

GWLF Modeling and Development of Benthic TMDLs: A Workshop for Department of Environmental Quality TMDL Project Managers

January 21-22, 2004

1. Introduction

1.1. *Workshop Trainer:* Gene Yagow, PhD

1.2. *Workshop Objectives*

- To provide hands-on experience with the GWLF model as it is used for TMDL development studies in Virginia.
- To provide guidelines for evaluating TMDL modeling performed with the GWLF model.
- To enhance the Project Manager's ability to more effectively communicate with TMDL contractors.

1.3. *Workshop Schedule*

Wednesday, January 21st

1:00 – 1:30 pm..... Introduction

1:30 – 2:00 pm..... Benthic Community Assessment

2:00 – 3:30 pm..... Stressor Analysis

Exercise 1: Stressor Analysis for Dirty Creek

3:30 – 3:45 pm..... Break

3:45 – 4:30 pm..... The Reference Watershed Approach

4:30 – 6:00 pm..... Introduction to GWLF

Creating GWLF Model Input Files

6:00 – 8:00 pm..... Dinner

8:00 – 10:00 pm..... Running the GWLF Model

Exercise 2: Using the GWLF DOS Interface

Exercise 3: Assembling GWLF input files for a new

watershed

Exercise 4: Running the VT-modified GWLF Model

Data Needs and Sources

Thursday, January 22nd

7:30 – 8:30 am..... GWLF Hydrologic Calibration

Baseflow Separation using HYSEP

Exercise 5: Hydrologic Calibration

8:30 – 9:30 am..... Post-Processing GWLF Model Output

Exercise 6: TMDL Load Calculation

The GWLF Post-Processing Spreadsheet

10:15 – 10:30 am..... Break

10:30 – 11:30 am.....

Exercise 7: GWLF Checklist for TMDL Project

Managers

11:30 – 12:30..... Questions and Discussion