



FINAL PROGRAM

SATURDAY, MARCH 7, 2015

8:00 AM – 9:00 AM Registration/Check-In for Dam Owner Training Workshop
9:00 AM – 5:00 PM Dam Owner Training Workshop (DoubleTree by Hilton Richmond-Midlothian, 2nd Floor Parlors A & B)

SUNDAY, MARCH 8, 2015

1:00 – 4:00 PM Dam Engineer's Forum (2nd Floor Parlor C)
1:30 – 5:00 PM Exhibitors' Display Set Up (Exhibitors' Area)
2:00 – 5:00 PM Registration (Conference Reception Desk)
4:00 – 5:00 PM Meeting of VLWA Board of Directors (2nd Floor York Room)
5:30 – 7:00 PM Exhibitor and Early Registrants' Reception (James River Ballroom Parlor H)

MONDAY MORNING, MARCH 9, 2015

7:00 – 8:00 AM Registration and Check-In (Conference Reception Desk)
7:30 AM Coffee and Pastries
7:45 – 9:00 AM Welcome to the Conference, Stuart Stein, Conference Chair

Keynote Address – The Benefits of Water Quality Improvements and Restoration, Dr. Melissa Kenney, Assistant Research Professor in Environmental Decision Analysis at the University of Maryland, Earth System Science Interdisciplinary Center and Principal Investigator of the U.S. Global Change Research Program, National Climate Indicator System

Track A–Parlor A

Track B–Parlor B

Track C–Parlor F

Track D–Parlor G

Track E–Parlor E

9:15 – 10:30 AM First Concurrent Sessions

Session 1A • Stormwater 1 • Moderator – Stephen G. McLaughlin, PE, City of Virginia Beach Department of Public Works Operations

- (1) **Can the California MS4 Program Evaluation Assessment Method Work for Me?**, Gary Friedman, Michael Baker International
- (2) **Municipal Virginia Coastal City's Response to the New MS4 Permit**, William J. Johnston, PE, City of Virginia Beach Department of Public Works Engineering I
- (3) **Compliance with Stormwater Standards on a Federal Phase II MS4**, David Duncan, EIT, Timmons Group; Liz Scheessele, PE, CFM, Timmons Group; E. Scott Conley, Thomas Jefferson National Accelerator Facility
- (4) **Regulatory Compliance Activities Followed by a Coastal Virginia Locality**, Stephen G. McLaughlin, PE, City of Virginia Beach Department of Public Works Operations; Karl Mertig, CPWD, Kimley-Horn

Session 1B • Dam Safety 1 • Moderator – Thomas I. Roberts, PE, CFM, Dam Safety and Floodplain Management Division, Virginia Department of Conservation and Recreation (DCR)

- (1) **Some Mistakes Found in Dam Break Inundation Studies in My Review**, Zhengang Wang, Ph.D., PE, CFM, Virginia Department of Conservation and Recreation, Division of Dam Safety and Floodplain Management
- (2) **A Look into Virginia's Simplified Inundation Mapping Program**, David P. Wilmoth, PE, CFM, PH, Dam Safety and Floodplain Management Division, Virginia Department of Conservation and Recreation (DCR)

(3) **Recent Dam Failures in Virginia**, Steven M. Snell, PE, Virginia Department of Conservation and Recreation, Division of Dam Safety

(4) **Palmertown Muck Dam Failure December 24, 1924, History of the Dam, the Operations, the Causes of the Failure, and the Affects of the Failure**, Thomas I. Roberts, PE, CFM, Dam Safety and Floodplain Management Division, Virginia Department of Conservation and Recreation (DCR)

Session 1C • Stormwater Retrofits • Moderator – Sheila S. Reeves, PE, CFM, Timmons Group

(1) **Creative Solutions for Funding of Retrofit Projects for Water Quality Treatment in Urban Watersheds**, Aislinn T. Creel, PE, LEED AP, Timmons Group

(2) **A Comprehensive Approach for Managing Stormwater: Implementing Retrofit Design and Stormwater Pollution Prevention Plans on Municipal Facilities**, Brice Kutch, PE, GKY & Associates, Inc.; Max Kuker, GKY & Associates, Inc.

(3) **Brookfield Park Wet Pond Reconstruction and Water Quality Improvement Project**, Sajan Pokharel, PE, Fairfax County DPWES Stormwater Planning Division; Geoffrey L. Cowan, PE, Dewberry Consultants LLC; Nicholas Shimer, Dewberry Consultants LLC

(4) **Mixing Grey and Green: A Retrofit Case Study – Jefferson Park SWMB**, Sheila S. Reeves, PE, CFM, Timmons Group

Session 1D • TMDL Action Planning 1 • Moderator – Kristian Doerken, PE, ARCADIS-US, Inc.

(1) **Cleaning the Bay the Navy Way – BMP Opportunity Assessments and TMDL Action Plans**, Joni M. Calmbacher, PE, CFM, Michael Baker International; James Kelly, PE, Michael Baker International; David Cotnoir, PE, NAVFAC Mid-Atlantic

(2) **Chesapeake Bay TMDL Credits – Planning vs. Obtaining Stream Credit**, Rebecca Napier, PE, Timmons Group; Mike Aust, Timmons Group

(3) **Taking Action: Urban vs. Suburban First Phase TMDL Action Plan Approaches**, Stephanie Hanes, PE, LEED AP, Brown and Caldwell; Lisa Jeffrey, PE, Brown and Caldwell

(4) **A Systematic Approach to Stormwater Capital Improvement Planning for Chesapeake Bay TMDL Compliance**, Kristian Doerken, PE, ARCADIS-US, Inc.; Scott Smedley, PE, Chesterfield County; Fernando Pasquel, ARCADIS-US, Inc.

Session 1E • Floodplain Management 1 • Moderator – Mark Slauter, Virginia Department of Emergency Management

(1) **Resilience & Discovery: FEMA RiskMAP**, Matthew McCullough, FEMA; Donald Syriani, CFM, Dewberry; Philip Hipley, CFM, Dewberry

(2) **Increasing Risk Communication for Property Owners with the New RiskMAP Products**, Garrett Skinner, CFM, LEED AP, Atkins

(3) **RiskMAP Flood Insurance Study and Hazard Mapping for Loudoun County, Virginia, USA**, Sabu Paul, Ph.D., PE, PMP, CFM, Michael Baker International; Wilbert O. Thomas, Jr., Michael Baker International; Jeffrey L. Sparrow, PE, Michael Baker International; William Cain, PE, CFM, Loudoun County, VA; Glen Rubis, Loudoun County, VA

(4) **Exploring Non-Regulatory RiskMAP Products**, Nabil Ghalayini, PE, PMP, D.WRE, CFM, Virginia Department of Conversation and Recreation

10:30 – 10:45 AM Coffee Break

10:45 AM – 12:00 PM Second Concurrent Sessions

Session 2A • Stormwater 2 • Moderator – Seth Brown, Water Environment Federation

(1) **To Green or Not To Green: Modeling Incentive-Based Programs for Green Infrastructure Investment on Private Properties**, Seth Brown, Water Environment Federation, George Mason University; Celso Ferreria, Ph.D., George Mason University

(2) **Overview of Virginia's Non-Point Source Credit Market: Recent Developments and Future Opportunities**, TJ Mascia, Troutman Sanders LLP; Brooks Smith, Troutman Sanders LLP

- (3) **Applying Offsets for Cost-Effective Stormwater Management**, Mark S. Kieser, Kieser & Associates, LLC
- (4) **Delivering on the P3 Promise – An Holistic Community Based, Public Private Partnership for Stormwater Management**, Greg Cannito, Corvias Group

Session 2B • Dam Safety 2 • Moderator – David A. Krisnitski, PE, CFM, Froehling &Robertson, Inc.

- (1) **DamWatch: Steps to Enhancing Virginia Dam Safety Through Integrated Technology and Real-Time Rainfall Monitoring**, Rebecca Stewart, CFM, Virginia Department of Conservation and Recreation (DCR); Robert Bennett, PE, RA, CFM, Virginia Department of Conservation and Recreation (DCR)
- (2) **Emergency Action Plan Interim Provisions – An Important Part of Your Alterations Permit**, Adrienne Shaner, PE, Gannett Fleming, Inc.
- (3) **EAP Requirements for Virginia Dam Owners**, Susan McGhee, PE, Gannett Fleming, Inc.
- (4) **Dam Safety – Emergency Action Plans and Tabletop Exercises?**, David A. Krisnitski, PE, CFM, Froehling &Robertson, Inc.

Session 2C • Stormwater Maintenance • Moderator – Jim Nadeau, ACF Environmental

- (1) **Municipal Off-Road Stormwater Ditch Maintenance: A Proactive Programmatic Approach**, Phillip Koetter, PE, City of Virginia Beach Department of Public Works Operations; Pete Crum, CPWD, Kimley-Horn and Associates, Inc.
- (2) **Successful Maintenance of Green Infrastructure**, Shelly Frie, PE, CH2M HILL; Daniel Wible, PE, LEED AP, CH2M HILL; Susan McDaniels, LEED AP, CH2M HILL
- (3) **ACB's: The Do's, Don'ts, and the Unknowns**, Jim Nadeau, ACF Environmental

Session 2D • TMDL Action Planning 2 • Moderator – Shelly K. Fisher, Atkins

- (1) **Navigating the Pollutant Reduction Crediting Methodologies for BMP Retrofits: A Case Study of a Large Scale BMP Retrofit**, Noelle Slater, ARCADIS-US, Inc.; Fernando Pasquel, PE, ARCADIS-US, Inc.; Scott Smedley, PE, Chesterfield County
- (2) **Flow Data Got You Down?, Estimating Stream Restoration Pollutant Load Reductions Using Modeled Flow Data**, Colin Hill, CE, KCI Technologies, Inc.; Michael Pieper, SCE, KCI Technologies, Inc.
- (3) **BMP Assessment Tool: Helping Communities Reduce Water Pollution and Better Plan for the Future**, Shelly K. Fisher, Atkins

Session 2E • Floodplain Management 2 • Moderator – Jeffrey R. Smith, Accenture

- (1) **How Can Digital Letters Of Map Change (LOMCs) Help Analyze Risk?**, Katherine H. Hermann, CFM, Dewberry; Elvis Martinez, CFM, Dewberry
- (2) **Total Exposure in Floodplain (TEIF) – Potential Flood Risk Estimation**, Cynthia McCoy, FEMA; Mike McGeehin, Dewberry
- (3) **Social and Community Indicators of Storm-Related Population Vulnerability**, Joshua G. Behr, Ph.D., Old Dominion University; Rafael Diaz, Ph.D., Old Dominion University
- (4) **Use of Agent Based Modelling (ABM) to Inform Flood Emergency Management Planning**, David Powers, PE, HR Wallingford

12:15 – 1:15 PM Luncheon

Keynote Address – Climate Change Impacts in Virginia, Dr. Carl Hershner, Director of the Center for Coastal Resources Management, Virginia Institute of Marine Science

MONDAY AFTERNOON, MARCH 9, 2015

1:30 – 2:45 PM Third Concurrent Sessions

Session 3A • Stormwater 3 • Moderator – J. Douglas Fritz, CPESC; GKY & Associates, Inc.

- (1) **Advanced Planning for Advanced Stormwater Management**, Scott Crafton, RLA, Louis Berger; Ginny Snead, PE, Louis Berger
- (2) **Data Mining of Historical BMPs**, Sue Kriebel, PE, City of Virginia Beach; William Johnston, PE, City of Virginia Beach; Seshadri Iyer, Ph.D., PE, CFM, AECOM
- (3) **Development of a GIS Toolkit to Support Hydrologic and Water Quality Modeling and Drainage Area Characterization of Ecological Sampling Sites**, Joe Riley-Ryan, Fairfax County, Stormwater Planning Division; Greg Bacon, Fairfax County, Department of Information Technology; Dipmani Kumar, PE, Fairfax County, Stormwater Planning Division; John Burke, Fairfax County, Stormwater Planning Division
- (4) **Interpreting Local TMDLs to Develop MS4 Permit Action Plans**, J. Douglas Fritz, CPESC; GKY & Associates, Inc.; Douglas H. Moseley, AICP, CFM, GKY & Associates, Inc.

Session 3B • Dam Safety 3 • Moderator – Ira Brotman, PE, Moffatt & Nichol

- (1) **Use of a Portable Dam for Dam Dewatering Operations in Virginia Beach**, Gerry Mann, Portadam, Inc.
- (2) **Actual and Predicted Earth Spillway Performance**, Mark F. Natale, PE, O'Brien & Gere Engineers, Inc.
- (3) **Inspection and Maintenance of Outlet Works**, Robert Kline, PE, Gannett Fleming, Inc.; Andrzej Kulik, EIT, CDT, Gannett Fleming, Inc.
- (4) **City of Virginia Beach's Dam Management**, Ira Brotman, PE, Moffatt & Nichol; Stephen G. McLaughlin, PE, City of Virginia Beach; Sean Jessup, PE, Moffatt & Nichol

Session 3C • Dredging • Moderator – Jayanthi Gopal, MS, EIT, Parsons Brinckerhoff

- (1) **City of Virginia Beach Lake Maintenance Dredging Program**, Tara W. Gallagher, PE, City of Virginia Beach, Public Works Operations
- (2) **Special Service District Neighborhood Channel Dredging**, Michael W. Mundy, PE, City of Virginia Beach Department of Public Works Engineering
- (3) **Impact of Dredging on Downstream Water Quality of Green Run Lakes**, Jayanthi Gopal, MS, EIT, Parsons Brinckerhoff; Lisa Bass, PE, Parsons Brinckerhoff; Lewis R. White, PE, Parsons Brinckerhoff

Session 3D • Water Quality 1 • Moderator – Deva Borah, Ph.D., PE, Adjunct Faculty, Old Dominion University; President, Borah Hydro-Environmental Modelingt, LLC

- (1) **1D & 1D/2D Modeling Approaches to Evaluate Flooding Within the City of Newport News, Virginia**, Steve Godfrey, PE, CFM, Woolpert; David Powell, Ph.D., PE, Woolpert; Jamie Clark, PE, City of Newport News
- (2) **Relative Sensitivity Analysis of the Lagrangian Model for Simulating Horizontal Submerged Buoyant Jet Plume in the Stagnant Ambient for Effluent Discharge**, Arash Aliabadi Farahani, Old Dominion University; Matthew Elliott, Old Dominion University; Jaewan Yoon, Old Dominion University
- (3) **In-Situ Total Suspended Solids (TSS) Characterization Using Formazin Attenuation Unit (FAU)-Based Disjointed General Linear Model**, Jeremy Pianalto, Old Dominion University; Robert Redmond, Old Dominion University; Jaewan Yoon, Old Dominion University
- (4) **Understanding VRRM Compliance Spreadsheets**, Partha Sarathi, PE, ENSOFTEC

Session 3E • Floodplain Management 3 • Moderator – John Paine, AECOM

- (1) **Mitigation Actions – Local Community Success Story Leveraging FEMA Datasets to Reduce the Consequences of Repetitive Flooding**, Edward G. Beadenkopf, PE, CFM, AECOM
- (2) **The 203(k) Rehabilitation Mortgage Insurance Program**, Charles Kline, CFM, Virginia Department of Conservation and Recreation

(3) **The Supreme Court on Flooding**, Melissa Hall, JD, CFM, Virginia Department of Conversation and Recreation

(4) **Adopting FEMA Map Changes at the Local Level**, Rishi R. Baral, PE, CFM, Stafford County, VA

2:45 – 3:15 PM Coffee Break

3:15 – 4:30 PM Fourth Concurrent Sessions

Session 4A • Stormwater 4 • Moderator – Mindy R. Hills, Contech Engineered Solutions

(1) **Design of a Cost Effective BMP Retrofit for a Historic Urban Watershed**, Chip Wyatt, EIT, Timmons Group; Darryl Walker, City of Petersburg; Aislinn Creel, PE, LEED AP, Timmons Group

(2) **Permeable Pavement from a Designer's Perspective**, Don Rissmeyer, PE, CFM; A. Morton Thomas and Associates, Inc.

(3) **Optimizing Water Quality Performance of Wet Pond Retrofits**, Howard Lusk, PE, LEED AP, ENV SP, CH2M HILL

(4) **Performance Monitoring of a High Flow Bioretention System and Permeable Paver High Flow Bioretention System in North Carolina**, Mindy R. Hills, Contech Engineered Solutions; Andrew Anderson, North Carolina State University, Inc.

Session 4B • Dam Safety 4 • Moderator – Randall P. Bass, PE, Schnabel Dam Engineering

(1) **Harvell Dam Removal: Fish Passage and Appomattox River Restoration**, L. Alan Weaver, Virginia Department of Game and Inland Fisheries

(2) **Kingston Lake Dam Renovation**, Jessica N. Winterwerp, PE, City of Virginia Beach; W. Brad Ellis, PE, Moffatt & Nichol

(3) **The New Ragged Mountain Dam – Lessons Learned During Design and Construction**, Randall P. Bass, PE, Schnabel Dam Engineering

Session 4C • Water Supply and Water Quality • Moderator – Carolyn L. Thomas, Ph.D., Ferrum College

(1) **Balancing Competing Uses of Water: The Smith Mountain-Leesville Protocol**, Steven Nebiker, PE, HydroLogics; Liz Parcell, Appalachian Power Company

(2) **Water, Water Everywhere? Regional Water Supply Planning and Modeling**, Aaron George, PE, GKY & Associates, Inc.; Stuart Stein, PE, GKY & Associates, Inc.

(3) **The Relationship Between Chlorophyll-a and Algal Populations in Smith Mountain Lake**, Carolyn L. Thomas, Ph.D., Ferrum College; Bob R. Pohlard, Ph.D., Ferrum College

Session 4D • Water Quality 2 • Moderator – Paul A. Gantzer, Ph.D., P.E., Gantzer Water Resources Engineering, LLC

(1) **Understanding Pollutant Toxicity on Freshwater Mussels**, Nancy Scott, MEM, The Catena Group

(2) **External Nutrient Loads Must be Managed When Controlling Internal Nutrient Loads via Hypolimnetic Oxygenation**, Alexandra B. Gerling, Virginia Tech; Jonathan P. Doubek, M.S., Virginia Tech; Kathleen D. Hamre, Virginia Tech; Zackary W. Munger, M.S., Virginia Tech; Paul A. Gantzer, PE, Ph.D., Gantzer Water Resources Engineering, LLC.; John C. Little, PE, Ph.D. Virginia Tech; Madeline E. Schreiber, Ph.D., Virginia Tech; Cayelan C. Carey, Ph.D., Virginia Tech

(3) **Hypolimnetic Oxygenation Alters Planktonic Community Structure**, Jonathan P. Doubek, M.S., Virginia Tech; Kathleen D. Hamre, Virginia Tech; Alexandra B. Gerling, Virginia Tech; Zackary W. Munger, M.S., Virginia Tech; Paul A. Gantzer, PE, Ph.D., Gantzer Water Resources Engineering, LLC; John C. Little, PE, Ph.D., Virginia Tech; Madeline E. Schreiber, Ph.D., Virginia Tech; Cayelan C. Carey, Ph.D., Virginia Tech

(4) **Integrating Micro-Floc Injection with Hybrid Oxygenation-Aeration: Applying a Theoretical Approach to Combat External Nutrient Loading**, Paul A. Gantzer, Ph.D., P.E., Gantzer Water Resources Engineering, LLC; Alexandra B. Gerling, Virginia Tech; Cayelan C. Carey, Ph.D., Virginia Tech; Mark Mobley, P.E., Mobley Engineering, Inc.; Jamie Morris, Western Virginia Water Authority

Session 4E • Floodplain Management 4 • Moderator – Don Rissmeyer, A. Morton Thomas & Associates

- (1) **Making the Most of the Community Rating System: How to Get Credit for What You Are Already Doing**, Mary-Carson Stiff, JD, CFM, Wetlands Watch; Shannon Hulst, Wetlands Watch
- (2) **Working in the Community Rating System (CRS)**, Kenneth Somerset, CBO, CZA, CFM, City of Poquoson
- (3) **What's Wrong With This Model?**, John Paine, PE, PH, CFM, AECOM
- (4) **FEMA Hazus Model Updates**, Shane Parson, Ph.D., PE, CFM, AECOM

MONDAY EVENING, MARCH 9, 2015

4:45 – 6:00 PM Reception (James River Ballroom Parlor H)

6:00 – 6:30 PM Virginia Lakes and Watersheds Association Business, Meeting Parlor F

TUESDAY MORNING, MARCH 10, 2015

7:15 – 8:15 AM Virginia Floodplain Management Association Business Meeting, Parlor E

8:30 – 9:45 AM Fifth Concurrent Sessions

Session 5A • Stormwater 5 • Moderator – Robert Jocz, Prince William County

- (1) **Municipal SWPPP Development for Stafford County – An Overview of the Process and Challenges**, Laurie M. Coffman, PE, Timmons Group; Jon D' Alessandro, Timmons Group; Paul Santay, Stafford County
- (2) **The Drones are Coming – Technologies for the Stormwater Professional**, Mike Aust, Timmons Group; Chris Dodson, PWS, Timmons Group
- (3) **Streamlining the BMP and IDDE Inspection Process with an iPad and Web-Based Reporting Solution**, Robert Jocz, Prince William County; Chris Gerecke, Timmons Group

Session 5B • Dam Safety 5 • Moderator – Turgay Dabak, Ph.D., PE, Michael Baker International

- (1) **Leaving No Stone Unturned: Virginia Dam Dragnet Initiative Searches for Unregulated Dams Throughout the Commonwealth**, Katlyn L. Amos, Division of Dam Safety & Floodplain Management, VA Department of Conservation and Recreation (DCR)
- (2) **Hundreds of Virginia Dams Found Needing Major Design Rehabilitation & Inspection**, Christopher E. Sidney, EIT, Dam Safety and Floodplain Management Division, Virginia Department of Conservation and Recreation (DCR)
- (3) **Who Regulates, Owns and Maintains Dams Within a Public Right-of-Way Owned by the Commonwealth of Virginia?**, Matthew T. Faris, PE, Koontz-Bryant, PC

Session 5C • Floodplain Issues 1 • Moderator – Seshadri Iyer, Ph.D., PE, CFM, AECOM

- (1) **NFIP Legislation Implementation Update**, Richard J. Sobota, CFM, CPCU, FEMA/DHS
- (2) **After the Wave of New FEMA Region III Coastal Hazard Studies, What's Next?, Resilient Coastal Communities**, Mari Radford, CFM, FEMA Region 3; Alison Kearns, CFM, FEMA Region
- (3) **Understanding Foundation Flood Vents and FEMA's Technical Bulletin 1**, Donald Jernigan, CFM, CDT, Smart Vent Products, Inc.
- (4) **What Can We Do About Nuisance Flooding in the Coastal Plains?**, Seshadri Iyer, Ph.D., PE, CFM, AECOM; Tim Clarke, CPM, AECOM; Jeff Waller, PE, City of Virginia Beach

Session 5D • Environmental Restoration 1 • Moderator – J. Timothy Hare, PE, CH2M HILL

- (1) **Regulatory Considerations for Permitting Shoreline Stabilization and Living Shoreline Projects**, Curtis Hickman, Kerr Environmental Services Corp.
- (2) **Applied Tidal Shoreline Stabilization Techniques, Thalia Creek, Virginia Beach, Virginia**, Patrick Shearer, PE, Water Resource Engineer, Kerr Environmental Services Corp.
- (3) **Partnering with Private Development to Restore Moore's Creek through a Variety of Stream Bank Stabilization & Buffer Restoration Actions**, Lance J. Koth, PE, Koth Consulting, P.C.; Stephen G. Werner, PG, Geo-Environmental Consulting Services, LLC
- (4) **Living Shorelines in Virginia: A Case for Stopping Recurrent Erosion While Protecting the Chesapeake Bay**, J. Timothy Hare, PE, CH2M HILL

Session 5E • Floodplain Management 5 • Moderator – M. Tariq Makhdoom, Ph.D, CFM, Dewberry

- (1) **Hampton's Tidal Flooding and Protection Plan**, Gayle E. Hicks, PE, CFM, City of Hampton
- (2) **A New Equation for Modifying the Design Coastal Flood Elevations to Consider Linear Sea Level Rise in Virginia**, Kaveh Zomorodi, Ph.D., PE, CFM, Dewberry
- (3) **Impact Of Climate Change And Sea Level Rise On Vegetation And Coastal Ecosystems**, Siva Sangameswaran, Ph.D., PE, Dewberry; Milan Pavich, Ph.D.; Methane Sreetharan, Ph.D., PE, Dewberry
- (4) **Quantifying the Impacts of Sea Level Rise on Coastal Flooding and Risk: Lessons Learned from Applied Studies**, Brian K. Batten, Ph.D., CFM, Dewberry; Joel Plummer, CFM, Dewberry; Krista Rand, CFM, Dewberry

9:45 – 10:15 AM Coffee Break

10:15 – 11:30 AM Sixth Concurrent Sessions

Session 6A • Stormwater 6 • Moderator – Troy McPherson, PE, Hazen and Sawyer, P.C.

- (1) **Outfall Rehabilitation Projects; A Program Perspective on Scopes, Costs, and Lessons Learned**, Fred Wilkins, PE, Fairfax County Stormwater Planning Division WPIB; Troy Biggs, PE, PH, D.WRE, Amec Foster Wheeler Environment & Infrastructure
- (2) **Virginia State University Stormwater Trunk Line Improvements**, Amelia C. Wehunt, PE, Timmons Group
- (3) **Meeting Energy Balance Requirements for Roadway Linear Development Projects**, Alex C. Lucado, EIT, Timmons Group; John M. Saunders, PE, Hanover County Department of Public Works; Aislinn Creel, PE, LEED AP, Timmons Group
- (4) **A Comprehensive Approach to Prioritizing Stormwater Capital Improvements**, Troy McPherson, PE, Hazen and Sawyer, P.C.; Alan Davis, PE, Hazen and Sawyer, P.C.; William VonOhlen, City of Virginia Beach Department of Public Works Operations

Session 6B • Dam Safety 6 • Moderator – Greg Paxson, PE, Schnabel Engineering

- (1) **Unraveling the Mystery of Lake Jackson Dam**, Turgay Dabak, Ph.D., PE, Michael Baker International; Chad R. Davis, PE, Michael Baker International; Mark T. Aveni, Prince William County Department of Public Works and Environmental Services; Madan R. Mohan, PE, Prince William County Department of Public Works and Environmental Services
- (2) **Lake Jackson Rehabilitation – Quality Control Testing and 3-Dimensional Monitoring**, David J. Kelly, EIT, ECS Mid-Atlantic, LLC
- (3) **James Madison University Newman Lake Dam Renovations – City of Harrisonburg, Virginia**, Michael L. Claud, PE, CFM, Timmons Group; Craig Short, James Madison University
- (4) **The Evolution of a Dam Rehabilitation Project...Coles Run Dam**, Greg Paxson, PE, Schnabel Engineering; Jesse Wullenwaber, PE, Schnabel Engineering; William Monroe, Augusta County Service Authority

Session 6C • Floodplain Issues 2 • Moderator – David Rubenstein, CFM, URS Corporation

- (1) **Levee Systems and Flood Hazard Mapping**, M. Tariq Makhdoom, Ph.D, CFM, Dewberry
- (2) **Automating HEC-RAS with Excel**, Thomas Williams, PE, Amec Foster Wheeler
- (3) **Effective Tools for Communicating Risk: Is Your Community Informed?**, David Rubenstein, CFM, URS Corporation; Robert Wiley, CFM, URS Corporation

Session 6D • Environmental Restoration 2 • Moderator – Robert Kerr, RWP, Kerr Environmental Services Corp.

- (1) **Rocky Pen Run Reservoir Mitigation and Claiborne Run Fish Blockage Removal**, Travis Crayosky, Stantec; Chris Kuhn, Stantec
- (2) **Stream Restoration Construction: The Value in Pre-Qualifying**, Phillip C. Todd, River Works, Inc.
- (3) **Catawba Creek, On-Site Stream Mitigation for the Roanoke Cement Western Quarry Expansion, Titan America, Troutville, Virginia**, Robert Kerr, RWP, Kerr Environmental Services Corp.; Lance Clark, Roanoke Cement Company, Titan America; Patrick Shearer, PE, Kerr Environmental Services Corp.; Curtis Hickman, Kerr Environmental Services Corp.

Session 6E • Floodplain Management 6 • Moderator – Mary-Carson Stiff, Wetlands Watch
Preparing Communities for Recurrent Flooding and Sea Level Rise – A Panel Discussion

- (1) Jim Redick, City of Norfolk
- (2) Emily Steinhilber, Old Dominion University
- (3) Michelle Hamor, U.S. Army Corps of Engineers
- (4) Mark Slauter, Virginia Department of Emergency Management

11:45 – 1:00 PM Luncheon

VLWA Dam Safety Committee Dam Awards:

- Best Maintained Dam, Privately Owned – Lake Salisbury Dam** in Chesterfield County owned by the Lake Salisbury Association
- Best Maintained Dam, Publically Owned – Hidden Lake Dam** in Stafford County owned by the Hidden Lake Association Service District
- Best Maintained Dam, Publically Owned – Little Creek Dam** in James City County owned by Newport News Waterworks
- Best Major Construction or Rehabilitation Project (completed prior to December 31, 2014) –Ragged Mountain Reservoir Dam** in Albemarle County owned by the Rivanna Water and Sewer Authority
- Most Improved Dam – Coles Run Dam** in Augusta County owned by the Augusta County Service Authority
- Most Improved Dam – Stony Creek Dam** in Bedford County owned by the Bedford Regional Water Authority
- Best Program, Privately Owned (three or more dams) – Reston Association** in Fairfax County
- Best Program, Publicly Owned (three or more dams) – Culpeper Soil and Water Conservation District**

Dave Pearson Watershed Excellence Award

- Harvell Dam Removal: Fish Passage and Appomattox River Restoration**, by L. Alan Weaver, Virginia Department of Game and Inland Fisheries

Keynote Address: Advancing Dam Safety & Floodplain Management Programs at Department of Conservation and Recreation, Robert T. Bennett, Director of Dam Safety and Floodplain Management at the Virginia Department of Conservation and Recreation