



22nd Annual Environment Virginia Symposium
5 – 7 April 2011
Marshall Hall, Center for Leadership and Ethics
Virginia Military Institute - Lexington, Virginia
www.vmi.edu/environmentva

Sustainable Solutions for Uncertain Times:
Partnering for Economic and Environmental Success

All sessions will take place in Marshall Hall, Center for Leadership and Ethics, unless otherwise noted.

Tuesday, 5 April

- 9:30 am – 7:00 pm **Registration** (*Gallery*)
- 8:00 – 11:30 am **Exhibitor set-up** (*Hall of Valor*)
- 11:00 am – 12:00 pm *Meeting: Virginia Environmental Excellence Program (Shenandoah)*
- 11:30 am – 7:30 pm **Visit Exhibit Booths** (*Hall of Valor*)
- 11:30 am – 12:45 pm **Buffet Lunch** (*Hall of Valor*)
- 1:00 – 1:10 pm **Welcoming Ceremonies and Remarks** (*Gillis Theater*)
CAPT Susan J. Rabern, USN (Retired), Director, VMI Center for Leadership and Ethics
- 1:10 – 2:00 pm **Plenary Session** (*Gillis Theater*)
Remarks - The Honorable Doug Domenech, Virginia Secretary of Natural Resources
“Global Warming: Manmade Disaster...or Natural Cycle”
Roy Spencer, Ph. D., Principal Research Scientist at the University of Alabama, Huntsville
(*Special Guest of Secretary Domenech*)
- 2:15 – 5:15 pm **Concurrent Sessions A-C** (*Various locations on Post*)
- **DEQ Regulatory Updates** (*details p. four*)
 - **Collaborative Environmental Leadership** (*details p. five*)
 - **Energy: Biomass Energy and Resource Extraction** (*details p. six*)
 - **Stormwater** (*details p. seven*)
- 5:30 – 7:30 pm **Reception - Visit Exhibit Booths** (*Hall of Valor*)
6:30 – 8:00 pm *VIP Reception (by invitation only)*

Wednesday, 6 April

- 7:30 am – 5:00 pm Registration (*Gallery*)
- 7:30 am – 8:45 am Buffet Breakfast (*Hall of Valor*)
- 7:30 – 10:30 am Coffee Bar (*Hall of Valor*)
- 7:30 am – 6:00 pm Visit Exhibit Booths (*Hall of Valor*)
- 8:00 – 8:45 am *Meeting: Virginia Regional Environmental Management System (V-REMS) (Allegheny)*
- 9:00 - 10:00 am **Plenary Session** (*Gillis Theater*)

Chesapeake Bay TMDL and the Virginia Watershed Implementation Plan

Host: COL Andrew W. Backus, Commander, Norfolk District, US Army

Corps of Engineers

- Jeffrey Corbin, Senior Advisor to the Administrator for Chesapeake Bay and Anacostia River
- Anthony Moore, Assistant Secretary of Natural Resources for the Chesapeake Bay Restoration, Commonwealth of Virginia

10:15 – 11:30 am

Concurrent Session D (*details p. three*)

- **Chesapeake Bay TMDL and Virginia's WIP**
- **Emerging Issues and Programs**
- **Climate Change**
- **Getting to Zero Waste**
- **Energy: Efficiency & Innovation**
- **Conservation of Natural & Historic Resources**
- **Restoring Ecosystems**

11:45 – 1:00 pm

Concurrent Session E (*details p. three*)

11:45 – 12:45 pm

Lunch One - Visit Exhibit Booths

1:00 – 2:15 pm

Concurrent Session F (*details p. three*)

1:00 – 2:00 pm

Lunch Two – Visit Exhibit Booths

2:30 – 3:30 pm

Keynote Speaker (*Gillis Theater*)

From Reading to Writing the Genetic Code

Dr. J. Craig Venter, Biologist

Introduced by Dr. Pieter deHart, Virginia Military Institute

3:45 – 5:00 pm

Concurrent Session G (*details p. three*)

5:30 – 8:15 pm

Environment Virginia Banquet (*Hall of Valor*) (*extra registration*)

Host: David Johnson, Director, VA Department of Conservation & Recreation

Celebration of the 75th Anniversary of the Virginia State Parks

2011 Erchul Award & Governor's Environmental Excellence Awards

Thursday, 7 April

7:30 – 8:45 am

Buffet Breakfast (*Hall of Valor*)

7:30 – 10:30 am

Coffee Bar (*Balcony, Hall of Valor*)

7:30 am – 1:30 pm

Visit Exhibit Booths (*Hall of Valor*)

9:00 – 10:15 am

Concurrent Session H (*details p. three*)

10:30 – 11:45 am

Concurrent Session I (*details p. three*)

12:00 – 1:15 pm

Luncheon Session (*Hall of Valor*) (*extra registration*)

Industrial Sustainability Initiatives

Mr. Blair Wimbush, VP, Real Estate and Corporate Sustainability Officer, Norfolk Southern

Introduction by David K. Paylor, Director, Virginia Department of Environmental Quality

12:30 – 3:30 pm

ICLEI Meeting: Virginia State Climate Protection Network (*Preston Library, Turman Room*)

1:15 – 3:00 pm

Social Media 101 (*details p. 19*) (*Shenandoah Room*)

Track	Wednesday Session D 10:15-11:30AM	Wednesday Session E 11:45-1PM	Wednesday Session F 1:00-2:15PM	Wednesday Session G 3:45-5:00PM	Thursday Session H 9:00-10:15AM	Thursday Session I 10:30-11:45AM
Bay TMDL and Virginia's WIP <i>Gillis Theater</i> (see p. 8)	In-depth: TMDL and WIP Implementation	WIP Phase II	<i>Lunch II</i> 1:00-2:00	Agriculture: Moving Forward	Wastewater Management in the Bay Watershed	Expansion of the Nutrient Credit Exchange
Emerging Issues & Opportunities <i>Turman Room, Preston Library</i> (see p. 10)	Rainwater Harvesting	<i>Lunch I</i> 11:45-12:45	Wastewater Innovations	Planning & Stormwater	Precision Ag	Developing PCB TMDLs
Climate Change <i>Activities Room, Moody Hall</i> (see p. 12)	State of the Science	GHG Reporting	<i>Lunch II</i> 1:00-2:00	Complying with the Boiler MACT	Coastal Hazard Mitigation	Sustainable Communities: Performance-based Framework
Getting to Zero Waste <i>Pogue Auditorium, Marshall Museum</i> (see p. 14)	Waste-to-Energy	Beneficial Waste Reuse	<i>Lunch II</i> 1:00-2:00	Composting	Zero Waste Facilities	Reducing Waste in Road Construction
Energy: Efficiency & Innovation <i>Boardroom, Moody Hall</i> (see p. 16)	Energy Innovations	Saving Water & Energy	<i>Lunch II</i> 1:00-2:00	Innovations: Lumenhaus & X-Prize Winner	Green Virginia Buildings	No Session
Conservation of Natural & Historic Resources <i>Shenandoah Room, Marshall Hall</i> (see p. 17)	The Future of Land Conservation: State & Federal Perspective	<i>Lunch I</i> 11:45-12:45	Innovations in Private Sector Land Conservation	Ft. Monroe	Managing Deer in Virginia	Case studies of Urban Deer Management
Restoring Ecosystems <i>Lounge, Moody Hall</i> (see p. 18)	Sustainable Fisheries in the Bay	<i>Lunch I</i> 11:45-12:45	Emerging Challenges in Bay Fisheries	Living Shorelines	In-Lieu Fee Mitigation	Mitigation Banking Case Studies

DEQ Regulatory Updates

Tuesday, 5 April 2011

2:15 – 5:15 pm

Gillis Theater, Marshall Hall

Host – Rick Weeks, Deputy Director, Virginia Department of Environmental Quality

Update on the Division of Land Protection & Revitalization

Jeffery Steers, Division Director

- Issues to include: Coal ash, Flexibility in DEQ's land cleanup programs including Corrective Action, Implementing Virginia's new Uniform Environmental Covenant Act, and Streamlining solid waste permitting and compliance

Update from the Air Division

Michael Dowd, Division Director

- Topics to include: Utility MACT (if proposed), Transport Rule (if promulgated), Implementation of NO₂ and SO₂ standard (evolving), GHG permitting, Legislative update, Biomass and small power generating general permits, New PM_{2.5} standard (if proposed)

Update from the Water Division

Ellen Gilinsky, Division Director

- Topics to include: groundwater permitting changes, water withdrawal permitting changes, pesticide general permit, water reuse, legislative update, and Biosolids permitting

Update on Renewable Energy

Carol Wampler, Renewable Energy Policy Manager

- Topics to include: Renewable Energy Permits by Rule

Collaborative Environmental Outreach and Education

Tuesday, 5 April 2011

2:15 – 5:15 pm

Pogue Auditorium, Marshall Museum

Leaders in environmental education and outreach will provide techniques for building successful collaborative programs. Fundamental to this will be innovative strategies and techniques for developing evaluation and metrics as you develop and adapt the management of your program. Two Virginia case studies will highlight many of these tools. The session will conclude with vital guidance for funding. Following a brief overview of the purpose for their funding, representatives of major environmental funders in Virginia will answer questions and join a discussion with the host, other presenters, and attendees.

Host – Ann Regn, Virginia Department of Environmental Quality

Building Collaborative Partnerships for Success in Environmental Education

Kathy McGlaufflin, Senior Vice President, Project Learning Tree

Metrics and Evaluation: How do you know you are making a difference?

Marc J. Stern, Ph. D., Assistant Professor, Department of Forest Resources and Environmental Conservation, Virginia Tech

Success stories from across the Commonwealth

- “*Southern Virginia Rivers Initiative*,” Katherine Mull, Dan River Basin
- “*The Long and Winding Road to Habitat Protection*,” Laura McKay, Coastal Program, Virginia Department of Environmental Quality

Views from Funders

Andrew W. Larkin, Virginia Outreach Coordinator, NOAA Chesapeake Bay Office

Gerald P. McCarthy, Executive Director, Virginia Environmental Endowment

Energy
Tuesday, 5 April 2011
2:15 – 5:15 pm
Activities Room, Moody Hall

2:15 – 3:55 pm

Biomass Energy: Scale and Sustainability

Moderator: Al Weed, Public Policy Virginia

This session will explore the sustainability of woody biomass energy in Virginia. The discussion will consider how large scale plants - 40MW and larger - evaluate feedstock availability and ensure continuous, affordable supply. In contrast, there will be a presentation on how small scale biomass facilities -20 MW and smaller -- are scaled to ensure long term supply. These presentations will be balanced by a look at sustainability from the perspective of the paper industry – a major Virginia employer. Presenters will also discuss the future of energy crops such as switch grass and short rotation woody plants in supplying a portion of Virginia's future power needs. This session will be of interest to those concerned about the long term impact on our forests and watersheds of a vigorous bio-power industry.

Presenters:

- Large Scale: Emil Avrum, Dominion Resources, Richmond, VA
- Small Scale: Stephen Langseth, Langseth Engineering, Lynchburg, VA
- Biomass Energy is Upon Us: Impact on Paper Companies: Jim DeMoss, Manager, Forest Stewardship and Strategy, MeadWestvaco

4:00 – 5:00 pm

Development of Marcellus Shale gas and Environmental Concerns

Moderator: CAPT John “Ned” Riester Jr., USN (Retired), Professor and Chair, Department of Civil and Environmental Engineering, Virginia Military Institute

Presentation:

Daniel J. Soeder, Physical Scientist, U.S. Department of Energy, National Energy Technology Laboratory

UPDATE: Wednesday, 30 March

Due to demands in the General Assembly Session, Del. Ware will not be able to present: “Update on Consideration of Uranium Mining in Virginia”

Stormwater
Tuesday, 5 April 2011
2:15 – 5:15 pm
Turman Room, Preston Library

This session is geared to environmental professionals in construction, industry, local government, environmental consulting, and nonprofit environmental organizations who work in stormwater management.

- 2:15 – 2:30 pm **Opening Remarks**
David Johnson, Director, Virginia Department of Conservation and Recreation
- 2:35 – 2:55 pm **Update from Virginia Stormwater Management Program**
Doug Fritz, Virginia Department of Conservation & Recreation
- 2:55 – 3:10 pm Questions
- 3:25 – 4:00 pm **Options for Establishing a Stormwater Utility**
Moderator: Joe Lerch, Virginia Municipal League
Presenters:
 - Bob Stiedel, City of Richmond
 - Randy Bartlett, Fairfax County
- 4:00 – 4:10 pm Questions
- 4:10 – 4:55 pm **LID Methodology: Implementation, Maintenance, and Operations**
Moderator: Chris French, Alliance for the Chesapeake Bay
 - Monitoring and Maintenance Responsibilities; Doug Beisch, Williamsburg Environmental Group, Inc.
 - Low Impact Development (LID) and Section 404 Clean Water Act Permitting: Hal Wiggins, U.S. Army Corps of Engineers, CENAO-REG, Fredericksburg Field Office
- 4:55 – 5:15 Questions

Wednesday and Thursday Tracks

Chesapeake Bay TMDL and Virginia WIP: Track 1

Wednesday, 6 April 2011
Gillis Theater, Marshall Hall

Session D – 10:15-11:30 AM: In-depth TMDL and WIP Implementation

Moderator: Ann Jennings, Virginia Executive Director, Chesapeake Bay Foundation

Presenters:

- Richard Batiuk, Associate Director for Science, U.S. Environmental Protection Agency, Chesapeake Bay Program Office
- Ellen Gilinsky, VA Dept. of Environmental Quality
- Jack Frye, Director, Division of Soil and Water Conservation, VA Dept. of Conservation & Recreation

Session E – 11:45-1:00 PM: Watershed Implementation Plans Phase II

Moderator: Joan Salvati, VA Dept. of Conservation & Recreation

Presenters:

- Leslie Middleton, Rivanna River Basin Commission
- Jenny Tribo, Hampton Roads Planning District Commission

Session F – 1:00-2:00 PM: Lunch

Session G – 3:45-5:00 PM: Agriculture: Moving forward in a TMDL world

Panel members will explain their work in agriculture related to the implementation of the Bay TMDL and then respond to a series of questions posed by the Commissioner. Topics may include: resource management plans, tracking voluntary best management practices for credit in the Chesapeake Bay Model and funding outlooks for the next couple of fiscal years for conservation programs.

Moderator: Matt Lohr, Commissioner, VA Dept. of Agriculture & Consumer Services

Panel:

- Mark Meador, District Program Manager, VA Dept. of Conservation & Recreation
- Wade Biddix, Assistant State Conservationist, Natural Resources Conservation Service
- Darrell Marshall, Agricultural Stewardship Coordinator, VA Dept. of Agriculture & Consumer Services
- Ann Jennings, Virginia Director, Chesapeake Bay Foundation
- Wilmer Stoneman, Associate Director of Governmental Relations, Virginia Farm Bureau Federation

Thursday, 7 April 2011

Session H – 9:00-10:15 AM: The Future of Wastewater Management in the Chesapeake Bay Watershed

The TMDL establishes high expectations for reductions from the wastewater sector. This session will examine the challenges and opportunities facing municipalities and manufacturers in the framework of the TMDL and examine potential strategies.

Moderator: Mark A. Haley, Director, Hopewell Regional Wastewater Treatment Facility

Presenters:

- Municipality: Ted Henifin, General Manager, Hampton Roads Sanitation District
- Manufacturer: T. Mayes Starke, Senior Technical Consultant in the Corporate Environmental Affairs, Georgia-Pacific, LLC

Session I – 10:30-11:45 AM: Issues Related to an Expansion of the Nutrient Credit Exchange

Virginia's Watershed Implementation Plan proposed a broad expansion of the Nutrient Credit Exchange Program. This session will focus on some of the key issues regarding an expansion of the Nutrient Credit Exchange and how trading and offsets factor into the implementation of the Chesapeake Bay TMDL.

Moderator: Ellen Gilinsky, Ph. D., Water Division Director, VA Dept. of Environmental Quality

Presenters:

- Municipal Wastewater and Stormwater: Chris Pomeroy, AquaLaw PLC
- Land Development and Nutrient Banking: Shannon Varner, Troutman Sanders
- Roy Covington, Director of Utilities, Chesterfield County

Emerging Issues and Opportunities: Track 2

Wednesday, 6 April 2011
Turman Room, Preston Library

Session D – 10:15-11:30 AM: Rainwater Harvesting in Virginia Goes Public

Learn about innovations in rainwater harvesting, public-private partnerships, and new rainwater harvesting technologies to accelerate their adoption. Attendees will learn about ways to encourage the reuse of harvested rainwater through case studies of actual projects. Discussion will include the challenges of working within local guidelines and requirements, as well as the multiple benefits of using harvested rainwater (stormwater management, water conservation, cooling). If available, the new Virginia Guidelines on Rainwater Harvesting from VDH will be presented.

Moderator: Alyson Sappington, Thomas Jefferson Soil and Water Conservation District (TJSWCD)

Presentations:

- **Municipal Rainwater Harvesting in Charlottesville: How One Virginia Locality is Integrating Harvested Rainwater into its Operations:** Dan Frisbee, City of Charlottesville
The City of Charlottesville is embracing rainwater harvesting in order to conserve potable water, reduce stormwater impacts to our waterways, and demonstrate environmental stewardship in the community. Learn about municipal projects to utilize harvested rainwater for a range of uses, including bus washing, fire suppression training, and much more.
- **Rainwater Harvesting to Reduce Runoff: From Poultry Barns to Laundromats:** Laurel Woodworth, Stormwater and Watershed Planner, Center for Watershed Protection
The Center for Watershed Protection and its project partners are working to test and promote the runoff and pollutant reduction benefits of rainwater harvesting in central Virginia by supporting an agricultural (Prince William poultry farm) and an urban application (commercial laundromat in Albemarle County). Learn about these systems and how they will help answer questions about the stormwater reduction benefits of capturing rooftop runoff and the safety of rainwater use for livestock.
- **Virginia Guidelines:** J. Wesley Kleene, PhD, PE, Director, Office of Drinking Water, Virginia Department of Health

Session E – 11:45-12:45 PM: Lunch

Session F – 1:00-2:15 PM: Wastewater Innovations

Moderator: MAJ Tim Moore II, PhD, PE, VMI

Presenters:

- “Fix the soil, save the Bay”: M. Noel Lyons, President, McGill Environmental Systems
- “Biochar: A Renewable Material for Removing Contaminants from Water”: Sandeep Kumar, Ph.D., Assistant Professor, ODU

Session G – 3:45-5:00 PM: More than the Parts: Integrating Stormwater, Urban Design, and Growth Policies

How can communities set themselves up to meet the (as yet unfinalized) new stormwater regulations, encourage development that is economically and environmentally sustainable, and address the backlog of infrastructure needs?

Moderator: Sara Hollberg, Planner, Valley Conservation Council

Presenters:

- “Stormwater in the context of growth policies”: Sara Hollberg, Valley Conservation Council
- “Stormwater utility program in a small city”: George Staber, City of Staunton
- “Tools in the toolbox for future programs”: Doug Beisch, Williamsburg Environmental Group

Thursday, 7 April 2011

Session H – 9:00-10:15 AM: Precision Agriculture

This session will discuss the adaption of technology in the recent years to precision management actions and precision application equipment use. It will include scientific findings, what is useful or not useful, as well as how these technologies are being applied by producers today.

Moderators: Kristen Hughes Evans, Chesapeake Bay Foundation and Tim Sexton, VA Dept. of Conservation and Recreation

Presenters:

- Alec Lipscomb, VA Dept. of Conservation & Recreation
- Wade Thomason, Virginia Tech
- Anthony Beery, Beery Farms

Session I – 10:30-11:45 AM: Addressing PCBs: Regulatory Approaches to Developing TMDLs

This session will discuss the how PCBs and other legacy contaminants are being addressed at the Federal, State, and Local level. It will include updates of state and federal regulations, implications to TMDL requirements, and information on what other states and localities are doing.

Presenters:

- “Federal Regulations, Method 1668, and What Other States Are Doing” David Blye, Environmental Standards, Inc.
- “A State Perspective: Virginia Regulations and DEQ Efforts” Dick Sedgley, AquaLaw

Climate Change: Track 3

Wednesday, 6 April 2011
Activities Room, Moody Hall

Session D – 10:15-11:30 AM: State of the Science

Moderator: Pieter deHart, Assistant Professor of Biology, VMI

Presenters:

- Roger Mann, Ph. D., Director of Research, Virginia Institute of Marine Science, College of William and Mary
- Paula Jasinski, President, Chesapeake Environmental Communications

Session E – 11:45-1:00 PM: GHG Reporting: This session will provide an overview of existing state and new Federal mandatory GHG reporting programs as well as show what various companies are doing to respond to the challenge of quickly developing inventories and reporting quality data. Other topics to be covered include: the interplay between mandatory reporting and voluntary disclosure on websites and in surveys/reports like the Carbon Disclosure Project, the benefits/costs of having a detailed carbon inventory, and the interplay between GHG reporting and GHG regulation.

Moderator: Mike Dowd, Director DEQ Air Division

Presenters:

- Lisa C. Moerner, Dominion Virginia Power
- Aniket Sawant, Senior Scientist, O'Brien & Gere
- Bill Cash-Robertson, Northrop Grumman Shipbuilding

Session F – 1:00-2:00 Lunch

Session G – 3:45-5:00 PM: Complying with the Boiler MACT

This will provide a current status of the rule, a synopsis of what the rule really says and how this relates to industry and ways that some have already prepared to comply in cost-effective ways.

Moderator: Pamela Faggert, Dominion

Presenters:

- Mark Wenclawiak, O'Brien and Gere
- Jim Taylor, MeadWestvaco

Thursday, 7 April 2011

• **Session H – 9:00-10:15 AM: Coastal Mitigation: Solutions Other than Treading Water**

How long can we tread water? Sea-level rise is here and here to stay. Gloucester County and Portsmouth are two communities in Virginia that are taking large proactive steps to address current and anticipated sea-level rise as well as other natural mitigation hazards. This session showcases the actions, best practices and lessons learned of these proactive localities the help federal, state, and local governments understand the challenges associated with Virginia's changing coastline.

Moderator: Alison Meehan, DCR Floodplain Management Program

Presenters:

- Emily Ashley, Emergency Management Coordinator, Gloucester County
- Fred Brusso, Special Projects Administrator, City of Portsmouth

Session I – 10:30-11:45 AM: Local Governments Building Sustainable Communities

Moderator: Megan Wu, Regional Officer, ICLEI – Local Governments for Sustainability USA

Presenters:

- Effectively Engaging Community on Sustainability - Clean and Green Initiative: Ken Cronin, Director of General Services and Sustainability, City of Roanoke
- Innovative Solutions to Building Sustainable Communities - Pedestrian/Bike Plan: Thanh Dang: Public Works Planner, City of Harrisonburg

Getting to Zero Waste: Track 4

Wednesday, 6 April 2011

Pogue Auditorium, George C. Marshall Museum

Session D – 10:15-11:30 AM: Waste-to-Energy

Moderator: Claire A. Collins, Administrator, Rockbridge County

Presenters:

- Loyd Ray Farms Waste-to-Energy Project (Yakin County, NC): William Gus Simmons, Cavanaugh & Associates
- Landfill Methane Gas-to-Energy: Aaron Gilman, SCS Field Services
- Alexandria/Arlington Waste-to-Energy Facility: Robert Brickner, Executive Vice President, Gershman, Brickner & Bratton, Inc.

Session E – 11:45-1:00 PM: Beneficial Waste Reuse

Moderator: Zoë Miles, Public Affairs Manager, Georgia-Pacific Big Island, LLC

Presenters:

- Screening Protocols for Beneficial Utilization of Solid Waste Residuals as Soil Amendments and Conditioners: W. Lee Daniels, Department of Crop and Soil Environmental Sciences, Virginia Tech
- Biochar as a new Approach to Managing Woody Waste with Significant Additional Environmental Benefits (Hampton, Virginia): Doris Hamill, NASA Langley

Session F – 1:00-2:00: Lunch

Session G – 3:45-5:00 PM: Composting

Moderator: Sarah Lobo, Environmental Engineer, Lockheed Martin

Presenters:

- Food Composting and Zero Waste: Walker Lunn, EnviRelation, LLC
- Composting Animal Carcasses removed from Roads: A Pilot Study of Two Techniques: Bridget Donaldson, VA Department of Transportation

Thursday, 7 April 2011

Session H – 9:00-10:15 AM: Zero Waste Facilities

Several corporations have announced that their facilities are “zero waste to landfill” but what does this mean? Did the facility eliminate all waste generation or does this mean that there is no waste to landfill? How much of the facility operations are covered by the “zero waste” claim? This session will explore these questions with two examples of companies with facilities in Virginia that have achieved “zero waste to landfill” status and a look at how a modern waste recycling facility operates.

These presentations will be followed by an interactive panel session to explore issues and challenges to attaining and maintaining zero waste to landfill. Some questions to be addresses are: What does it mean to be a Zero Waste facility? What are some practical challenges? How are changes in production or waste characteristics managed? Attendees should take away some practical ideas that could be implemented at their facilities.

Moderator: David Gunnarson, Environmental Engineer at Lockheed Martin in Manassas, Virginia

Presenters:

- Achieving Zero Waste to Landfill: Dean Willis, Environmental Engineer at Lockheed Martin in Manassas, Virginia
- Operating a Construction and Demolition Waste Recycling Facility: Kevin Herb, Managing Partner with Broad Run Recycling in Manassas, Virginia
- Zero Waste to Landfill at Lipton Tea: TJ Chiesa, Unilever (Lipton Tea) in Suffolk, Virginia

Session I – 10:30-11:45 AM: Reducing Waste in Transportation

Moderator: MAJ Wakeel Idewu, Ph.D., VMI

Presenters:

- Transportation Efficiencies Gained Through the Use of In-Place Pavement Recycling: Brian Diefenderfer, Research Scientist, Virginia Department of Transportation
- Sustainable Road Construction Innovations to Reduce Materials leading to Savings in Money and Energy: Richard Ferron, Lanford Brothers, Inc.

Energy Efficiency and Innovation: Track 5

Wednesday, 6 April 2011

Boardroom, Moody Hall

Session D – 10:15-11:30 AM: Energy Innovations

Moderator: Howard Turner, Trane

Presenters:

- The Feasibility of Using Off-Shore Wind Energy for Desalination: Caitlin Grady, Graduate Student, Purdue University
- Digital Submetering and Campus Competitions as a Means Conserve Resources and Reduce Emissions: Julio Stephens, SustainABILITY Coordinator, Radford University
- Andrew Porter, Dam Neck Naval Base

Session E – 11:45-1:00 PM: Saving Water & Energy

Moderator: Dr. Tamim Younos, Cabell Brand Center

Presenters:

- Wanchese Seafood Industrial Park Water Reclamation: William "Gus" Simmons, Vice President & Director of Engineering, Cavanaugh & Associates
- Energy Conservation: The Overlooked Benefit of Rainwater Harvesting: Sarah Lawson, Consultant, Rainwater Management Solutions
- Behavior Change and Water Conservation at On-Campus University Residential Halls: Tammy Parece, Graduate Student, Virginia Tech

Session F – lunch 1:00-2:00 PM

Session G – 3:45-5:00 PM: Global Innovations from Virginia

Moderator: COL Grigg Mullen, Ph.D., P.E. Professor of Civil & Environmental Engineering, VMI

Presenters:

- Lumenhaus, Virginia Tech, Solar Decathlon, Europe Winners: Professor Robert Dunay + Joe Wheeler
- Edison2, X-Prize Winner: Brad Jaeger + team

Thursday, 7 April 2011

Session H – 9:00-10:15 AM: Green Virginia Buildings

Moderator: Bob Carter, VA Dept. of Historic Resources

Presenters:

- No Child Left Inside: Lessons from Manassas Park Elementary School: Steve Davis, Director of Sustainable Design, VMDO Architects, P.C.
- Building Green in the Bay Watershed: Fred Farris, Deputy Executive Director, Virginia Living Museum
- Unpacking the Virginia Preservation Toolkit: Tools for Greening Historic Houses, Saving Energy and Saving Money: Lynn Rainville, Director, Tusculum Institute, Sweet Briar College

Session I – 10:30-11:45 AM: No Session

Conservation of Natural and Historic Resources: Track 6

Wednesday, 6 April 2011
Shenandoah Room, Marshall Hall

Session D – 10:15-11:30 AM: The Future of Land Conservation: A State and Federal Perspective.

Moderator: Jeb Wilkinson, Deputy Director, Department of Conservation and Recreation

Presenters:

- Presidential Executive Order on Land Conservation: John Maounis, Superintendent, NPS Chesapeake Bay Office
- Battlefield Preservation: Elizabeth Tune, VA Department of Historic Resources
- Updates on GIS System: Jason Bulluck, Department of Conservation and Recreation, Natural Heritage Division

Session E – 11:45- 12:45 PM: lunch

Session F – 1:00-2:15 PM: Innovations in Private Sector Land Conservation

Moderator: Michael Lipford – State Director, The Nature Conservancy of Virginia

Presenters:

- Lessons of Large Scale Land Conservation: Linda Crowe, Director of Land Protection, The Nature Conservancy of Virginia; Hunter Jenkins, The Forestland Group; Paul Young, Conservation Forestry, LLC
- Carbon Market Opportunities with Land Conservation: David Shoch, TerraCarbon, LLC; Greg Meade, Forester, The Nature Conservancy of Virginia

Session G – 3:45-5:00 PM: Fort Monroe

Moderator: Kathleen S. Kilpatrick, Director and State Preservation Officer, Virginia Department of Historic Resources

Presenters:

- Cherylyn Widell, Director of Heritage Assets and Historic Preservation Officer, Ft. Monroe Authority
- Robert S. Mills, AIA, CID, NCARB, Principal, Commonwealth Architects
- Protection of Natural Resources in the Reuse plan: John Davy, National Park Service, Chesapeake Bay Program

Thursday, 7 April 2011

Session H – 9:00-10:15 AM: Understanding Deer and Managing Deer in Virginia

Wildlife biologists will provide an overview of the history, biology, and management of white-tailed deer that is most relevant to decision-makers and citizens interested in deer management. In addition, information will be provided about specific Virginia programs, from traditional hunting seasons, to urban archery season, to special property-level programs, including permits for localities or public entities to use permits to remove deer outside of hunting seasons.

Moderator: Bob Duncan, Director, Virginia Department of Game and Inland Fisheries (VA DGIF)

Presenters:

- Whitetail Deer: History, Biology, Management: Nelson Lafon, Deer Project Coordinator, VA DGIF
- Deer Management Program Opportunities: David Kocka, District Wildlife Biologist, VA DGIF

Session I – 10:30-11:45 AM: Case Studies of Urban Deer Management

Moderator: COL David Hough, Naval ROTC Commanding Officer, VMI

Presenters:

- Larry Faust, Chief Animal Warden, Lynchburg Police Department
- Stan Olah, Chief, Wintergreen Police Department

Ecosystem Restoration Track: Track 7

Wednesday, 6 April 2011

Lounge, Moody Hall

Session D – 10:15-11:30 AM: Sustainable Bay Fisheries

Moderator: Peyton Robertson, Director of NOAA Chesapeake Bay Office

Presenters:

- Shellfish Aquaculture: Mark Luckenbach, VIMS
- Blue Crab: Rob O'Reilly, VMRC

Session E – 11:45-1:00 PM: Lunch

Session F – 1:00-2:15 PM: Emerging Challenges to Fisheries

Moderator: Jack Travelstead, VMRC

Presenters:

- Blue Catfish: Dr. Greg C. Garman, Director, Center for Environmental Studies; Research Director, VCU Rice Center
- Atlantic Sturgeon: Dave O'Brien, NOAA

Session G – 3:45- 5:00 PM: Living Shorelines

Non-structural shoreline protection is now required by some localities. Ideally, it allows for more room to adjust (due to sea level rises) than hardened structures. Presentations will cover historical and current success examples and Virginia's shoreline protection vision, and agency coordination on streamlining the permitting process.

Moderator: Stephen Decker, Environmental Scientist, USACE – Norfolk District

Presenters:

- Scott Hardaway, Scientist, Virginia Institute of Marine Science (VIMS)
- Neville Reynolds, Principal/Williamsburg, VA Office Manager, VHB
- David W. Byrd, U.S. Fish and Wildlife Service

Thursday, 7 April 2011

Session H – 9:00-10:15 AM: In-Lieu Fee Mitigation: New Initiatives and Frameworks

Moderator: Jeanne Richardson, Environmental Scientist, U.S. Army Corps of Engineers-Norfolk District

Presentations:

- VA Aquatic Resources Trust Fund and the 2008 Mitigation Rule: Linda Crowe of the Nature Conservancy will provide an update regarding the changes that have occurred to the Virginia Aquatic Resources Trust Fund as a result of the 2008 Final Compensatory Mitigation Rule.

Session I – 10:30-11:45 AM: Case Studies of Mitigation Banking

Moderator: Jeanne Richardson, Environmental Scientist, U.S. Army Corps of Engineers-Norfolk District

Presentations:

- Save the Streams and Keep the Change: A Profitable Partnership in Mitigation Banking: Public/Private Partnership: Charles Williamson, Prince William County; Don Seaborn, Principle, Angler Environmental; Debbie Andrew, Director of Operations, Planning & Support; Prince William County Parks
- Re-establishing Atlantic White Cedar- Dr. Rob Atkinson will provide discussion on the re-establishment of Atlantic White Cedar in the Great Dismal Swamp: Dr. Robert Atkinson, Professor of Biology, Director of Wetland Studies, Christopher Newport University

Special Session
Thursday, 7 April 2011

Gillis Theater, Marshall Hall

Social Media 101

This session will provide an overview of the tools available in the world of Social Media and how global corporations as well as smaller Virginia organizations are doing to communicate effectively in today's world.

Host: LTC Amy Goetz, Assistant Director, Communications and Marketing, Virginia Military Institute

1:15-2:00 pm

What's possible in the World of Social Media?

"Overview of Social Media Tools"

Mark Haviland, US Army Corps of Engineers, Norfolk District

- Overview of social media tools: Blogs, Facebook, Twitter, video and photo sharing sites, and dashboard tools.
- Basic web research and internal investigation – “Google yourself”, what you have to offer
- Communication *Rules* – Join the conversation, Do's and Don'ts
- Get started – convince your organization, terms of use, what tools are best

1:45 – 1:55 pm

Questions

2:00-2:45 pm

Use of Social Media at the National, State, and Local Levels: Panel Discussion

Panel members will focus on their own organizational experiences detailing success and areas for improvements, what social media options they are using (which not) and why.

Participants:

- Nancy Heltman, VA State Parks
- Natalie Johnson, Coca Cola
- Jeff Hanna, Washington and Lee University

2:45 – 2:55 pm - Questions

3:00 pm - Adjourn