PROGRAM

SUNDAY, MARCH 13, 2005

1:00 PM	Virginia Lakes & Watershed Association Golf Tournament Heron Ridge Golf Course, Virginia Beach
2:00 – 6:00 PM	Exhibitors' Display Set Up (Exhibitors' Area)
5:00 – 7:00 PM	Registration (Conference Reception Desk)
5:30 – 7:00 PM	Meeting of VLWA Board of Directors (Elm Room)
7:00 – 8:30 PM	Exhibitor and Early Registrant's Reception (President's Suite-Room #1234)

MONDAY MORNING, MARCH 14, 2005

7:00 – 8:00 AM	Registration and Check-In (Conference Reception Desk)
7:30 AM	Coffee and Pastries (Grand Ballroom)
8:00 – 9:00 AM	President's Welcome – David Rosenthal, President, VLWA
9:15 – 10:30	**First Concurrent Sessions**

SESSION 1A LAKES AND WATER QUALITY 1 *Beth Anderson, Parsons Brinckerhoff*	SESSION 1B FLOODPLAIN HAZARDS & HAZARD RESPONSE *Shane Parson, VA Tech CGIT, & VFMA*	SESSION 1C DAM BASICS WORKSHOP *Bill Browning, DCR, Dam Safety and Floodplain Management*
Optical Brightener Monitoring in Lynnhaven River Watershed—Seshadri Iyer, Michael Barbachem, URS; Steve McLaughlin, City of VA Beach DPW&E *Optical Dissolved Oxygen Sensors Improve Data, Reduce Downtime*—Rob Mooney, Tony Arnerich, In-Situ, Inc. *Long-term Changes in the Physical and Chemical Characteristics of Lake Prince and Western Branch Reservoir Following Hypolimnetic Aeration*—Gary Schafran, Dhananjay Sharma, ODU, David Rosenthal, City of Norfolk *Evaluation of Lake Aeration to Reduce Fecal Coliform Bacteria Levels*—Beth Anderson, Parsons Brinckerhoff	*Hurricane Gaston and Its Effect on Shockoe Bottom*—Ben Johnson, City of Richmond *Emergency Dam Breach Hydrology and Hydraulics-A Case Study*—Marlene Tomaszkiewicz, Michael Baker Jr., Inc. *Delivering Hazard Mitigation Programs in a Multi-Hazard Environment*—Deborah Mills, VA Dept. of Emergency Management *GIS-Based Analysis Methods for Multi-Jurisdictional Hazard Mitigation Plans in Virginia*—Shane Parson, VA Tech CGIT	*Brief History of Dams & Failures, and Extreme Storms*—Thomas Roberts, DCR, DS & FM Dam Safety Engineer, John Harrison, Schnabel Engineering *Virginia Dam Safety Program Regulatory Requirements*—Dianna Sheesley, DCR, DS & FM Dam Safety Engineer *Proper Dam Construction and Maintenance*—Dianna Sheesley, DCR, DS & FM Dam Safety Engineer *Failure Mode Analysis of Dams*—Thomas Roberts, DCR, DS & FM Dam Safety Engineer

10:45 – 12:00 Second Concurrent Sessions

SESSION 2A LAKES AND WATER QUALITY 2 *Karl Smithson, City of Virginia Beach Public Works Engineering Department*	SESSION 2B FLOOD HAZARDS *David Powers, KCI Technologies*	SESSION 2C DAM INSPECTION-POTENTIAL FAILURE MODE WORKSHOP *Bill Browning, DCR, Dam Safety and Floodplain Management*
Method to Develop Predictive Eutrophication Criteria for Lakes and Reservoirs—Melissa Kenney, Duke University *Reservoir Dynamics: A Comparison of Smith Mountain Lake and Claytor Lake*—David Johnson, Carolyn Thomas, Ferrum College *Biological Dredging in Lakes and Waterways*—David Cutlip, DSC Aquatic Solutions, Inc. Implementation Issues with HB 1177 - Successfully Turning the Corner—Karl Smithson, City of Virginia Beach Public Works Engineering Department	*Tropical Storm Gaston Hits Richmond*—Andrew Gould, Timmons Group *The Transition to Planned System Maintenance and the Impact on Storm Preparation and Recovery*—John Barnes, DPW, City of Virginia Beach *Ragged Mountain Reservoir – 120 Years of Service*—Robert Kline, Amanda Hess, Gannett Fleming, Inc.	*Safety Inspections of Dams*—Dianna Sheesley, DCR, DS & FM Dam Safety Engineer *Potential Failure Mode Inspections of Seeps, Boils, Leaks, and Moisture Indicators*—Thomas Roberts, DCR, DS & FM Dam Safety Engineer *Potential Failure Mode Inspections of Earthen Dam Embankment Toe Drains, Outlet Pipes and Concrete Spillways*—John Harrison, Schnabel Engineering *Potential Failure Mode Inspections of Spillway Capacity*—Thomas Roberts, DCR, DS & FM Dam Safety Engineer

12:15 – 1:15 PM Luncheon (Grand Ballroom)

Keynote Address: **"Pumping water from the Libyan Desert: Does it make sense?"**

Daniel P. Loucks serves on the faculty of the School of Civil and Environmental Engineering, Cornell University. He has been teaching and conducting research in the application of economic theory and systems analysis methods to the solution of environmental and regional water resources problems. He has authored articles and book chapters in these subject areas. During periods of leave from Cornell, he has held appointments at other universities in the US and abroad, at the World Bank, at the International Institute for Applied Systems Analysis, and in various UN agencies. Loucks has served on various scientific committees and boards of professional organizations including those of NATO, the National Research Council and the US Army Corps of Engineers

MONDAY AFTERNOON, MARCH 14, 2005

1:30 – 2:45 PM Third Concurrent Sessions

SESSION 3A BMPS *Shelly Frie, Woolpert, Inc.*	SESSION 3B FLOODPLAIN MODELING AND MAPPING *David Preusch, Michael Baker Jr., Inc. and VFMA*	SESSION 3C DAM EMERGENCY ACTION PLANS – MANAGING EXTREME EVENTS WORKSHOP *Martin Firth, Lakes Services of Virginia*
Comparison of Storm Water Quality Treatment Guidelines and Critical Structural BMP Performance Factors and Parameters to Consider—Penh Tov, Stormceptor® Group of Companies *We've Got Our BMPs, Now What Do We Do With Them?*—Richard Broad III, Mariellen Calabro, Casey Magruder, City of Chesapeake *Business for Partners for Clean Water Program*—June Moser, City of Norfolk *The IDEAL Model and Assessing Impacts of BMPs on Stormwater Runoff*—Shelly Frie, Jeff Wright, Woolpert, Inc.	*2-D Hydraulic Modeling in the Floodplain*—John Paine, URS Corp. *Update on FEMA's Map Modernization Program*—Kira Brooks, Michael Baker Jr., Inc. *Updating Virginia's Flood Maps*—David Gunn, VA DCR Floodplain Program *GIS Techniques for Floodplain Mapping Updates in Virginia*—Rachael Heltz Herman, VA Tech CGIT	*Emergency Action Plan (EAP) Requirements and Consequences* — Dianna Sheesley, DCR, DS & FM Dam Safety Engineer *March 12, 2004 Mississippi Dam Failure Story, What Was Needed vs. What Was Required*—Thomas Roberts, DCR, DS & FM Dam Safety Engineer *Examples of Excellent Emergency Action Plans & Examples of Average EAPs*—Thomas Roberts, DCR, DS & FM Dam Safety Engineer *Step by Step Walk Through the Completion of the EAP Forms and How to Prepare an Excellent Emergency Action Plan*—Thomas Roberts, DCR, DS & FM Dam Safety Engineer

3:15 – 4:30 PM **Fourth Concurrent Sessions**

SESSION 4A BMPS 2 *Tara Ajello, CH2M HILL*	SESSION 4B "AND NOW FOR SOMETHING COMPLETELY DIFFERENT. . ." *Stuart Stein, GKY&A*	SESSION 4C DAMS DOOMED TO FAIL – DELAYING THE INEVITABLE WORKSHOP *Don Wells, Hanover-Caroline SWCD*
A Proactive Strategy for BMP Management—Cindy Linkenhoker, City of Portsmouth; Tim Hare, CH2M HILL, Ephraim Seidman, Aquatic Services, Inc. *City of Richmond Drainage Master Plan Development*—Laurens van der Tak, CH2M HILL, Andrew Gould, Susan Mulholland, Timmons Group *Geodatabase Support of Stormwater Maintenance Program in Loudoun County, VA*—David Sedgwick Ward, James Suddreth, Dept. of General Services, Loudoun County *Protecting Watershed Resources and Quality Through Utilization of GIS Tools and Models*—Tara Ajello, CH2M HILL	*Comic Relief*—Scott Cahill, Watershed Services *Travels*—Mike Barbachem, URS	*Extending the Life of a Dam – Vegetative Cover, Filter Drains, Control Surveys, Rodent Control, Riprap, and Conservation Easements*—Dianna Sheesley, DCR, DS & FM Dam Safety Engineer *Overtopping Protection-Roller Compacted Concrete, Hot It Works, Where It's Applicable, and Sample Projects with Costs* —Fares Y. Abdo, Portland Cement Association *Slip Line Dam Pipe and Gate Valve Replacement* — Scott Cahill, Watershed Services *Filter Drains-How They Greatly Increase or Shorten the Life of Your Dam, and Questions You Need to Ask Your Engineer* —Tillman Marshal, Schnabel Engineering

MONDAY EVENING, MARCH 14, 2005

4:45 – 6:00 PM Reception

6:00 – 6:30 PM Virginia Lakes and Watersheds Association Business Meeting (Grand Ballroom)

TUESDAY MORNING, MARCH 15, 2005

7:00 – 8:15 AM **Virginia Floodplain Management Association Annual Business Meeting**

8:30 – 9:45 AM **Fifth Concurrent Sessions**

SESSION 5A BMPS 3 *Michael Lipparelli, SolarBee*	SESSION 5B NATURAL AND BENEFICIAL FUNCTIONS OF THE FLOODPLAIN *David Powers, KCI Technologies and VFMA*	SESSION 5C DAM ISSUES 1 *Tillman Marshall, Schnabel Engineering*
Analysis of the Kingsbrook Bioretention Area—Suzanne Angelo, Occoquan Watershed Monitoring Lab, Virginia Tech *Analysis of Long Term Rainfall to Develop Stormwater Quality Design Criteria*—Brian Lee, Stormceptor Canada Inc. *Geohydrological and Geotechnical Constraints in Karst Terrane*—Joseph Fischer, James McWhorter, Geoscience Services, Terri Brown, Terrane Environmental *Surf's Up! The Emerging Science of Circulation for Improving Lakes and Ponds*—Michael Lipparelli, SolarBee	*No Adverse Impact-A Common Sense Strategy for Floodplain Management*—David Powers, KCI Technologies *Economic and Ecological Benefits of Floodplain Management*—Mark Slauter, DCR Floodplain Program *Cooperating Technical Partners and Floodplain Mapping*—Melissa Hess, URS	*Falling Creek Dam Takes on Tropical Storm Gaston*—Mike Claud, Robert Roop, Timmons Group *GIS Applications in Dam Failure Analysis*—David Moore, Roger Denick, Burgess & Niple *The Future of Emergency Action Planning: Recognition of Triggers and Execution of Actions through Autonomous Dam Control Systems*—Scott Cahill, Watershed Services *Dam Breaks from Topical Storm Gaston*—Robert Cooper, DCR, DS & FM Dam Safety Engineer

10:15 – 11:30 AM Sixth Concurrent Sessions

SESSION 6A ECOLOGICAL ASSESSMENT AND RESTORATION *Kestra Miller, Timmons Group*	SESSION 6B	SESSION 6C DAM ISSUES 2 *Robert Cooper, DCR*
Prince William County's Stream Assessment: A Summary of Results—Daniel Medina, Tara Ajello, CH2M HILL, Madan Mohan, Wade Hugh, Prince William County *Innovative Products for the Ecological Restoration Industry*—Gerry Hammel, EcoDepot, LLC *Performing a Stream Condition Assessment Survey in a Tidal Stream: Challenges and Opportunities*—Wendy Royston, URS; Sam Sawan, City of Chesapeake, DPW *Wellesley Shoreline Stabilization*—Kestra Miller, Mike Claud, Timmons Group	*No 6B Session*	*Repairing Major Concrete Dams*—Cameron Smith, Watershed Services *Fighting Hazard Creep - Some Alternatives*—David Moore, Daniel Hill, Burgess & Niple *Labyrinth Weirs for Your Dam? - Possible Solutions to Extreme Flood Events*—John Harrison, Schnabel Engineering *Hurricane Floyd Hits Dams in North Carolina*—Dianna Sheesley, DCR, DS & FM Dam Safety Engineer

11:45 – 1:00 PM Luncheon (Grand Ballroom)

Dam Safety Awards Presentations – Andrew Gould

VFMA Awards