



A Message from the Director

This is our third quarterly report for Fiscal Year 2011. Budget uncertainty continued through the third quarter but most planned State assistance projects were able to proceed. Our focus continues to be to provide the best service we can to conservationists at the State and field levels and we were pleased to see that States were able to complete most planned training and assistance projects.

The agency announced several actions that have the potential to significantly affect conservation technology. The agency announced an intention to move toward multi-State conservation practice standard specifications, scenarios, and payment schedules. Harmonizing these aspects of conservation technology across States will require a substantial investment of technical staff both at the Centers and at the States. Workload is also picking up to implement two major new areas of conservation – energy conservation and organic agriculture. You can read about our efforts related to helping States on organic agriculture in this report.

Two of our staff retired this quarter – Wendell Gilgert, Wildlife Biologist, and Charles Zuller, Environmental Engineer. We will be recruiting to fill the vacancies during the fourth quarter of this year.

I hope that you find this report useful. As always, please let me know how we can better serve you.

- Bruce Newton



CORE TEAM HIGHLIGHTS:

Renewed interest in Economics of Conservation Planning course

Most NRCS employees took a basic economics class in college, a few enjoyed the class but even fewer have tried to apply basic economics principles on the job. However, with the financial challenges agricultural producers are facing today, there has been a renewed interest in economics and farm and ranch planning among NRCS employees. Last fall, over 250 NRCS employees signed up on Aglearn to attend the NEDC's "Economics of Conservation Planning" course; this year to date over 200 students have received the training. The main objective for offering the course is to address the concern that NRCS employees often do not consider a producers financial situation when recommending conservation practices. **Hal Gordon, Economist**, was the lead instructor for the majority of the course sessions, and along with one of six state economists, co-taught nine courses nationwide.

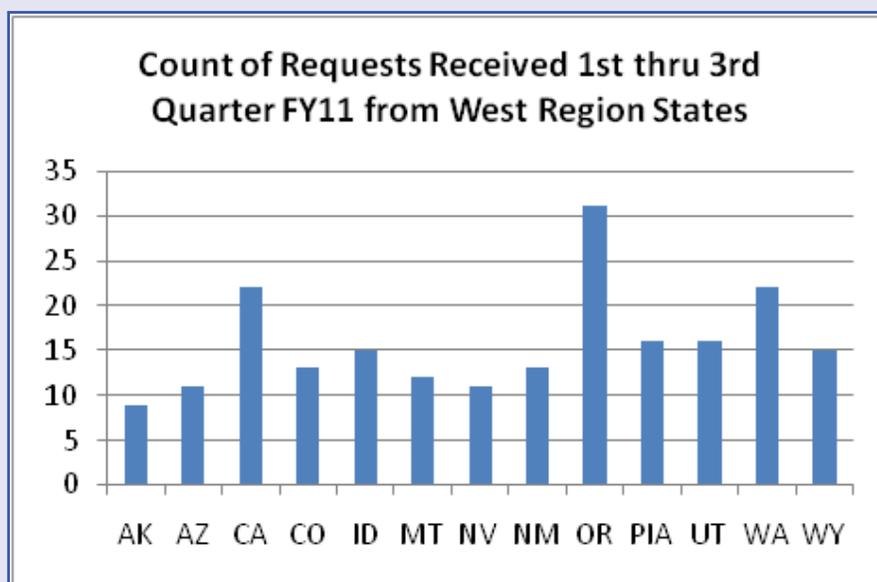
The three-day course is based on the nine steps of conservation planning and integrates economic

An Analysis of WNTSC Assistance Third Quarter FY 2011

<i>Subject</i>	<i>Total</i>
Administration	6
Agronomy	47
Air	31
Conservation Planning/FOTG	9
Economics & Social Sciences	42
Energy	14
Engineering-Construction	13
Engineering-Environment	7
Engineering-Irrigation	16
Environmental Compliance	18
Fish & Wildlife	30
Forestry	31
Geomorphology	20
Manure Management	9
Plant Materials	19
Range & Pasture	81
Soils	26
Water Quality	60
Grand Total	479

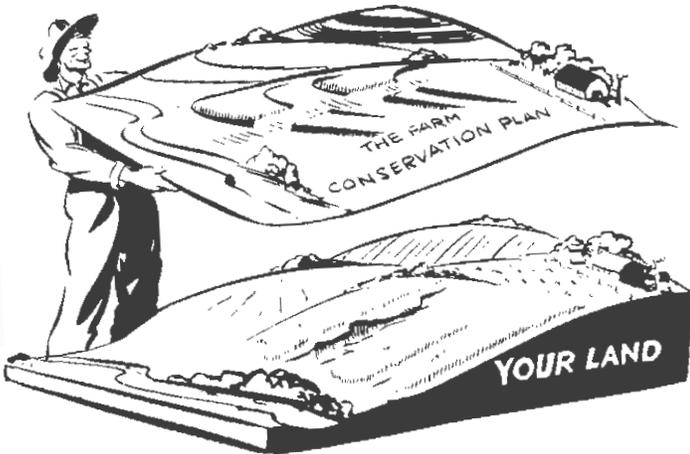
<i>Counts of Requests Received 1st thru 3rd Quarter FY11 by Location</i>	<i>All Requests</i>	<i>>20 Hours</i>
West Region States	245	171
Central Region States	37	25
East Region States	25	19
All States (nationwide efforts)	118	88
NHQ/NEDC	54	37
Total	479	340

<i>1st thru 3rd Quarter Request status:</i>	<i>Number</i>
Completed	312
In Progress	153
Not Started	4
Cancelled	10
Total	479



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

principles, tools, and techniques into managing a typical farm or ranch from the student's area. Current farms include: row crops for the Pacific Islands, cow/calf-wheat/fallow for western states, swine-corn/soybean for Midwest states, corn/soybean-pasture/forestland for southern states and dairy/silage/grapes for northeast states. Groups of three students inherit a farm with typical resource problems and are responsible for making all management, financial, and conservation decisions on the farm for up to five years.



AW - 95

Students receive a dozen Resource Management System (RMS) alternatives to evaluate and potentially implement on their farm. The students are taught basic economic tools to evaluate the benefits and costs of each RMS and select which alternative to implement. For each theoretical year, crop prices and yields are randomly selected by spinning a wheel and students calculate their annual farm income after paying conservation improvements expenses. Each student team develops a unique farm plan which allows them to compare their plan with other team's plans to see where conservation pays and where it does not.

The course is both challenging and fun as students anticipate the "spin of the wheel" and compete with each other to increase their farm income while solving resource problems. Students leave the course with a better understanding of what farmers are thinking when an NRCS employee enters the front gate resulting in the employee's ability to develop more profitable conservation plans.

National Resources Inventory Certification completed on Utah Ecological Site

Gene Fults, Rangeland Management Specialist, and Luis Garcia, New Mexico State Resource Inventory Coordinator, completed data collection certification on an Ecological Site near Tooele, Utah, this summer. The certification was part of the performance quality assurance conducted during the start-up training for the On-Site Grazing Land Study National Resources Inventory (NRI). NRI is in its ninth year of collecting grazing lands data on range land and its fourth year for collecting data on pasture land. Each segment point (0.4 acres) has 22 protocols completed to determine conditions. The information is statistically analyzed to produce reports on the condition of the nation's private grazing lands. Information for data collected from 2003-06 can be found at <http://www.nrcs.usda.gov/TECHNICAL/NRI/rangeland/index.html>

This year will mark the first year that site conditions on BLM land will be collected as part of an MOU for Sage-grouse habitat evaluations. Those protocols will focus on sagebrush characteristics found at the sites.



Gene Fults, GLCI Rangeland Management Specialist, WNTSC and Luis Garcia, New Mexico State Resource Inventory Coordinator, review summary statistics from 4 monitoring protocols completed on a Utah Ecological Site.

Organic Conservation Specialist continues to provide training and assistance

Requests for organic technical assistance over the past quarter have been overwhelming. Since last quarter's report, Sarah Brown, Joint Organic Conservation Specialist, WNTSC and Oregon Tilth, has provided trainings to KY, MS, and ID. Idaho initiated

Core Team continued

an especially productive training that incorporated an organic farmer listening session. The two-day session gave producers and local organic non-profit organizations an opportunity to provide feedback on program implementation, standards offered, and FA payments. The sessions proved to be very helpful in spurring conversation at the State Office where students spent the final day revising payment schedules and providing training to State Office staff.

Sarah has scheduled at least one training per month through the end of 2011, with multiple states interested in scheduling sessions for early 2012. The NTSCs recently meet to discuss the demand for assistance and are working on creating a strategy for satisfying all requests.

Beyond trainings, Sarah is continuing to work with NHQ on the development of an Organic Communication Plan to improve outreach to the organic community. In cooperation with Programs, she is also working on developing a fact sheet for working with Transitioning to Organic producers. In response to numerous request for clarification on organic Nutrient Management (590) and Integrated Pest management (595), Sarah is working with WNTSC agronomists Giulio Ferruzzi and Rick Fasching on the development of job sheets/specifications and payment schedules.

This winter, Sarah will be facilitating panel presentations at a handful of the largest organic and sustainable agriculture conferences in the country. The goal of these panel presentations is to further promote the organic initiative to organic producers and answer questions. All panels will include a local NRCS Organic Initiative point of contact and a local organic grower with an EQIP contract.

Soils for Conservation Planners training session held in Modesto, California

Steve Campbell, Soil Scientist, served as one of the instructors in a “Soils for Conservation Planners” training session in Modesto, California, along with Ken Oster, Area Resource Soil Scientist, and Sid Davis, Assistant State Soil Scientist. The session took place on May 3th-5th and included 25 participants from NRCS and Resource Conservation Districts.

The training was designed to help conservation plan-

ners evaluate soil properties, both inherent and management-affected, as an integral part of conservation planning. Most of the session was hand-on in the field. Topics included identification of major soil horizons, soil texture, structure, root-restricting layers, and indicators of a high water table. Field determination of the Unified engineering soil classification system was covered.



California NRCS staff learn how to evaluate soil properties in the field using Soil Quality Field Test Kit

The session also included the relationship of soil survey map units to landforms and geologic material. Participants were trained in how to recognize inclusions of contrasting soils within soil map units.

The participants used the Soil Quality Field Test Kit to evaluate soil properties that can be affected by management, such as compaction, water infiltration, aggregate stability, pH, and salinity.

Dryland Cropping Systems Review & Field Day held in Utah

After record high spring rainfalls caused over 6 million dollars in extensive damage to roads and other infrastructure in Utah, NRCS State Agronomist, Niels Hansen, decided to do something to boost no-till adaptation to avert future disasters. The result was the first Dryland Cropping Systems Review & Field Day in Utah, a collaborative effort between NRCS, the Western SARE Center, USU Cooperative Extension Service, USU Ag Experiment Station, and the host of the tour, the Blue Creek Utah Crops Welfare Farm. Interestingly, when **Rick Fasching, Conservation Agronomist**, was asked to present Precision Ag Technology at the field day, he discovered that, although approximately 36% of US cropland utilizes no till systems, Utah has only just

Core Team continued

recently (since 2004) begun to adopt the technology. Previously, conventional systems where excessive tillage was practiced, were generally used throughout the state's 2.5 million acres of cropland.

Almost 100 participants came to see the effects no-till was having. The Blue Creek Farm manager attested to dramatic reductions in chemical use (also since 2004), an increase in yields, the elimination of erosion, and the improvement of soil quality. He also attested to the fact that he uses 2/3 less fuel, has less equipment and maintenance expense, and less labor requirements. This resulted in, higher net profits using a sustainable cropping system.

For NRCS in Utah, this is an exciting change to witness because conservation cropping systems positively reduce soil carbon loss, water pollution, erosion, energy use, and soil quality. Staff plan to continue holding annual field days on no till and conservation cropping systems, including precision technology, with the knowledge that adaptation will restore soil health and sustainable farming systems to agriculture in Utah.



Rick Fasching, Regional Agronomist, uses the Green Seeker hand held to demonstrate precision nutrient management to field day participants in Utah.

CNMP Smart Documents in development

Since the 590 Nutrient Management standard was released almost two years ago, many States have begun looking at how the revised standard might change the way they write and implement CNMP (comprehensive nutrient management plans) for animal feeding operations. The MMP (Manure Management Planner) was developed so that planners could create manure management plans for crop and animal feeding operations. Planners enter information about the operation's fields,

crops, storage, animals, and application equipment. MMP helps the planner, in collaboration with the producer, allocate manure (where, when, and how much) on a monthly basis for the length of the plan. This allocation process helps determine if the current operation has sufficient crop acreage, seasonal land availability, manure storage capacity, and application equipment to manage the manure produced in an environmentally responsible manner. MMP is also useful for identifying changes that may be needed for a non-sustainable operation to become sustainable, and determine what changes may be needed to keep an operation sustainable if the operation expands.

MMP currently supports over 35 states including the western states of AZ, CA, CO, MT, NM, OR, UT, and WA by automatically generating fertilizer (N-P-K) recommendations and estimating manure N availability based on each state's Extension and/or NRCS guidelines. Hawaii and Wyoming are waiting in the queue for their State to be added to the national MMP database.

Rick Fasching, Conservation Agronomist, has been busy providing Arizona, Washington, Oregon, and New Mexico with CNMP and MMP training including providing assistance on the development of their customized state specific comprehensive nutrient management plans and producer activity documents. Each state's customized plans are based on NRCS policy formats and utilizes Microsoft's "smart document" technology to efficiently create plans that meet producer objectives as well as regulatory agency requirements.

AIR QUALITY AND ATMOSPHERIC CHANGE TEAM:

Agricultural Air Quality Task Force

In April 2011, Secretary Vilsack announced the selection of individuals to serve as members of the Agricultural Air Quality Task Force (AAQTF) for the 2011-2012 term, stating: "These leaders in farming, industry, health, and science bring a broad range of interests, knowledge, and geographic diversity and will be invaluable in providing guidance as the Administration pursues sound scientific research on agricultural air quality issues." The AAQTF is re-chartered every two years, is chaired by the Chief of the NRCS, and has been advising the Secretaries of Agriculture since the mid 1990's. They have been instrumental in helping

focus USDA Agricultural air quality research and in identifying issues for discussion with EPA.

The NRCS Air Quality and Atmospheric Change (AQAC) Team supports the AAQTF by helping the Chief and the Designated Federal Official (DFO) arrange the meetings, respond to Task Force requests, provide briefing materials for the Secretary's office, process Task Force recommendations to the appropriate agency(s), and serve as Task Force Subcommittee liaisons.

The first meeting of this newly chartered Task Force was held in Washington, DC, June 8-10, 2011. The AAQTF chose four primary areas of focus and subcommittees for the next two years: Air Quality Standards; Climate Variability and Bioenergy; Emissions Quantification, Mitigation and Validation; and Emerging Issues and Opportunities. It is anticipated that the next Task Force meeting will be September 20-22 in Manhattan, Kansas.” For more information about the AAQTF please visit: <http://www.airquality.nrcs.usda.gov/aaqtf/>



2009 - 2011 USDA Agriculture Air Quality Task Force members

Air Quality and Atmospheric Change and Energy Teams to receive (ASABE) Educational Aids Blue Ribbon Award

The Air Quality and Atmospheric Change Team and the Energy Team will be awarded an American Society of Agricultural and Biological Engineers (ASABE) Educational Aids Blue Ribbon Award at the ASABE meeting in Louisville, KY, in August for the development and promotion of the six NRCS air quality, climate change, and energy online courses. The ASABE Educational Aids competition is intended to recognize outstanding extension and training materials in various categories, including the Electronic Delivery category under which the NRCS entry was judged. The six NRCS air quality, climate change, and energy online courses are housed in AgLearn. In addition to the Air Quality and Atmospheric Change Team and the Energy

Team, NRCS is also represented in the award by the National Employee Development Center and the Soil Survey Division. Additionally, the Livestock and Poultry Environmental Learning Center was included in the award for their willingness to host a link to a public version of the NRCS air quality, climate change, and energy courses on the Air Quality page on the eXtension.org website maintained by the Cooperative Extension System (<http://www.extension.org/pages/15538/air-quality-in-animal-agriculture>).

WATER QUALITY AND QUANTITY TEAM:

New Mexico Streambank Stabilization and Principles in Fluvial Geomorphology

WNTSC staff **W. Barry Southerland, Fluvial Geomorphologist, Kip Yasumiishi, Civil Engineer, Jim Briggs, Plant Materials Specialist, and Dan Moore, Hydraulic Engineer** were the principle instructors for the training workshop “Streambank Stabilization and Principles in Fluvial Geomorphology” in Silver City, New Mexico the week of May 23-26. The course was well attended and had a waiting list. The WNTSC and the New Mexico NRCS collaborated with the New Mexico Environment Department to provide the workshop. The training course included both fieldwork sites and formal lecture. Streambank stabilization with floodplain connectivity and riparian establishment were the primary points of emphasis in this workshop. The unique conditions of arroyo geomorphology with monsoonal climatic runoff conditions, hydraulics and hydrology were highlights in the course agenda.



Teams of students completed field exercises on streambank erodibility analysis, geomorphic planning fundamentals, bed material size analysis, and potential bank stabilization measures.



Gila River Particle Size and Distribution Analysis