CARIBBEAN AREA
2012 ANNUAL REPORT

PRODUCTIVE LANDS — HEALTHY ENVIRONMENT

HELPING PEOPLE HELP THE LAND
IN PUERTO RICO & THE U.S. VIRGIN ISLANDS
Quick Facts

- 25,360 acres of conservation planning completed
- 10,779 acres of cropland conservation applied to improve soil quality
- 24,440 acres of conservation applied to improve water quality
- 1,233 acres of irrigation improvements
- 17,599 acres of grazing land with conservation applied to protect/improve the resource
- 2,583 acres of conservation applied to protect fish & wildlife habitat
- Approximately 56% of financial assistance provided to beginning, limited-resource or socially-disadvantaged farmers
- Over $4.9 Million in financial assistance to Caribbean Area producers & landowners

Message From Our State Conservationist

Greetings Caribbean NRCS Employees and Partners!

As your Director for NRCS in the Caribbean Area, I can look back at 2012 with pride and say: “I am glad to be part of the NRCS Caribbean Family.” Although many challenges got in our way, we managed to successfully close another magnificent year, meet our goals and proudly say that we enjoyed our work while we made it happen. Many thanks for understanding that there is a lot of work to be done and not nearly enough funds or staff to do it, yet we manage to accomplish our mission through excellent team work and dedication.

I encourage all of you to take a look at all the accomplishments we highlight on this second consecutive annual report and take pride as you read it because you were part of it. I also need to recognize the hard work and contributions of our partners; their contributions were vital to our success.

As we move towards a new and wonderful Fiscal Year (FY) full of challenges, it is important that we all work towards securing the future of our agency. Tough times are ahead of us as we face budget needs, uncertainty of our Farm Bill and other challenges, but we need to move forward to accomplish our mission and goals. I assure you that we will continue to work hard providing our NRCS staff with the right tools and training to continue performing your jobs. However, it is important to note that we must remain flexible and mindful that changes and adjustments will be inevitable, but we will face them together.

I am certain that the spirit of cooperation and leadership all of you exhibited this past FY 2012, once again will help us make this new FY a successful one. Thank you for your extra efforts and commitment, I certainly look forward to 2013 along you.

Yours in Conservation,

Edwin Almodóvar, Director
Environmental Quality Incentives Program (EQIP)

EQIP is a voluntary conservation program to provide farmers with technical and financial assistance to install and implement conservation practices on eligible agricultural lands. Through EQIP, farmers in Puerto Rico and the U.S. Virgin Islands receive assistance for agricultural production and environmental quality as compatible goals.

In FY 2012, NRCS approved 353 contracts providing $4,970,394 in financial assistance to benefit 12,149 acres in the Caribbean Area, including contracts specific to four major initiatives: Coral Reefs, Santa Isabel South Aquifer Watershed, On-Farm Energy & National Water Quality. Almost 56% of these funds were provided to beginning, limited-resource or socially-disadvantaged farmers.

EQIP On-Farm Energy Initiative

NRCS & the Puerto Rico Milk Industry Development Fund are helping dairy producers transition to more energy efficient operations. The On-Farm Energy Initiative funds individual on-farm energy audits to save farmers both money and energy. This year, NRCS approved 29 Energy Audit contracts for $41,319 and signed 19 On-Farm Energy contracts for $181,537 to implement energy audit recommendations. Auditors will conduct on-farm energy audits for 29 eligible participants to identify how farm operations can become more energy-efficient, and use audit results to develop cost-effective Agricultural Energy Management Plan (AgEMPs).

EQIP Coral Reef Initiative

The Guánica Río Loco Watershed Project is located in the southwest corner of Puerto Rico and covers portions of Guánica, Yauco, Lajas and Cabo Rojo. NRCS is helping producers in the watershed to voluntarily install conservation practices to reduce and trap sediment and nutrient runoff; improve wildlife habitat; and maintain agricultural productivity. The project began in 2009 as a multiagency effort to support the U.S. Coral Reef Task Force in reducing the impacts of land based sources of pollution on coral reefs.

To date, NRCS has allocated over $1.5 million in EQIP funds and $400,000 in conservation technical assistance (CTA) to 17 contracts to conserve resources on 1,194 acres of farmland in the Lower Río Loco watershed. In the Upper Río Loco watershed, over $480,000 has been allocated to convert 916 acres of sun grown coffee plantations to shade grown coffee. To date, over 12,800 native trees have been planted (right) and over $168,000 has been paid to farmers for reforestation and conservation practices. Along the Río Loco, $400,000 has been allocated to stabilize 600 meters of stream bank with structural and bioengineering practices. Practices installed include: four 3 acre reservoirs; three 3 acre sediment basins; 8,500 feet of open channels; 8,000 feet of irrigation pipeline; 8,500 feet of grassed waterways; 28,500 feet of fencing; 14 livestock watering facilities; 195 acres of pasture and hayland planting; 190 acres of access control; 197 acres of critical area plantings and pump houses to serve over 1,500 acres.
EQIP South Aquifer Watershed Project

The South Aquifer Watershed Project in Santa Isabel, PR, aims to protect, preserve and improve the quality and quantity of agricultural resources in the watershed. Project objectives are to control soil erosion, improve the quantity and quality of water in the aquifer, improve runoff management, install water reservoirs for irrigation management, improve irrigation systems, and install systems to improve water infiltration. Planned conservation practices include irrigation water reservoirs and pipelines, irrigation systems, pumping plants for water control, grassed waterways, and water & sediment control basins. In FY 2012, 5 contracts were obligated for a total of $1,132,333 to protect about 1,970 acres.

EQIP National Water Quality Initiative (NWQI)

EQIP’s National Water Quality Initiative offers financial and technical assistance to farmers, ranchers and forest landowners to improve water quality and aquatic habitats in priority watersheds with impaired streams. In the Caribbean Area, NRCS is targeting the Río Grande de Añasco watershed, one of the primary rivers discharging into Mayagüez Bay. Río Grande de Añasco drains one of the largest watersheds in Puerto Rico and is ranked #5 on PR’s list of impaired watersheds, due primarily to sediment, bacterial and chemical contamination.

In FY 2012, NRCS approved 5 NWQI contracts for local producers for a total of $58,125. Resource concerns to be addressed in the Río Grande de Añasco watershed through this initiative are sheet and rill erosion, water quality and quantity, plant health, flooding and invasive species. The primary conservation practices planned for the NWQI contracts are nutrient management systems, erosion control, conservation tillage, integrated pest management, and buffer systems.

Emergency Watershed Protection (EWP)

The Emergency Watershed Protection (EWP) program helps communities implement emergency measures, including purchase of flood plain easements, to relieve imminent hazards to life and property created by a natural disaster. EWP can install practices to help areas recover from flood, drought, erosion, landslides and sedimentation on any watershed whenever fire, flood, storms or any other natural disaster has caused a sudden impairment of the watershed.

In the aftermath of Hurricane Irene on August 21, 2011, NRCS worked to provide disaster assistance to communities that suffered damage to watershed areas. Applications were received to repair 50 sites across the island, with nine (9) sites qualifying for EWP funding. USDA processed seven of these applications and awarded $1.8 million to the Caribbean Area on January 23, 2012. NRCS signed agreements with the Puerto Rico municipal governments of Caguas, Humacao, Juncos, Las Piedras, Maunabo, and Yabucoa counties to install projects to reduce threats to life and property on the island. Two projects were completed clearing 4,000 feet of Areanas Creek in Las Piedras and 1,300 feet of Candelero River in Humacao. A clearing project in Juncos and stream bank protection projects in Caguas Los Muertos and Maunabo will start construction in November 2012. Stream bank protection projects in Yabucoa and Caguas La Ponderosa are in the design stage.
National Resources Inventory (NRI)

The NRI provides natural resource managers, policy makers and the public with scientifically valid, timely, and relevant information on the natural resources and environment of the Caribbean Area. This information provides the scientific basis for effective public policies, sound agricultural and natural resource legislation, sensible local and national conservation programs, and targeted USDA financial and technical assistance in addressing natural resource concerns.

The 2007 NRI is the latest in a series of national resource inventories conducted by USDA NRCS throughout the United States, including the Caribbean Area. It provides updated information on the status, condition, and trends of land, soil, water, and related resources on non-Federal lands across the Nation. Non-Federal lands include privately owned lands, tribal and trust lands, and lands controlled by State and local governments. The NRI provides a record of the Nation’s conservation accomplishments and future program needs. During FY 2012, Caribbean Area NRI staff completed the data collection and certification of 2009 and 2010 NRI segments and published the “2007 NRI Caribbean Area Summary Report” online.

Plant Materials Program (PMP)

Salt flats are fragile ecosystems adjacent to coastal waters where salt-tolerant plants grow. They play an important role in protecting coral reefs by removing debris, nutrients, sediment and other pollutants from storm water before it enters the marine environment. In FY 2012, the PMP completed 2 projects to identify common salt flat vegetation that can act as conservation buffers between uplands and salt flats. Phase I was conducted by Dr. Yasmin Detrós (UPR Marine Science Department) and two undergraduate students, and Phase II by Dr. Joaquín Chong (UPR Mayagüez) and Mr. Aníbal Arocho. Four sites in southern Puerto Rico were selected for soils, vegetation and climate typical of salt flats in the Caribbean Area (Agua al Cuello and Bahia Sucia in Cabo Rojo, Ensenada las Pardas in Guánica, and Jagüeyes in Salinas). At each site, 6 parameters were studied: ground cover, foliar cover, soil slope, soil nutrient content, soil electrical conductivity and pH, and a GIS map showing the spatial distribution of vegetation was produced. The six most frequent species found (of 22 plant species identified) were selected for study: Sessuvium portulacastrum, Batis maritima, Sporobolus virginicus, Spartina patens, Salicornia bigelovii, and Paspalum vaginatum. Results can be applied to crop, pasture and urban lands near salt flats, and other areas these species can grow.

PMP staff partnered with the ENTSC to demonstrate portable, temporary electric fencing powered by solar chargers at two farms in St. Croix and Puerto Rico. The demonstrations show goat, sheep and cattle producers in remote locations how to easily move fence and livestock to improve grazing management. Staff trained over 100 personnel from UPR-Mayagüez, PR Department of Natural and Environmental Resources, Inter-American University-San Germán, Catholic University, NRCS, and local NGOs on Wetland Indicators. The PMP was also awarded $40,000 by the National PMP to demonstrate and apply habitat for native pollinators on cropland in southern PR. Agricultural field margins will be converted into non-crop habitat to validate how this practice can significantly increase wild bee abundance and diversity. This in turn could increase crop yield and decrease chemical use, resulting in higher overall profits for growers.
Soil Survey Program

The NRCS Caribbean Area Soils Survey Division is part of the National Cooperative Soil Survey (NCSS) program, a nationwide partnership of federal, regional, state and local agencies and institutions. The National Soil Survey Program began a Soils Restructuring Plan during FY2012 that included a Soil Survey Region reorganization—the Major Land Resources Area’s (MLRA) Regional Offices were reduced from 18 to 12. Our Mayagüez MLRA Soil Survey Office (SSO), formerly served by the MO Region Office in Auburn, Alabama, is now served by the MO Region Office in Raleigh, North Carolina.

During FY 2012, The Mayagüez MLRA SSO completed the MLRA 270 El Yunque National Forest SSURGO certification project, including the SSURGO certification and update of 27,847 acres now available to the public online via Web Soil Survey and Soil Data Mart. The project was a cooperative effort between the former MO Regional Office of Auburn, Alabama, the NRCS Caribbean Area Soil Science Division and the Puerto Rico Forest Service. We also updated 6,317 acres of the Soil Survey of Humacao Area, Puerto Rico Eastern Part, to ensure a seamless join to El Yunque National Forest boundary.

As part of the National Soil Data Join Recorrelation (SDJR) Initiative, the Mayagüez MLRA SSO prepared 5 SDJR projects that will be part of the FY 2013 soil's information update goal, for a total of more than 272,097 acres.

Caribbean Area Soil Staff helped National Water Climate Center team members Gary Schaefer, Don Huffman and Austin Beard install a new SCAN station at the Corozal Experimental Station. The group also provided maintenance to SCAN stations in Puerto Rico and the US Virgin Islands: Mayagüez Master, Isabela, Maricao, Susúa, El Combate, Bosque Seco, Fortuna, St. Croix and St. John. Data collected by SCAN stations is used by NRCS employees, UPR students and professors, Experiment Station investigators, State Forest administrators, National Park administrators and the general public. Please visit: www.wcc.nrcs.usda.gov/scan/ to obtain SCAN data.

Other accomplishments included: completing an archeological site soil description by request of Soil Professor Yanira Sánchez and Archeologist Reniel Rodríguez for an Archeological Study being conducted at the University of Puerto Rico Utuado Campus; updating the Caribbean Area Soils’ Web Page (www.pr.nrcs.usda.gov/technical/soil_survey/) with new instructions on how to use the Web Soil Survey in English and Spanish; producing a “Caribbean Soils Division Helping People Understand Soils” poster; and planning and participating in the “Soils, Crops, and Land Use Tour of Puerto Rico” organized by the University of Puerto Rico Mayagüez Campus for 8 students and two professors from the University of North Dakota, visiting several sites in Puerto Rico with soil series representing at least 8 different soil orders.

The MLRA SSO staff conducted several presentations and a workshop on how to develop soil survey maps and interpretations using Web Soil Survey, in partnership with the Mayagüez field office and the Southwest Conservation District, for farmers, students, university professors and local government agency staff; served more than 800 customers through technical soil services including workshops, conferences, trainings, on site investigations, environmental impact statement evaluations, and personal contacts; and provided 100 percent of the soil technical assistance requested by field offices, including on site investigations for: irrigation storage reservoirs, water and sediment control, and sewage lagoons.
Conservation Technical Assistance (CTA)

NRCS provides conservation technical assistance (CTA) to land users to help them make sound natural resource management decisions. Assistance may be in the form of resource assessment, practice design, resource monitoring, or follow-up of installed conservation practices. NRCS also holds outreach activities to increase participation of socially-disadvantaged farmers and ranchers in our programs and provide information to underserved groups and individuals.

Outreach: In FY 2012, we provided CTA to over 4,600 clients and media outreach to over 150,000 residents through over 1,260 separate activities and contacts including: training workshops, onsite investigations and evaluations, conservation plans, technical consultations, advisory committees, newspaper and newsletter articles, radio and television appearances, conference presentations, public meetings, informational mailings and email blasts, outreach publications (factsheets, brochures, reports), posters and exhibits, NRCS Caribbean Area website, and personal contacts.

Grants: In FY2012, the NRCS Caribbean Area continued 7 Conservation Technical Assistance Program (CTAP) grants awarded in FY2011. The goal of the CTAP grant awards is to increase NRCS technical capacity and to further enhance partnership opportunities in the Caribbean Area to accomplish the Agency’s conservation objectives and priorities. Projects accomplishments include:

- NRCS-CB & Suroeste SWCD have assisted 70 producers in the Guánica/ Rio Loco watershed in implementing over 200 water conservation and runoff management practices to improve over 22,500 acres of land.
- NRCS-CB in partnership with the U.S. Fish & Wildlife Service (FWS) Caribbean Islands National Wildlife Refuge (NWR) collected/ propagated approximately 10,000 specimens of 16 native tree and shrub species to be planted in Puerto Rico’s Rio Loco/ Guánica watershed.
- NRCS-CB & the U.S. FWS have assisted 25 farmers in the Guánica Bay/Rio Loco watershed in implementing conservation practices to convert 685 acres from sun coffee to shade coffee in order to establish a wildlife corridor between Maricao, Yauco and Guilarte Forests.
- The St. Croix Environmental Association (SEA) and their contractor, Horsley Witten Group, Inc., completed engineering designs and specifications for two priority watershed restoration project sites to reduce land-based sources of sediment contributing to the St. Croix East End Marine Park (STXEMP). The first site is a severely eroded gully on pastur-land in Southgate watershed, and the second is a 5-mile network of eroding dirt roads in Solitude watershed.
- Caribbean Environmental Films, Inc. (CEFI) filmed across Puerto Rico and St. Croix this year, documenting the Agency’s conservation accomplishments in the Caribbean Area in high definition video documentaries to be aired throughout the region.
Partnerships

During FY 2012, the NRCS Caribbean Area partnered with the Suroeste and Oeste Soil and Water Conservation Districts in May and June to conduct a series of four Web Soil Survey workshops held for over 90 participants. The workshops targeted personnel from agencies that provide services to land owners/users. Participating agencies were: University of Puerto Rico at Mayagüez, Extension Service, PR Water Authority, PR Education Department, Farm Service Agency, Sea Grant, and the Agricultural Research Station.

In FY 2012 NRCS also initiated a partnership with the Noroeste Soil and Water Conservation District to implement a special project in the Coloso Valley to improve runoff management and irrigation systems. This effort includes technical assistance from NRCS and financial assistance from NRCS and the Puerto Rico Department of Agriculture. The Noroeste SWCD also partnered with NRCS to conduct a series of outreach activities to promote Farm Bill programs in 2013. Among other activities, the District plans to conduct workshops, radio programs and a TV program.

Led by NRCS, the Puerto Rico State Conservation Committee met in Mayagüez after 7 years of inactivity. In this meeting the Committee agreed to appoint members to fill Committee vacancies. Once the State Committee is totally activated, the Districts will have the necessary leadership to complete the District reorganization as required by state law.

Resource Conservation & Development (RC&D)

The NRCS Resource Conservation & Development (RC&D) program helps local groups and communities conserve, develop and wisely use their natural resources. RC&D supports improved economic activity and seeks to enhance the environment and standard of living in the three federally-authorized RC&D areas in the Caribbean.

El Atlántico RC&D received a USDA Forest Service Grant to install a Dry Hydrant Demonstration Project in the three rural communities of Cibao, Piletas and Guajataca located in the municipalities of Camuy, Lares and San Sebastián, respectively. The project’s goals were to increase the efficiency and safety of local fire stations in suppressing fire emergencies and to increase public awareness of dry hydrants within the Atlántico area’s rural communities. On February 03, 2012, El Atlántico RC&D inaugurated the Dry Hydrant project with a Field Day for representatives from federal, state, and local governments, rural communities, non-profit and non-government organizations and the general public. The Cibao Fire Department demonstrated dry hydrant use for inauguration participants. As a result of this project, the 8,656 residents of the target communities will now have a safe place to live, as well as a conservation tool to protect forests, wildlife, pastureland, cropland and properties.
Civil Rights Advisory Committee (CRAC)

NRCS Caribbean Area CRAC members represent field and state office employees from Puerto Rico and the US Virgin Islands, and serve in an advisory role to the Director. Our Mission is to provide civil rights counsel and recommendations to the Director for all clients and employees. Our Vision is “A diverse workforce that, by reflecting the face of the Caribbean Area, will provide equal opportunity and quality of service to all customers.”

There are eight Special Emphasis Programs (SEPs) that are part of the Civil Rights Advisory Committee and each has its own SEP Manager (or SEPM): African Americans; American Indians/Alaska Natives; Asian Americans/Pacific Islanders; Persons with Disabilities; Lesbian, Gay, Bisexual and Transgender (LGBT) Individuals; Hispanics; Veterans; and Women.

Fiscal year 2012 CRAC member accomplishments include:

- 56% of FY12 Farm Bill Program participants were Beginner, Limited-Resource, or Socially-Disadvantaged Farmers.
- 9% of FY 12 Farm Bill Program participants were Women.
- Participation in PR College of Engineers & Land Surveyors Job Fair with ~160 contacts & over 480 attendees.
- Celebration of March Women’s History Month with NRCS-CB female staff.
- Participation in EcoFeria National Agriculture Fair with over 30 attendees.
- Participation in Beef Cattle Breeder Association Conference with over 25 attendees.
- Participation in “Open Dialogue with Female Farmers—Women in Agriculture” with over 50 attendees.
- Participation in 12 Veterans Job Fairs to provide outreach on USDA-NRCS programs and employment opportunities for over 3,500 attendees.
- Participation in 4 Job Training workshops to conduct classes on resume building, USAJOBS website, VA E-benefits and American Jobs Act review of benefits for 246 participants including over 40 veterans.
- Conducted 6 outreach activities in the Guánica/ Río Loco watershed (3 in Yauco, 2 in Guánica, 1 in San Germán) under the Coral Reef Initiative for 150 participants.
- Participation in the UPR Extension Service “Women in Puerto Rico’s Agriculture” workshops that trained 30 women farmers & ranchers.
- San Sebastián FO conducted outreach Field Tours and demonstrations for 29 university students on conservation planning techniques, conservation practices, and instruments & technologies.
- Utuado FO staff provided outreach to under-served audiences on Farm Bill programs, NRCS practices & programs, and career opportunities at the University of Puerto Rico-Utuado’s 26th "Festival Tierra Adentro."

CRAC member, Carlos E. Morganti, discusses conservation principles with 15 Boy Scouts at Camp Guajataca in San Sebastián.

CRAC members, Carlos E. Morganti (Agronomist & CRAC Advisor) and Lydia E. Collazo (Civil Engineer & Federal Women’s and LGBT Special Emphasis Program Manager) promote NRCS careers at the PR College of Engineers & Land Surveyors Job Fair.
LEGEND: NRCS SERVICE CENTERS (PHONES)

- STATE OFFICE (787) 766-5206
- ARECIBO, PR (787) 817-2473
- CAGUAS, PR (787) 743-2743
- COROZAL, PR (787) 859-2880
- JUANA DIAZ, PR (787) 837-4450
- MAYAGUEZ, PR (787) 831-3464
- SAN SEBASTIAN, PR (787) 896-3565
- ST. CROIX, USVI (340) 692-9662
- ULOTUO, PR (787) 894-1480

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USDA-NRCS CARIBBEAN AREA

654 Munoz Rivera Ave.
Suite 604
Hato Rey, PR 00918 4123
Phone: 787 766 5206
Fax: 787 766 5987
E mail: Edwin.Almodovar@pr.usda.gov
Website: www.pr.nrcs.usda.gov