



Introduction to Alternative Practices to Manage Highway Runoff May 18, 2006 (1:00 – 2:30 p.m., EDT)

Speaker and Moderator Bios

Moderator

**Rod Frederick, P.E., F. ASCE
Environmental Engineer
US Environmental Protection Agency**

Rod Frederick was born and raised in Maryland. He graduated from Baltimore Polytechnic Institute and went on to receive his Civil Engineering Degree from the University of Maryland in College Park. After graduating in 1966, Rod took a job as a civilian engineer for the Navy, where he transitioned from designing buildings, roads, and utilities to designing and operating wastewater treatment systems, and eventually became in charge of complying with air, land, and water regulations at 26 naval bases. Rod arrived at EPA in 1971; just six months after the agency opened its doors. Over his years with the agency, Rod has helped develop numerous regulations and has been a key player across a variety of specialized programs, largely focused on industrial and municipal wastewater treatment and drinking and surface water quality. He recently developed EPA National Urban Nonpoint Source Guidance for the most cost-effective practices to control urban pollution. Rod is married and has helped raise three children of his own. He and his wife have also provided emergency foster care for over 500 children. Rod is a Certified Professional Engineer in Virginia and has been elected as a Fellow of the American Society of Civil Engineers.

Speakers

**Neil Weinstein, P.E., R.L.A., AICP
Executive Director, Low Impact Development Center, Inc.**

Mr. Weinstein is the Executive Director of the Low Impact Development Center, Inc, a non-profit water resource research organization. Mr. Weinstein has over 20 years of experience in water resource research, planning, and design. This includes development of national policy documents on Best Management Practices (BMP's) and Total Maximum Daily Loads (TMDL's), stormwater and wetlands models, water conservation, stream restoration, watershed master plans, NPDES permitting, and site design. He is a qualified expert witness on land use, zoning, and environmental issues. As the Director

of the Low-Impact Development Center he is responsible for directing research, training, and seminars on the integration of Low Impact Development technology into ultra-urban, suburban, and rural environments.

Larry Schaffner

Stormwater Team Lead, Environmental Services Office

Washington State Department of Transportation

As a senior environmental policy specialist for the Washington State Department of Transportation's stormwater program, Larry is responsible for the development and implementation of the department's stormwater management program. Prior to working for Washington State, Larry spent eight years as a planner for Lane Council of Governments in Oregon where he managed numerous projects that involved creating forums for jurisdictions, agencies, and citizens to collaboratively resolve various natural resource, land use, and transportation issues. Before his tenure as a planner, Larry spent nearly 10 years in parks operations and management working for various federal, state, and local agencies. Larry holds a master's degree in Urban and Regional Planning from the University of Oregon and a bachelor's degree in Outdoor Recreational Planning and Management from the University of Illinois at Urbana-Champaign.

Karuna Pujara, P.E.

Chief, Highway Hydraulics Division

Maryland State Highway Administration

Karuna has twenty-two years of experience in Civil Engineering with focus in hydrologic and hydraulic analysis and design of hydraulic structures. She has been working with the Maryland State Highway Administration for past fourteen years and currently with the Highway Hydraulics Division as a Division Chief. Karuna has a Masters of Environmental and Water Resource Engineering and is a registered Professional Engineer.

Her experience includes storm drain culvert analysis and design, channel hydraulic studies, storm water management (SWM), erosion and sediment control (ESC) design, watershed studies, Non-point Discharge Elimination system (NPDES) permitting and program, stream stabilization projects, pump station design, technical review of projects, consultant contract procurement, consultant management and management of division consisting of twenty five full time Civil Engineers. Additionally, her experience includes preparation of plans, specifications, cost estimate, and obtain and negotiate permits from Federal and State review agencies for highway projects. She also has an active role in developing and maintaining the Erosion and Sediment Control Program for SHA. She is currently serving on the teams upgrading standards for Erosion and Sediment Quality Assurance Rating System, the Erosion and Sediment Control Incentive/Disincentive, and the Erosion and Sediment Control Training and Certification. In her position she manages annual budget of \$15M to \$20M for Storm Water Management facilities, NPDES efforts and drainage improvement projects statewide.

Ms. Patricia A. Cazenias, P.E., L.S.

Highway Engineer, Federal Highway Administration, U.S. Department of Transportation, (Washington, D.C.)

Patricia Cazenias has over 10 years experience with the Water and Ecosystems Team in FHWA's Planning, Environment and Realty office at headquarters. She deals with environmental regulations, concepts, practices and procedures as they relate to highway water quality issues. She serves as the national advisor on water quality control, water resources, stormwater management and water resources coordination in connection with Federal-aid highway programs. She has over 20 years experience in both government and consulting engineering firms. Patricia Cazenias has her B.S. in civil engineering from Virginia Tech and is a registered professional engineer and licensed land surveyor in Virginia.