

Estate Bethlehem Retention Pond Unveiled



VI RC&D Project Manager Errol Chichester (left) describes the Estate Bethlehem Watershed Water Quality Demonstration Project to Field Day participants.

The Virgin Islands Resource Conservation & Development Council, Inc. (VI RC&D) hosted a field day December 28, 2005, to introduce over 20 St. Croix farmers, Council members, and other interested community members to the *Estate Bethlehem Watershed Water Quality Demonstration Project*. The project is located on V.I. Department of Agriculture farm land leased by Mr. Herminio Torres in Estate Lower Love.

The project is a partnership between VI RC&D, the Department of Planning & Natural Resources (DPNR), and the USDA Natural Resources Conservation Service (NRCS). The goals of the project are to demonstrate the benefits and effectiveness of innovative best management practices (BMPs) on water quality and quantity in the Estate Bethlehem watershed, to reduce the impact of agricultural nonpoint source pollution on St. Croix's coastal waters and coral habitats, and recharge the ground water aquifer.

The project area is a 19-acre farm within the 6,600-acre Bethlehem drainage basin. Prior to the pond construction, the farm was regularly flooded by storm water runoff from adjacent urban development, including a highway, streets, dirt roads, and upstream agricultural lands with high animal concentrations on small acreages. With DPNR Nonpoint Source Pollution Management grant funding and USDA-NRCS engineering assistance, the project installed:

- Temporary erosion control practices [reinforced silt fences, erosion control mats, seeding & mulching],
- A storm water runoff retention pond with principal & emergency spillways [the pond will also provide water for livestock],
- A gabion basket stream crossing for cattle to safely pass over the gut crossing the property,
- Alternative water sources for livestock [concrete water tank and trough], and
- Pasture land fencing to promote rotational grazing.



New pond, spillway, embankments and fencing on December 28, 2005.

The first phase of the project is now completed. In the second phase, additional pasture and livestock exclusion fencing, as well as pipelines and pumps to pump water from the pond to the holding tank, and then to existing and new watering troughs, will be installed with USDA-NRCS Environmental Quality Incentives Program (EQIP) funds. "I applaud RC&D and its efforts to deal with nonpoint source pollution," V.I. Department of Agriculture Commissioner Dr. Lawrence Lewis stated at the Field Day. "This project will do a lot for farmers."

For more information about this or other VI RC&D projects, contact the VI RC&D office at 340-692-9632 x5 or vircd@usvircd.org, or visit www.usvircd.org.

DPNR Sponsors NPS Pollution Conservation Schools

DPNR-DEP has developed a pilot program for youth to study environmental and nonpoint source pollution (NPS) issues. Through its "Youth Putting a LID (Low Impact Development) on Nonpoint Source Pollution" program, DPNR intends to increase the level of environmental awareness among public schools and the community at large. The program encourages schools to manage the resources on their grounds and surrounding areas to mitigate NPS pollution through Low Impact Development.

Twelve (12) local schools—John Woodson Jr. High, St. Croix Vocational Complex, Evelyn Williams Elementary, Arthur Richards Jr. High, St. Croix Central High and Juanita Gardine Elementary on St. Croix; and Adelita Cancryn Jr. High, Jane E. Tuitt Elementary, Eudora Kean High, Bertha Boschulte Jr. High, Joseph Gomez Elementary and Evelyn Marcelli Elementary on St. Thomas – will be awarded \$1,000 to \$4,000 to develop programs that include:

- Management of school grounds & surrounding areas,
- Environmental curriculum usage, and
- Community education.

Schools have one year (12 months from receipt of funds) to develop and implement their programs. The programs should be action-based, require participation, and relate to nonpoint source pollution. They should also help students to be environmentally active and to learn environmentally sustainable practices.

For more information on this and other DPNR-DEP programs, contact Diane Capehart at 340-773-1082 or capehart.diane@vidpnr-dep.org.

Table of Contents

Estate Bethlehem Retention Pond Unveiled	1
DPNR Sponsors NPS Pollution Conservation Schools	1
9 th VI NPS Conference a Success!	2
VI RC&D to Host Grant Writing Training	2
DPNR-CZM Holds Student Oceans Conference	2
USDA-NRCS to Sponsor Area Wide Conservation Planning Training	3
EPA Seeks Environmental Quality Awards Nominations	3
Web Resources	3
Available Grants	3
Upcoming Events	4

9th VI Nonpoint Source Conference a Success!

Over 150 V.I. government agency personnel, researchers, architects, engineers, farmers, community group members, students and residents of the Virgin Islands, Puerto Rico, the wider Caribbean, and the U.S. participated in the 9th V.I. Nonpoint Source Pollution Conference, held November 28-30, 2005, at the Westin St. John Resort & Villas.

Conference participants attended or viewed over 50 oral and poster presentations and exhibits relating to nonpoint source (NPS) pollution control in tropical climates. Presentation topics covered a wide range of issues including low impact development and best management practices, nonpoint source education and outreach, coastal and watershed management, land use and island planning.

DPNR Commissioner Dean C. Plaskett, Esq., welcomed attendees to the conference and provided an overview of DPNR's efforts to address NPS pollution in the territory. Senator Craig Barshinger pointed out in his opening remarks that many people have difficulty understanding NPS pollution. While overflowing sewage treatment plants are visible point sources of pollution; leaking septic systems and sediment runoff during rainstorms are less visible nonpoint pollution problems. "It's like creeping or insidious pollution," he said.

Dr. Henry Smith, Vice Provost for Research & Public Service at the University of the Virgin Islands (UVI), pointed out that reaching those who pollute is a major problem. He called on conference participants to work hard to collaborate with polluters.

Keynote speaker Ginger Garrison, a coral reef ecologist with the U.S. Geological Survey, delivered a riveting presentation on the impacts of Sahara dust on coral reefs. "2005 was the worst ever for Sahara dust," she said, "and the Virgin Islands National Park is the dustiest in the national park system."

According to Dr. Garrison, on July 26, 2005, Sahara dust extended from West Africa across the Atlantic to Florida and the Caribbean. Dr. Garrison and other scientists are studying what arrives with this dust, which routinely clouds the skies in the USVI, and the link between the dust and coral diseases. She said that pathogens that cause sea fan disease were found on St. John during dust events. Additionally, toxicology studies of dust collected in the Virgin Islands show that Saharan dust is highly toxic to lab rats.

Dr. Garrison also reported that coastal water turbidity tests found high sediment levels in Coral Bay, Cruz Bay, Fish Bay, and Haulover Bay. Haulover Bay had the highest sediment levels, from both dust and NPS runoff.

The conference also featured a youth participation session on Day 3, capped off with the presentation of the student poster design contest prizes:

- First place [\$100]: **Rose Parilla**, 6th grade, The Manor School [St. Croix]
- Second Place [\$75]: **Yoriena Rose**, 6th grade, Peace Corps School [St. Thomas];
- Third Place [\$50]: **Austin Andre**, 5th grade, Charles Emanuel School [St. Croix].

The first place design was used for the conference agenda cover, mug and tote bag.

The conference was sponsored by DPNR, UVI, VI RC&D, the V.I. Nonpoint Source Pollution Control Committee; U.S. EPA, and USDA-NRCS. For more information on the conference or nonpoint source pollution issues in the territory, contact DPNR-DEP at 340-773-1082. Conference presentations will soon be available on CD from DPNR and at www.usvircd.org/NPSconf.html.

VI RC&D to Host Grant Writing Training

The Virgin Islands Resource Conservation & Development Council, Inc. (VI RC&D), in partnership with the UVI Cooperative Extension Service (CES), invites the public to register to attend the **2006 Grant Writing for Professionals Training**. The training will be conducted by Dr. Don Udell, Resource Development Specialist and President of Udell Consulting, Inc. Dr. Udell is a nationally-recognized trainer who has been providing this service to the Territory for the past 13 years.

Government agencies, nonprofits, teachers, churches, community groups, youth groups, and any other organization seeking funding assistance are invited to send representatives to participate in this valuable and informative hands-on training.

The training will be held on St. Thomas in the UVI Sports & Fitness Center Training Room March 6-10, 2006, and in Room 133 at the UVI Research & Extension Center March 13-17, 2006. Attendees are encouraged to attend all five days to get the full benefit of Dr. Udell's expertise. The 5-day training encompasses three sessions: Introduction to Grant Writing [G.W. I]; Pre-Proposal Preparation, Organization, Research & Structure [G.W. II]; and Proposal Design and Development [G.W. III].

However, those with time constraints may wish to participate in only one session, either Grant Writing I/II or Grant Writing III.

Grant Writing for Professionals Training Cost

	Payment Before Feb. 21, 2006	Payment After Feb. 21, 2006
5-Day Registration	\$350.00*	\$400.00*
3-Day Registration [G.W. I&II]	\$250.00*	\$300.00*
2-Day Registration [G.W. III]	\$250.00*	\$300.00*

VI RC&D members & UVI-CES staff receive a \$50.00 discount!

Registration fees include instruction materials, lunches and refreshment breaks. Space is limited so pre-registration is required. For early registration or for details, contact the VI RC&D office at 340-692-9632 x.5 or vircd@usvircd.org, or visit www.usvircd.org.

DPNR-CZM Holds Student Oceans Conference

The DPNR Coastal Zone Management Division (CZM) held its Second Annual Coastal Zone Management Student Oceans Conference "*Caribbean Coastal Threats and Protections, Our Oceans Here Today Gone Tomorrow*" on December 6, 2005. Student attendees praised the conference as a tremendous success. The Conference provided a unique and exciting opportunity for 36 students and 15 teachers, representing each senior high school and college campus in the territory, to participate, interact with, and learn first hand from the professionals that they themselves might someday become.

The conference focused on coastal zone problems and possible solutions. Presentations included UVI-VIMAS' "*Pollution Impacts on the Ocean Environment*," DPNR Energy Office's "*New Energy Concepts Relating to the Ocean*," DPNR-CZM's "*Legal Issues*," and DPNR-DEP's "*The Clean Marina Program*." The presentations encouraged the students to empower themselves with the tools to foster marine conservation, and emphasized protection and preservation of coastal resources in the Virgin Islands and the Caribbean.

Students also took part in an afternoon breakout session with their peers to prepare group presentations on one of the topics presented in the morning. Their presentations were creative and included a commercial to stop pollution. Students were also given the opportunity

to network with other youth interested in marine science and conservation. DPNR's goal is for the students to draw inspiration from what they learned and put this information into practice as they become new leaders in the community and help to manage our coastal resources for the future.

For more information on DPNR-CZM's Oceans Youth Conference, contact Lillian Moolenaar at lillian.moolenaar@viczmp.com or 340-774-3320.

USDA-NRCS to Sponsor Area Wide Conservation Planning Training

The USDA Natural Resources Conservation Service (NRCS), in partnership with VI RC&D, is sponsoring an *Area Wide Conservation Planning Training Workshop* to be held March 28-30, 2006, on St. Croix in Room 133 of the UVI Research & Extension Center. USDA-NRCS is sponsoring a similar workshop in Puerto Rico.

NRCS is offering this training in support of the Virgin Islands and Puerto Rico Coral Reef Task Force Land-Based Sources of Pollution Local Action Strategies. The training is designed to help build technical capacity in the Caribbean to improve watershed planning processes. The training will be conducted by NRCS National Employee Development Center (NEDC) staff, and will feature a hands-on approach to watershed planning through the use of local case studies. Registration fee is \$25, which includes course materials and refreshment breaks.

The training is geared towards government agency employees, researchers, and others involved with watershed planning in the territory. Space is limited to 35 attendees, so registration is required by March 20, 2006. For details or to register, contact the VI RC&D office at 340-692-9632 x5 or vircd@usvircd.org. For details on the Puerto Rico training, contact Jose Castro, USDA-NRCS, at 787-766-6206 x226 or jose.castro@pr.usda.gov. For information on the Coral Reef Task Force and Local Action Strategies, contact Bill Rohring, DPNR-CZM, at 340-774-3320 or bill.rohring@viczmp.com, or visit www.coralreef.gov.

EPA Seeks Environmental Quality Award Nominations

U.S. EPA Region 2 is now accepting nominations for its 2006 Environmental Quality Awards. The awards are given in the following categories:

- Individual Citizen,
- Nonprofit Organization, Environmental or Community Group,
- Environmental Education,
- Business & Industry,
- Federal, State, Local or Tribal Agency or Government, and
- Press & Media

The nomination deadline is March 6, 2006. For details about nomination criteria and the process, please contact Chris Sebastian, U.S. EPA Region 2 Public Affairs Division, at 212-637-3597 or sebastian.chris@epa.gov, or Jim Casey, U.S. EPA Caribbean Environmental Protection Division V.I. Field Office, at 340-714-2333 or casey.jim@epa.gov.

Web Resources



EPA's Nonpoint Source Branch is seeking comment on its draft Watershed Planning Handbook, "*Handbook for Developing Watershed Plans to Restore and Protect our Waters.*" Visit www.epa.gov/owow/nps/watershed_handbook to download the handbook.

EPA has released "*National Management Measures to Control Nonpoint Source Pollution from Urban Areas.*" The guidance will help local governments and others protect water resources from polluted runoff that can result from everyday activities and urban development. Visit www.epa.gov/owow/nps/urbanmm to download the document.

The International City/County Management Association, the Trust for Public Land, and U.S. EPA hosted the "*Protecting Water Resources through Land Conservation: Funding Options for Local Governments*" webcast in June 2005. The webcast provided context for the role of conservation finance in land conservation and water protection, described critical components for creating a successful funding effort, and showcased local government success stories. For a free multimedia CD-ROM of the webcast, visit www.lgean.org/html/whatsnew.cfm?id=961.

The National Academy of Engineering recently published *Assessing and Managing the Ecological Impacts of Paved Roads*. The document describes how all phases of road development impact physical and chemical soil conditions, water flow, and air and water quality, as well as plants and animals. To purchase the handbook, visit www.nap.edu/catalog/11535.html.

NACD is offering free copies of a new forestry guide published by the National Association of State Foresters. The handbook, *A Stewardship Handbook for Family Forest Owners: A Guide for Planning, Managing and Protecting Your Woods, Your Investment, Your Environment*, is a simple, generic guide to making a difference on the ground. To

order the handbook, contact 202-547-6223 or Laura-McNichol@nacdnet.org.



Available Grants

The *2006 Flood Mitigation Assistance Program* provides funding for state allocations for planning, project and technical assistance grants, and for administrative costs to support the FMA program. Visit www.fema.gov/fima/fma.shtm for details.

Grants for Aquatic Conservation Projects. The PADI Project AWARE Foundation awards funds for the conservation and preservation of the aquatic environment throughout the world. The Foundation will consider funding projects that focus on: coral reef conservation, shark protection, aquatic ecotourism, aquatic education, and direct conservation activities in both marine and fresh water for up to \$10,000. Projects that incorporate public education, grassroots involvement, and research that leads to conservation are examples what the Foundation will fund. Application dead-lines are March 15, June 15, September 15, and December 15, annually. For details, visit www.projectaware.org.

The National Fish and Wildlife Foundation is accepting proposals to the *Coral Reef Conservation Fund*. Grant proposals should build public-private partnerships to reduce and prevent degradation of coral reefs and associated reef habitats (seagrass beds, mangroves, etc.). For details, visit www.nfwf.org/programs/coral_funding.cfm.

The NFWF Five-Star Restoration Matching Grants Program provides grants on a competitive basis to support community-based wetland, riparian, and coastal habitat restoration projects. Supported projects should build diverse partnerships and foster local natural resource stewardship through education, outreach and training activities. Proposals are due March 10, 2006. For details, visit www.nfwf.org/programs/5star-rfp.cfm.

The National Association of Counties, NFWF, and NOAA's Community-Based Restoration Program have announced the creation of a new grant program targeting marine habitat restoration in coastal counties. The *Coastal Counties Restoration Initiative* will provide financial assistance on a competitive basis to innovative, high-quality, county-led or -supported projects that support wetland, riparian, and coastal habitat restoration. Proposals are due February 24, 2006. Visit www.nfwf.org/programs/ccri.cfm for details.

Mantis has expanded its 2006 grants in support of charitable and educational *garden programs* that enhance the quality of life in local communities. Proposals are due March 21, 2006. Visit www.kidsgardening.com/grants/mantis-criteria.asp for details.

USDA-NRCS has up to \$20 million available for **Conservation Innovation Grants (CIG)**. This nationwide competition promotes the development and adoption of innovative conservation technologies and approaches in agriculture. Proposals are due March 20, 2006. For details, visit www.nrcs.usda.gov/programs/cig/. USDA-NRCS also has up to \$4 million available nationwide for the **Cooperative Conservation Partnership Initiative (CCPI)**. This competition fosters the development of conservation partnerships to focus technical and financial resources on conservation priorities in watersheds of special significance. Proposals are due March 7, 2006. For details, visit www.nrcs.usda.gov/programs/ccpi/.

U. S. Fish and Wildlife Service Coastal Program Grant. The Coastal Program provides financial assistance on a competitive basis to individuals, organizations, and agencies interested in restoring wildlife habitat. For details, visit www.fws.gov/coastal/CoastalProgram/pdfs/grantgov06Coastal.pdf.

VI NPS Update is a quarterly newsletter published by the Virgin Islands Resource Conservation & Development Council, Inc. for the University of the Virgin Islands Cooperative Extension Service, Kwame Garcia, State Director, and produced by the Virgin Islands Nonpoint Source Pollution Committee to inform the public about projects funded by U.S. EPA Nonpoint Source Pollution Management (§319) grants and other NPS pollution control/prevention projects in the territory, and to provide information and material regarding the control/prevention of NPS pollution. No endorsement of products or firms is intended, nor is criticism implied of those not mentioned. Issued by the Virgin Islands Cooperative Extension Service and the U.S. Department of Agriculture in furtherance of the acts of May 8 and June 30, 1914. Extension programs and policies are consistent with federal and state laws and regulations on non-discrimination regarding race, color, national origin, religion, gender, age, disability or gender preference. *Funding for VI NPS Update provided by the U.S. Environmental Protection Agency, Nonpoint Source Pollution Management Program through the Virgin Islands Department of Planning and Natural Resources, Dean C. Plaskett, Esq., Commissioner.*

Upcoming Events

Local

February 17-20, 2006. **St. Croix Agri-Fest**, Estate Lower Love, St. Croix. Contact 340-778-0998 for details.

March 6-10, 2006. **Grant Writing for Professionals Training**, UVI Sports & Fitness Center, St. Thomas. Contact 340-692-9632 x5 or vircd@usvircd.org for details.

March 13-17, 2006. **Grant Writing for Professionals Training**, UVI-REC Room 133, St. Croix. Contact 340-692-9632 x5 or vircd@usvircd.org for details.

March 28-30, 2006. **Area Wide Conservation Planning Training**, UVI-REC Room 133, St. Croix. For details, contact 340-692-9632 x5 or vircd@usvircd.org.

National

February 20-24, 2006. **International Erosion Control Association Conference: Environmental Connection 2006**, Long Beach, CA. For details, visit www.ieca.org.

April 5-7, 2006. **Reinventing Older Communities**, Philadelphia, PA. For details, visit www.philadelphiafed.org/cca/conferences.html.

April 24-27, 2006. **9th National Mitigation & Conservation Banking Conference**, Portland, O R. For details, visit www.mitigationbankingconference.com.

May 16-17, 2006. **Restoration 2006 Conference**, New Orleans, LA. For details, visit www.restoration2006.org.

July 24 - 27, 2006. **StormCon 06**, Denver, CO. For details, visit www.stormcon.com.

Nonpoint source (NPS) pollution results from rain water flowing over and through the ground, picking up pollutants and depositing them into guts, salt ponds, beaches, coastal waters, and ground water.

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