Stormwater Management Training and Software to Meet New Rules, Regulations and Practice

BMPFast

Marty Wanielista

Harvey Harper

Dingbao Wang

Ron Eaglin

Introduction

December 28, 2025

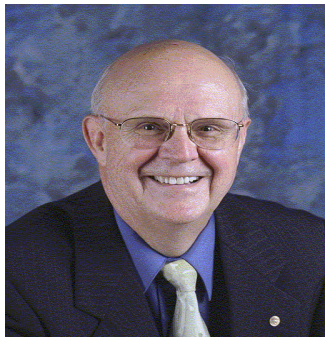
Faculty Profile

Dr Eaglin is a professor at Daytona State College.
He has at least 40 years of programming in many diversified fields of practice. He holds degrees in Mechanical and Environmental Engineering.
He specializes in computer applications and cyber security.

Dr Harper is president of ERD.
He has 40+ years of experience in stormwater management research, teaching and design.
He holds degrees in Limnology, environmental sciences, and Environmental Engineering.
He specializes in water quality and evaluation of Stormwater BMPs

Faculty Profile

Dr Wang is professor of engineering at the University of Central Florida.
He has 15+ years of experience in teaching and research at UCF.
He holds degrees in Civil Engineering.
He specializes in water resources system modeling and programming.



Dr Wanielista is professor emeritus at the University of Central Florida.
He has 55+ years of experience in stormwater management.
He holds degrees in Civil Engineering, Sanitary Engineering and Environmental Systems Engineering.
He specializes in Stormwater BMPs and has 7 textbooks in the area of water resource management

Why are you here?

1. Collect information on the new rules, regulations and practice affecting an Environmental Resource Permit (ERP) and Basin Management Action Plans (BMAPs).
2. Address getting an ERP permit as fast as possible while ensuring consistency with new rules, regulations and practice.
3. Understand the BMPFast software.
4. Earn a certificate of competency after completing a test.
5. Obtain more understanding and training for stormwater management.

Who is interested in this?

In general, professionals who are interested in stormwater management.

A mixed level of involvement Including or classified as those who have

1. Written past stormwater software (BMPTrains, OPSEW, SWIMM, SMADA, RETEN, LEASTS, LOADER, PAVER and others). Or software programmers.
2. Provided details on the content of new laws (foreign IP), regulations (AHs), and practice. Or both current ERP Reviewers and Applicants.
3. Minimal knowledge now but want to become competent to complete and review ERP, BMAP and other applications.
4. Advanced knowledge that is used to complete and review ERP and BMAP applications.

Initial Listing of **Learning Modules identified in 2025**

1. Introduction.
2. Stormwater History and Permitting.
3. Understanding new laws, regulations and practices.
4. Rainfall Characteristics.
5. Site Characteristics with Rainfall and Performance Standards.
6. Runoff Generation.
7. Runoff Characteristics and EMCs.
8. Calculations of Runoff Loadings.
9. Catchment Characteristics.
10. Retention.
11. Retention Analysis.
12. Wet Detention.
13. Wet Detention Analysis.
14. Significance of Concentrations.
15. Stormwater Harvesting.
16. Example Competency Test Problems.

Trying to keep each learning module to no more than 20 minutes for on-line viewing.
The content can be viewed many times and at a pace suitable to the user. FAQ are our guide for the learning modules title and content.

Additional Learning Modules Being Considered

1. Swale Performance and Analysis.
2. Swale Analysis.
3. Significance of Concentration and TN and TP Species in Filtration.
4. Sorption Media Analysis.
5. Rain Garden as an LID (GSI) BMPs.
6. Rain Gardens Analysis.
7. Disconnecting DCIA Analysis.
8. Permeable Pavement Design and Analysis.
9. Gross Pollutant Separators and Analysis with User Input.
10. Greenroof Treatment Performance and Analysis.
11. Alum Treatment and Analysis.
12. User Defined BMPs (those not specific to the software).
13. Vegetated Filter Strips (VFS) Analysis.
14. Treatment Train Examples.
15. Series of BMPs (treatment train) in one catchment.
16. Many catchment configurations.
17. Cost analysis. Certainly not last and is required by A.H. Vol 1

The BMPFast Software

The professional version of the software can be downloaded from https://bmpfast.com/download

Each person has the opportunity to earn a certificate of competency after completing a test

Use the blog on BMPFast web site to discuss ideas or make suggestions.

Initiating the Training Software

BMPFast

BMPFast 2025

Welcome to BMPFast 2025

Software by: Marty Wanielista, Ron Eaglin, Harvey Harper, and Dingbao Wang

Input for improvements to content was from professionals representing local and state government agencies as well as from the academic and consulting areas. This software is in agreement with State laws on the distribution of intellectual property as well as current practice related to applicant handbooks, research, and regulatory decisions made through 2025.

Disclaimer: The user is responsible for all input data and an understanding and navigation of the software.

Enter Valid User Email:

Enter Validation Code:

About BMPFast Validation

After paying a fee for the training information, documentation, and software, a validation code will be sent.

Stormwater Management Training and Software to Meet New Rules, Regulations and Practice

Marty Wanielista

Harvey Harper

BMPFast

Dingbao Wang

Ron Eaglin

THANK YOU for your interest in stormwater management

ERD Water Quality Engineering

Florida Department of Environmental Protection

University of Central Florida