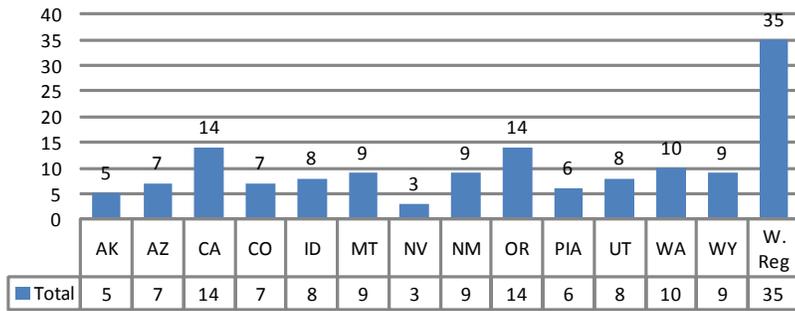
Organic Agriculture Conservation

Sarah Brown, Organic Conservation Specialist, disseminated results from the 2012 NRCS organic technical assistance survey to State Office and NTSC organic contacts. 26 States responded outlining their needs related to organic technical and outreach assistance. Approximately 60% of respondents identified the need for an intermediate or advanced organic training while 30% need an introductory course. Beyond NRCS staff, training and recruitment for "organic" TSPs were identified by 37% of the States as a priority for 2012. Currently, Sarah is contacting states to assess what assistance needs can be provided by the WNTSC. A number of states with low FY2012 EQIP Organic applications requested assistance with the coordination of listening sessions to provide outreach on the program, gather feedback and input for future implementation. Sarah will coordinate state-specific webinars, where requested, and work with external partners on projects to recruit and train TSPs.

The Organic Production Webinar series, coordinated in collaboration with the ENTSC, is underway for 2012. 'Using RUSLE2 in Organic Systems' had record breaking attendance with over 240 lines used and an assumed 360 participants. In the 3rd Quarter two webinars will occur, 'Organic

An Analysis of WNTSC Assistance First and Second Quarter FY 2012

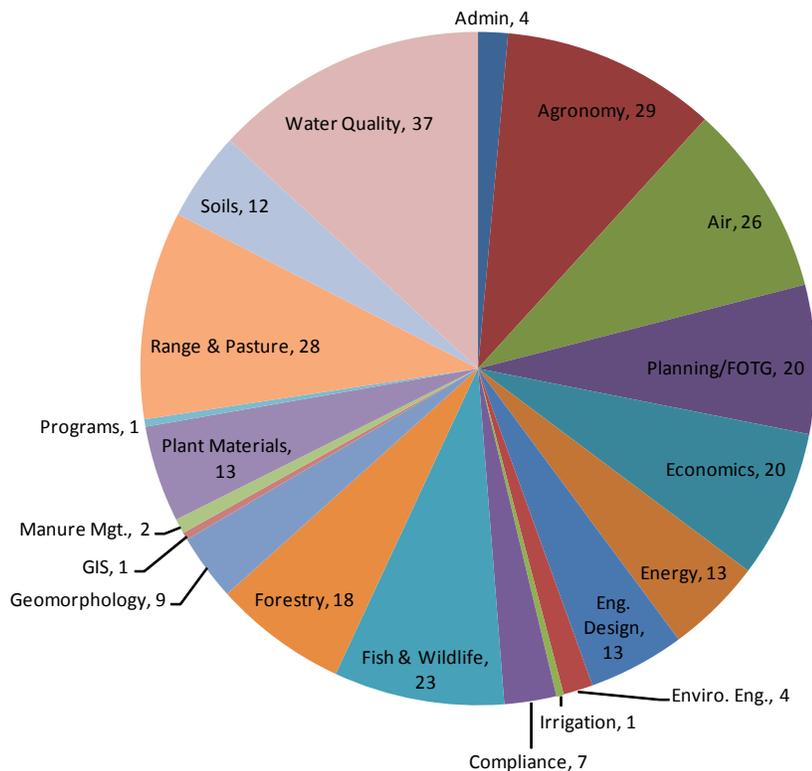
**Number of Requests from Western States
Requiring >20 Hours
1st & 2nd Quarters FY12**



WNTSC assistance provided to:	All Requests	>20 Hours
West Region States *	195	144
Central Region States	14	8
East Region States	35	29
All States (nationwide efforts)	70	57
NHQ/NEDC	22	18
Total	336	256

* includes multi-state and region-wide requests

**Number of Requests Received by Subject
1st & 2nd Quarters FY12**



For more information on Assistance Requests, please contact Russ Hatz, WNTSC National Technical Specialist at russ.hatz@por.usda.gov or 503.273.2428.

Core Team continued

Pasture Management' on April 10th, and 'Food Safety and Conservation' on June 12th.

Sarah's employer, Oregon Tilth, with whom NRCS has a contribution agreement was awarded a \$98K Western SARE grant to support the development of organic job specifications and trainings in the West. Partners on the project include the Northwest Center for Alternatives to Pesticides, ATTRA, University Extension, conservation districts, and NRCS state offices in OR, ID, NV, and CA. This project will commence in late summer 2012 and trainings will take place in 2013.

Assistance to the Pacific Islands Area on Land Capability and Farmland Classification

Steve Campbell, Soil Scientist, recently visited Hawaii to assist the Pacific Islands Area (PIA) Soils Staff to develop criteria for a land capability classification system (LCC). LCC is a system of grouping soils primarily on the basis of their capability to produce common cultivated crops and pasture plants without deteriorating over a long period of time. Agriculture Handbook 210 provides general guidance for this system, and each state can develop specific criteria for placement of soil map unit components into land capability classes and subclasses. More information on the LCC system is available at <http://soils.usda.gov/technical/handbook/contents/part622.html#02>.

Steve also discussed with the PIA Soils Staff the potential to designate certain soils that are used for high value crops, including coffee, macadamia nuts, and papayas, as "Unique Farmland" in the farmland classification system. Some of these soils, such as the Opihikao series, consist of less than 10 inches of organic material over lava bedrock. The lava bedrock is ripped with large subsoilers before fruit and nut trees are planted.

The "Unique Farmland" designation provides a greater degree of protection from development due to federal actions under the Farmland Protection Policy Act. State and local governments can also use the "Unique Farmland" designation in land use planning laws and regulations.



Steve Campbell in a papaya orchard on the very shallow Opihikao soil near Hilo, Hawaii. The lava bedrock was ripped by a subsoiler before papaya trees were planted. New USDA-NRCS/EPA Reference Guide to Agricultural Air Quality Conservation.

The Lesser Prairie-Chicken a Candidate Species under the ESA

The lesser prairie-chicken (*Tympanuchus pallidicinctus*) (LEPC) is a species of prairie grouse that occupies a five-state range encompassing portions of Texas, New Mexico, Oklahoma, Kansas and Colorado. LEPC populations need large tracts of relatively intact native grasslands and prairies to thrive. The vast majority (approximately 95 %) of LEPC habitat occurs on privately owned and operated lands across the five-state range. Therefore, the voluntary actions of private landowners are the key to maintaining, enhancing, restoring and re-connecting habitat for the species.

The Lesser Prairie Chicken Initiative (LPCI) is a conservation initiative based upon a targeted conservation systems approach to implement specific conservation practices to manage and enhance the LEPC and expand their habitats within the context of sustainable ranching.

Gene Fults, Rangeland Management Specialist, conducted three 2-day sessions on vegetation monitoring protocols for the Lesser Prairie Chicken Initiative (LPCI). Protocols include NRI based Line Point Intercept, Plant Height, and Visual Obstruction Reading (VOR). Photos and plant phenology data was also collected. The training at Garden City, Kansas was attended by over 100 participants from Colorado, Kansas and Oklahoma. Pampa, Texas had 52 and the Portales,

New Mexico session had 35 participants. Participants included staff from USFWS, State Parks and Wildlife agencies, recently hired State Watershed Action Team (SWAT) range and biology specialists, NRCS Rangeland Management Specialists and Biologists, and conservation partners including CEHMM, PLJV, TNC, and private ranchers.



Chandra Pettie (R) and George Chavez lead the field discussion in drought ridden New Mexico.

AIR QUALITY AND ATMOSPHERIC CHANGE TEAM:

New USDA-NRCS/EPA Reference Guide to Agricultural Air Quality Conservation

The West NTSC Air Quality and Atmospheric Change Technology Development (AQAC) Team (Susan O'Neill, Greg Zwicke, Greg Johnson, and Adam Chambers) co-authored a document entitled "Agricultural Air Quality Conservation Measures: Reference Guide" with the Environmental Protection Agency (EPA). The EPA had been urged for some time to develop a guidance document that their regional offices, as well as state and local regulatory agencies, could use for initiating voluntary approaches to agricultural air emissions management, especially in areas where air quality challenges directly involve agricultural production. The Guide is a joint publication between the USDA and the EPA Office of Air Quality Planning and Standards (OAQPS). The AQAC Team worked with EPA-OAQPS over a six month time period in developing the Guide to ensure that it accurately reflects proven conservation technologies and methods used in addressing air emissions from agriculture. The Guide contains an introduction to agricultural air quality emissions mitigation, and then is subdivided into 8 sections, each addressing broad categories of practices and activities that farmers and ranchers can use to address air quality issues, especially in regions where some agricultural operations are regulated. These 8 sections are: Maintaining Soil Surface Cover, In-Field Pass Reductions, Soil Conditions and Timing of Operations Modifications, Unpaved Roadways and Other Areas, Wind Bar-

rier, Equipment Modifications, Wildfire Prevention and Managing Smoke, and Other. Each section contains descriptions of and links to all relevant NRCS practice standards, as well as some additional technologies and activities used in California and Arizona. The Guide is expected to be approved by Chief Dave White and EPA Assistant Administrator Gina McCarthy this spring and will be distributed to NRCS offices at that time. The Guide should also prove useful as NRCS state and field offices address an increasing number of agricultural air quality resource issues.

Prescribed Burning Training Features Smoke Management and Prediction

Dr. Susan O'Neill, Air Quality Scientist, was an instructor at the southeastern Prescribed Burning Training course February 28 - March 3, 2012 at the Tall Timbers Research Station in Tallahassee. Attending were approximately 25 NRCS personnel from Florida, North Carolina, New Jersey and Mississippi. The purpose of the class was to introduce NRCS personnel to prescribed burning so that they have the job approval authority to discuss prescribed burning with private landowners. The training covers fire ecology, fire prescriptions, burn plans, fire effects on soils, fire effects on wildlife, smoke management, NRCS prescribed burning policy, ignition patterns, contingency planning, fire weather, equipment use, safety, and includes a burn plan writing workshop and as many training burns as weather permits. Susan led training on smoke management and prediction. This is an important class for NRCS personnel because fire is a natural part of the landscape and is especially important for the southeastern US where the natural fire return interval is 1-3 years and many native plants and wildlife species rely on fire to provide necessary habitat structure and growth responses.

NRCS Representation for EPA Science Advisory Board Panel

Greg Zwicke, Air Quality Engineer, was asked by EPA to participate in meetings and deliberations of the new EPA Science Advisory Board (SAB) Animal Feeding Operation Emission Review Panel. Greg was invited to dialogue directly with EPA's Office of Air Quality Planning and Standards on the work of this panel because of his in-depth knowledge of the research involved in the National Air Emissions Monitoring Study (NAEMS). The data and recommendations coming from NAEMS

are focal points for this Panel. It is expected that EPA will take the SAB Panel's comments and recommendations, as well as suggestions from USDA, into consideration in the final development process regarding air emissions from confined animal operations.

ENERGY TEAM:

Energy Conservation Technology is Advancing

The FY-12 EQIP On-Farm Energy Initiative and new rules for payment schedules highlighted the need for more training and new energy Conservation Practices and support documents. *Dr. Stefanie Aschmann, Leader and Kip Pheil, Energy Specialist*, Energy Technology Development Team (ETDT) have been working diligently toward meeting those needs.

In January and early February, Stefanie and Kip supported development and delivery of a series of webinars on how to estimate energy savings from conservation practices offered under the EQIP On-Farm Energy Initiative. The webinars can be accessed through the NRCS Science and Technology Training Library, https://nrcs.sc.egov.usda.gov/st/ntsc_training/default.aspx. In January, the Team also held a brain storming session to identify urgent energy training needs and begin development of a long-term energy training strategy. The Team is currently working with National Headquarters to offer a nationwide Train-the-Trainer workshop on Energy Audits and Energy Practice Standards.

A second major focus of the ETDT has been development of new Energy Conservation Practice Standards (CPS). Currently, the only National CPS targeting energy as the primary resource concern is CPS 374, "Farmstead Energy Improvement". The purpose of this CPS is to reduce energy use by helping to implement an on-farm energy audit. As such, it encompasses a broad spectrum of technologies, making it difficult to identify the technical criteria necessary to ensure quality implementation. The ETDT has established the goal of over time splitting out component technologies based on the categories established in ASABE/ANSI S612 standard for "On-Farm Energy Audits".

The Team has begun this process with three new Conservation Practice Standards:

- Lighting System Improvement (670)

- Building Envelope Improvement (672)
- Ventilation System (673)

CPS 670 has been posted to the NCPS FTP site for internal review with others scheduled to be posted early in the third quarter.

WATER QUALITY AND QUANTITY TEAM:

River Restoration Assistance

At the invitation of Wyoming NRCS and the Saratoga, Encampment, Rawlins Conservation District, *Dr. Barry Southerland, Fluvial Geomorphologist*, completed a preliminary geomorphic and hydraulic analysis in the field and presented the causes and effects about the conditions of North Platte River Reach in Saratoga, WY. Barry presented the results at the Platte Valley Community Center in Saratoga the evening of February 16th to over 70 Saratoga shareholders and residents. The one-hour presentation was followed by a 50 minute question and answer discussion session. Town leaders were present and expressed their support for a sound holistic river restoration planning process to address flooding, recreation, tourism, fishing habitat and irrigation issues concerning the North Platte River Reach as it passes through the city of Saratoga.



Dr. Southerland from the Water Quality and Quantity Technology Development Team presents findings at the Platte Valley Community Center.