FINAL PROGRAM

SUNDAY, MARCH 5, 2017

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 6, 2017

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 – SWIFT – One Initiative, Many Benefits, Mr. Ted Henifin, PE, General Manager, Hampton Roads Sanitation District (HRSD)

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 – Neely L. Law, Ph.D., Center for Watershed Protection, Inc.
(2) The Growing Pains of Stormwater Management Compliance, Melissa J. Simpson, PE, LEED AP, ENV SP, WSP | Parsons Brinckerhoff
(3) Municipal Facility Stormwater Pollution Prevention Plan (SWPPP) Implementation Challenges and Solutions, Max Kuker, GKY & Associates, Inc.
(4) The Road to Oz: Unravelling the Many Paths to Achieve Cost-Effective Pollutant Load Reductions for Phase III WIPs, Neely L. Law, Ph.D., Center for Watershed Protection, Inc.; Bill Stack, PE, Center for Watershed Protection, Inc.; Laurel Williamson, Center for Watershed Protection, Inc.; Ari Daniels, Center for Watershed Protection, Inc.

Session 1B • Dam Safety 1 • Moderator – Austen Bander, PE, Bander Smith, LLC
(1) An Overview of the New and Improved Virginia Dam Safety, Flood Prevention and Protection Assistance Fund for 2017, Robert J. VanLier, PE, Dept. of Conservation and Recreation, Division of Dam Safety and Floodplain Management
(2) Virginia DCR Dam Rehabilitation Study and Report Plans for the Rehabilitation of Aging Flood Control Dams, Amanda S. Pennington, PE, Virginia Department of Conservation and Recreation (DCR)
(3) For Dams Without a Working Bottom Drain, Draining Pond by Siphoning, How and Why, Author: Thomas I. Roberts, PE, CFM, Virginia Department of Conservation and Recreation; Presenter: Cameron Smith, Bander Smith, LLC)
(4) Experiences with Low Level Drain Valves on Dams in Virginia, Austen Bander, PE, Bander Smith, LLC

Session 1C • Banks, Trading, and Funding • Moderator – Jim Novak, EIT, ENV SP, LEED Green Associate, WSP | Parsons Brinckerhoff
(1) Demystifying Innovative Financing and Project Delivery Approaches for Green Stormwater Infrastructure, Seth P. Brown, PE, Storm & Stream Solutions, LLC

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(2) Mossy-Creek North River Environmental Bank: Case Study in Sediment and Nutrient Reduction, Brian Wagner, Ecosystem Services, LLC; Annemarie Abbondanzo, M.S., Ecosystem Services, LLC

(3) Non-Point Source Water Quality Credit Trading and the Nutrient Credit Marketplace, Casey J. Jensen, Chesapeake Bay Nutrient Land Trust (CBNLT)

(4) More Bling for Your Cha-Ching – Efficiently Utilizing SLAF Grant Funds, Jim Novak, EIT, ENV SP, LEED Green Associate, WSP | Parsons Brinckerhoff; Melissa J. Simpson, PE, LEED AP, ENV SP, WSP | Parsons Brinckerhoff; Sam Sawa, PE, City of Chesapeake

Session 1D • BMP Maintenance and Inspection 1 • Moderator – Brian Finerfrock, PE, RK&K

(1) Inspection of Stormwater Controls for Better Performance, Ryan O'Banion, Hazen and Sawyer; Karlee Copeland, Fairfax County

(2) Evaluation of Publicly Maintained Permeable Surfaces with a Focus on Proper Installation and Maintenance, Asad Rouhi, Ph.D., Northern Virginia Soil and Water Conservation District; Daniel N. Schwartz, Northern Virginia Soil and Water Conservation District; Heather Ambrose, Fairfax County Department of Public Works and Environmental Sciences

(3) It's All in the Cards: Communicating the Maintenance History and Goals of Enhanced Extended Detention (EED) Facilities, Susanna G. Orndorff, GKY and Associates, Inc.; John N. Burke, Fairfax County Stormwater Management

(4) The Good, the Bad, the Ugly in Post-Construction BMP Inspections – A Lessons Learned of BMPs After Construction, Brian Finerfrock, PE, RK&K, LLP; Erin Cox, EIT, RK&K, LLP

Session 1E • Floodplain Management 1 • Moderator – Jeff Smith, PE, PMP, CFM, AECOM

(1) USGS Flood Monitoring in Virginia, R. Russell Lotspeich, U.S. Geological Survey Virginia and West Virginia Water Science Center

(2) High Tides, High Precipitation and High Groundwater: Coastal Flooding and the Water Cycle Virginia, Kurt McCoy, U.S. Geological Survey Virginia and West Virginia Science Center; R. Russell Lotspeich, U.S. Geological Survey Virginia and West Virginia Science Center

(3) New Design Coastal Tailwater Table for Virginia Beach and Norfolk, Kaveh Zomorodi, Ph.D., PE, CFM, Dewberry; Gregory Johnson, PE, City of Virginia Beach; Brian K. Batten, Ph.D., CFM, Dewberry

(4) Leveraging FEMA’s Published Discharge Data for Needs Assessment and Trend Analysis, William Jiang, PE, CFM, AECOM; Jeff Smith, PE, PMP, CFM, AECOM

10:30 – 10:45 AM Coffee Break

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

Session 2A • Stormwater 2 • Moderator – Shelly Frie, PE, CH2M HILL

(1) Loudoun County's Evolving Approach to Identifying and Eliminating Illicit Discharges, Part II, Jason W. George, CFM, GKY & Associates, Inc.; Chris Stone, CFM, PG, Loudoun County Department of General Services

(2) Playing in the Mud (Lynnhaven River Now's Stewardship and Access Committee), Eric S. Loescher, EIT, Timmons Group

(3) The National Green Infrastructure Certification Program, Brice Kutch, PE, GKY & Associates, Inc.; Karlee Copeland, Fairfax County, Maintenance and Stormwater Management Division

(4) Getting People (and Their Dogs) Motivated about Cleaner Stormwater, Shelly Frie, PE, CH2M HILL

Session 2B • Dam Safety 2 • Moderator – Rebecca Evans, United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS)

(1) A Rocky Road at Stony Creek – The Challenges of Rehabilitating Two NRCS Flood Control Dams Simultaneously; Stoney Creek Dams #9 and #10, Lake Laura and Lake Bird Haven, Shenandoah County, VA, Jonathan M. Pittman, PE, Schnabel Engineering; Daniel Cox, VA DCR Design and Construction
(2) **A Simplified Design Guide to Utilizing ACB’s in Dam Rehabilitations**, Jim Nadeau, ACF Environmental; Susan McGhee, PE, PMP, Gannett Fleming, Inc.

(3) **Developing a Small Dam Repair Prioritization and Selection Process for District Owned Dams (Putting a Round Peg in a Square Box)**, Charles T. Wilson, PE, Virginia Department of Conservation and Recreation – Division of Soil and Water Conservation

(4) **Rehabilitation of Todd Lake Dam, The Construction Phase**, Rebecca Evans, United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS)

### Session 2C • Water Quality and Drainage • Moderator – Dan I. Sweet, PLA, City of Charlottesville

1. **Little Things Matter, Incorporating Water Quality into Drainage Improvement Projects**, Lisa Jeffrey, PE, Hazen and Sawyer; Fran Geissler, James City County
2. **Equipping Homeowner Associations to Manage and Maintain Their Stormwater Infrastructure**, Frances C. Geissler, James City County; John M. Fuqua, James City County; Phillip Doggett, James City County
3. **Utilizing SWMM to Solve Residential Drainage Issues – A Case Study, Loudoun County, Virginia**, Jon D’Alessandro, PE, Timmons Group; Rich Brawley, PE, Timmons Group

### Session 2D • BMP Maintenance and Inspection 2 • Moderator – J. Douglas Fritz, CPESC, GKY & Associates, Inc.

1. **Lifecycle of Urban Green Infrastructure: 5 Years After Pilot Implementation**, Matthew P. Jones, Ph.D., PE, Hazen and Sawyer
2. **Prioritizing Increasing BMP Maintenance Requirements with Decreasing Budgets**, Kay Cabe, PE, Associate, EEE Consulting, Inc.

### Session 2E • Floodplain Management 2 • Moderator – Shane Parson, Ph.D., PE, CFM, AECOM

1. **MAP Virginia’s Floodplains with Greater Accuracy**, Jangwoan Choi, Ph.D., CFM, Stream Methods, Inc.; John Sun, Stream Methods, Inc.
2. **HEC-RAS 101: Introduction to River Modeling**, David M. Gunn, PE, CFM, Henrico County Department of Public Works

**12:15 – 1:15 PM Luncheon**

### MONDAY AFTERNOON, MARCH 6, 2017

**1:30 – 2:45 PM Third Concurrent Sessions**

#### Session 3A • BMPs 1 • Moderator – Robert Kerr, RWP, Kerr Environmental Services Corp.

3. **Regenerative Stormwater Conveyance Channels Construction in the Coastal Plain - Lessons Learned**, Robert Kerr, RWP, Kerr Environmental Services Corp.; Shawn Gordon, PE, James City County.

#### Session 3B • Dam Safety 3 • Moderator – David A. Krisnitski, PE, CFM, Froehling & Robertson, Inc.

3. **No Dam Failure Before Its Time – A Dam in a Conflict**, Jonathan T. Phillippe, PE, LS, J. T. Phillippe, PE, LS.
4. **Dam Safety – Crab Orchard Dam, Bland, VA**, David A. Krisnitski, PE, CFM, Froehling & Robertson, Inc.

#### Session 3C • Flood Issues 1 • Moderator – Scott Blossom, Stantec

4. **Introducing the Commonwealth Center for Recurrent Flooding Resiliency (CCRFR)**, Emily E. Steinhilber, Old Dominion University.

#### Session 3D • Watersheds and TMDLs • Moderator – Deva K. Borah, Ph.D., PE, F.ASCE, City of Chesapeake

1. **Leveraging the GIS Platform for Watershed Analysis and Identification of Green Infrastructure Opportunities**, P. Eric Mains, PE, Gannett Fleming, Inc.
3. **Harmful Aquatic Bloom Management Provides Potential TMDL Credits**, Bruce W. Schwenneker, Ph.D., Whitman Requardt and Associates, LLP; Ron Harris, PG, Newport News Waterworks Department.

#### Session 3E • Floodplain Management 3 • Moderator – M. Tariq Makhdoom, Ph.D., CFM, Atkins

1. **Hurricane Matthew Impact on Southeast Virginia**, Lee Brancheau, FEMA Region III; Zane Hadzick, FEMA Region III.
Survey Results from Flood Prone Communities, Mark Slauter, CFM, Virginia Department of Emergency Management

Understanding Flood Opening Regulations, Kurt Luecke, CFM, Smart Vent Products Inc.

2:45 – 3:15 PM  Coffee Break

3:15 – 4:30 PM  Fourth Concurrent Sessions

**Session 4A • BMPs 2 • Moderator – Sean Simonpietri, EXACT Stormwater Management, LLC**

1. Potential of CU-Soil™ as a New Stormwater BMP, Christopher W. Fields-Johnson, M.S., Davey Institute, a Division of the Davey Tree Expert Company; Kateri S. Shreve, PE, LEED AP, VCCO, Luck Ecosystems


**Session 4B • Dam Safety 4 • Moderator – Benjamin Israel-Devadason, PE, CFM, Gannett Fleming, Inc.**

1. An Insight into DCR's Dam Break Modeling and Mapping World, David P. Wilmoth, PE, CFM, PH, Virginia Department of Conservation and Recreation (DCR)

2. Improving an NRCS-Type Water Supply Dam to Safely Pass Its Spillway Design Flood, N. Johan Anestad, PE, O'Brien & Gere Engineers, Inc.

3. Lake Bird Haven Dam: A Story of One vs. Two Dimensional Hydraulic Modeling, Maridee Graves, PE, Schnabel Engineering; Jonathan M. Pittman, PE, Schnabel Engineering; Daniel Cox, VA DCR Design and Construction

4. Why CFD Modeling Should Be a Spillway Designer’s Best Friend, Benjamin Israel-Devadason, PE, CFM, Gannett Fleming, Inc.; Paul G. Schweiger, PE, CFM; Gannett Fleming, Inc.

**Session 4C • Flood Issues 2 • Moderator – Cheryl B. Hannan, PE, CFM, AECOM**

1. NC Flood Warning System: Ground Truth Comparisons During Hurricane Matthew, Kurt Golembesky, PE, CFM, North Carolina Floodplain Mapping Program (NCFMP), Division of North Carolina Emergency Management; David Key, PE, CFM, ESP Associates, P.A.

2. Flooding from Tropical Storm Julia Followed by Hurricane Matthew on a Virginia Coastal-Plain City: Lessons Learned and Remediation Planning, Sam Sawan, PE, City of Chesapeake; Kelly Mills, PE, City of Chesapeake; Deva Borah, Ph.D., PE, F.ASCE, City of Chesapeake; Indra Paudel, PE, City of Chesapeake; Arnold Lucero, City of Chesapeake; Cole Stinnette, City of Chesapeake

3. In and Out Letter of Map Revision (LOMR) (Greasing the Wheels of the LOMR Process), Cheryl B. Hannan, PE, CFM, AECOM

**Session 4D • Coastal Issues • Moderator – Mark A. Jones, PE, City of Virginia Beach**

1. Coastal Area Drainage Issues: What Can Be Done? – Step Back and Take a Big Picture! Seshadri Iyer, Ph.D., PE, CFM, AECOM; Bill Walker, PE, AECOM; Jeff Waller, PE, City of Virginia Beach

2. Chesterfield Heights – Coastal Community of the Future, Scott A. Smith, PE, LS, City of Norfolk

3. Coastal Resiliency and Shoreline Restoration: Restoring Miles of Shorelines and Acres of Wetlands and Oysters, Ben Nash, PLA, Brown and Caldwell; C. W. Gaskill, Jr., PE, City of Norfolk

4. Proactive Hurricane Protection in Virginia Beach, Mark A. Jones, PE, City of Virginia Beach; Jamie Bondurant, PE, Hazen and Sawyer

(1) Virginia Flood Risk Information System, Gina DiCicco, AICP, CFM, Virginia Department of Conversation & Recreation Division of Dam Safety and Floodplain Management; Charley Banks, CFM, Virginia Department of Conversation & Recreation Division of Dam Safety and Floodplain Management

(2) Permitting All Development in the SFHA: A Dilemma that must be Addressed, Charley Banks, CFM, Virginia Department of Conversation & Recreation Division of Dam Safety and Floodplain Management

(3) NFIP Legislation Implementation Update, Richard J. Sobota, CPCU, FEMA Region III

(4) The NFIP’S Community Rating System: Bridging Adaptation Gaps in Coastal Communities, Mary-Carson S. Stiff, CFM, JD, Wetlands Watch

MONDAY EVENING, MARCH 6, 2017

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 7, 2017

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

8:30 – 9:45 AM Fifth Concurrent Sessions

Session 5A • BMP Site Selection • Moderator – Mira Micin, Brown and Caldwell

(1) Henrico Countywide Energy Dissipater Retrofit Assessments, Alex Lucado, EIT, CFM, Timmons Group

(2) Using SUSTAIN to Find Potential Locations and Costs of BMPs, John E. Schooler, Jr., PE, Woolpert, Inc.

(3) Considerations for Selecting BMP Sites in Rural Locations, Mira Micin, Brown and Caldwell

Session 5B • Flood Modeling 1 • Moderator – Alaurah Moss, Dewberry Engineers

(1) Hydraulic Modeling to Verify Depths for Major Intersections Known to Flood Outside of the Regulatory Floodplain, Celeste R. Ostman, EIT, CH2M HILL; Laurens Van der Tak, PE, D.WRE, CH2M HILL

(2) Innovative Two-Dimensional Modeling for Stormwater Flood Mitigation, Maged Aboelata, Ph.D., PE, CFM, AECOM; Brian Rahal, PE, CFM, City of Alexandria; Joni Calmbacher, PE, CFM, City of Alexandria

(3) Coastal Water Table Mapping: Incorporating Groundwater Data Into Flood Inundation Forecasts, Alaurah Moss, Dewberry Engineers; Marco Marani, Ph.D., Duke University

Session 5C • Environmental Restoration • Moderator – Sravan Krovidi, PE, CFM, Amec Foster Wheeler

(1) County-Wide Stream Assessments, Matthew Webb, EIT, Timmons Group

(2) Functional Lift for Stream Assessments and Restoration, Kelly S. Mattfield, PE, Brown and Caldwell

(3) Materials Management as a Major Cost Driver in Environmental Restoration Construction, and Analysis of the White Marsh Stream Restoration and Sanitary Sewer Stabilization Project, Katrina Emery, Environmental Quality Resources, LLC; Rick Scaffidi, Environmental Quality Resources, LLC; Ken Williams, Environmental Quality Resources, LLC

(4) The Largest Wildlife Refuge Restoration Project in Eastern U.S., Sravan Krovidi, PE, CFM, Amec Foster Wheeler
Session 5D • Water Quality 1 • Moderator – Stephanie Smith, Brown and Caldwell

(1) What's in Your Water? Experiential Education and Well Water Testing for High School Students and Their Families, Erin Ling, MS and M. EPC, Virginia Tech and Virginia Cooperative Extension; Rachelle Rasco, MEd, Carroll County High School; Gabrielle Coleman, BS, Carroll County High School; Randy Webb, Ph.D. Candidate, Virginia Tech and Carroll County High School; Alan Webb, MEd, Carroll County High School; Dwayne Huff, MAT, Carroll County High School; Hannah Scherer, Ph.D., Virginia Tech and Virginia Cooperative Extension

(2) Case Study – Contamination of Groundwater from Coal Ash Ponds and Possible Remediation Techniques using the Duke Energy Sutton North Carolina Facility, Victoria Njuki, Old Dominion University; Nathan Guess, Old Dominion University; Jaewan Yoon, Ph.D., Old Dominion University

(3) Management Alters Carbon Dioxide and Methane Dynamics in Drinking Water Reservoirs, Ryan P. McClure, Virginia Tech; Mary E. Lofton, Virginia Tech; Shengyang Chen, University of Sydney; Nicole K. Ward, MS, Virginia Tech; Jonathan P. Doubek, MS, Virginia Tech; Charlotte W. Harrell, Virginia Tech; Katie Krueger, Virginia Tech; Barbara R. Niederlehner, MS, Virginia Tech; Madeline E. Schreiber, Ph.D., Virginia Tech; Cayelan C. Carey, Ph.D., Virginia Tech

(4) A Data Management Strategy for MS4 Permit Compliance by the City of Virginia Beach, Stephanie Smith, Brown and Caldwell; Diana St. John, PE, City of Virginia Beach; Co-Presenter: Melanie Coffey, City of Virginia Beach

Session 5E • Floodplain Management 5 • Moderator – Turgay Dabak, Geosyntec Consultants, Inc.

(1) FEMA Risk MAP and Hazus Model: The Latest Updates for Hazus and Related Risk MAP Standards and Guidance, Shane Parson, Ph.D., PE, CFM, AECOM

(2) Not all Hazus Analyses are Created Equal: How to Get the Most Accurate Hazus-Estimated Flood Losses, Brandon Cramer, Amec Foster Wheeler

(3) Shall We Play a Game? Michelle L. Hamor, CFM, U.S. Army Corps of Engineers, Norfolk District

(4) Understanding the Risks and Consequences of Earthquakes on a Semi-Hydraulic Fill Dam, Lucas de Melo, Ph.D., PE, Geosyntec Consultants, Inc.; Glenn Rix, Ph.D., Geosyntec Consultants, Inc.

9:45 – 10:15 AM Coffee Break

10:15 – 11:30 AM Sixth Concurrent Sessions

Session 6A • BMP Retrofits • Moderator – Sheila Reeves, PE, Timmons Group


(2) Making the Most of a Retrofit, Umar Shahid, PE, PMP, LEED AP, AECOM; Sara DeGroot, PE, CFM, City of Alexandria

(3) Big Benefits from Public-Private Partnerships for Dry Pond Retrofits, Stavros Calos, County of Albemarle; Laurel Williamson, Center for Watershed Protection, Inc.; Ari Daniels, EIT, Center for Watershed Protection, Inc.

(4) Jefferson Park BMP Retrofit: Construction Case Study, Sheila Reeves, PE, Timmons Group; Trafford McRae, City of Waynesboro, VA

Session 6B • Flood Modeling 2 • Moderator – Adrienne K. Shaner, PE, Gannett Fleming, Inc.

(1) Projecting the Change in Heavy Rainfall Under Future Climate Scenarios, Jason Giovannettone, Ph.D., Dewberry; Dmitry Smirnov, Ph.D., Dewberry; Gregory Johnson, PE, City of Virginia Beach; Shanda Davenport, PE, AICP, CFM, City of Virginia Beach; Brian K. Batten, Ph.D., CFM, Dewberry

(2) The New NRCS Rainfall Distributions and How They Will Change Your Hydrologic Analysis Results, Steve Godfrey, PE, CFM, Woolpert, Inc.

Session 6C • Lake and Reservoir Management • Moderator – W. Weedon Cloe III, Chesterfield County Department of Environmental Engineering

1. **Wilde Lake Dredging & Aquatic Bench Design**, Chris Nelson, EIT, Timmons Group
2. **Retrofit Forebays – More to it than You'd Think**, Laurie Coffman, PE, Timmons Group
3. **Challenges of Permitting Chesapeake Bay Preservation Act Water Dependant Structures in the Swift Creek Reservoir**, W. Weedon Cloe III, Chesterfield County Department of Environmental Engineering

Session 6D • Water Quality 2 • Moderator – Christopher Mihalkovic, Old Dominion University

2. **Effects of Epilimnetic Mixing on Algae Populations: Implications for Management**, Mary E. Lofton, Virginia Tech; Ryan P. McClure, Virginia Tech; Shengyang Chen, University of Sydney; Charlotte Harrell, Virginia Tech; Katie Krueger, Virginia Tech; Madeline Schreiber, Ph.D., Virginia Tech; John Little, Ph.D., Virginia Tech; Cayelan C. Carey, Ph.D., Virginia Tech
3. **Reservoir Discharge and Management are Important Drivers of Zooplankton Community Structure Across the Continental United States**, Jonathan P. Doubek, M.S., Virginia Tech; Michael Lavender, Queen's University; Amanda K. Winegardner, McGill University; Marieke Beaulieu, Université de Sherbrooke; Patrick T. Kelly, Ph.D., University of Miami-Ohio; Cayelan C. Carey, Ph.D., Virginia Tech; Amina I. Pollard, Ph.D., U.S. Environmental Protection Agency; Dietmar Straile, Ph.D., University of Konstanz; Jason D. Stockwell, Ph.D., University of Vermont
4. **Wetland Plantings and Their Relationship to Salinity Regimes**, Christopher Mihalkovic, Old Dominion University; Nathan Sturre, Old Dominion University; Jaewan Yoon, Ph.D., Old Dominion University

Session 6E • Floodplain Management 6 • Moderator – Mark Slauter, CFM, Virginia Department of Emergency Management

**Dam Safety Panel Discussion**

1. Jill C. Stewart, PE, South Carolina Department of Health & Environmental Control – Dam Safety and Stormwater Permitting Division
2. John Kaylor, Headwaters Soil & Water Conservation District
3. Thomas Roberts, Virginia Department of Conversation & Recreation Division of Dam Safety and Floodplain Management
4. Mike Winters, Dominion Power Generation Engineering

11:45 – 1:00 PM Luncheon

**VLWA Dam Safety Committee Dam Awards:**

- **Best Maintained Dam, Publicly Owned – Newman Lake Dam** in the City of Harrisonburg owned by James Madison University
- **Best Rehabilitation Projects – Stony Creek Dam #9 & #10 (Lake Laura & Bird Haven Lake)** in Shenandoah County owned by Lord Fairfax Soil and Water Conservation District
- **Most Improved Dam, Private – Crab Orchard Creek Dam** in Bland County owned by IMOK LLC
Dave Pearson Watershed Excellence Award

Making the Most of a Retrofit, by Umar Shahid, PE, PMP, LEED AP, AECOM; Sara DeGroot, PE, CFM, City of Alexandria

Keynote Address – South Carolina's Dam Safety Program – Before and After the Flood, Ms. Jill C. Stewart, PE, Director, Dam Safety and Stormwater Permitting Division, South Carolina Department of Health & Environmental Control