Tennessee Department of Transportation

# Statewide Storm Water Management Plan



## Public Meeting
## TDOT Region 1 Auditorium

February 8th, 2007

# Project Overview

- **Statewide Storm Water Management Plan (SSWMP)**

  A collection of program recommendations, procedures and new guidance material.

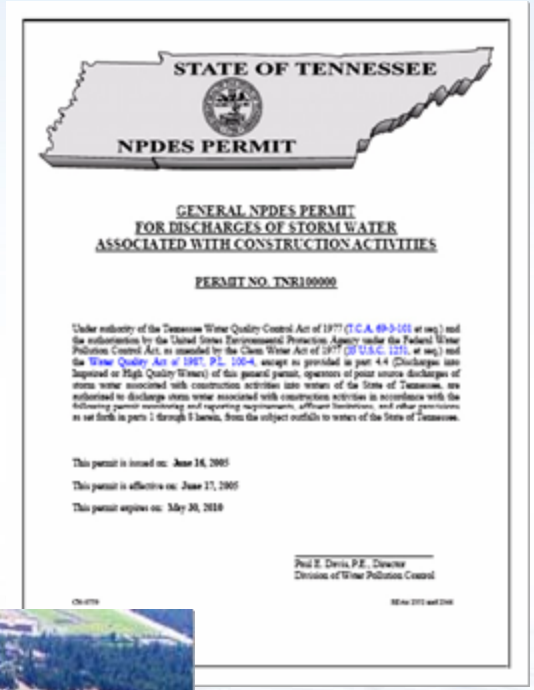
- **Purpose –**

  A plan to protect streams and implement erosion prevention and sediment control measures for TDOT construction projects.

- **TDOT partnered with the Tennessee Department of Environment and Conservation (TDEC) to Develop the SSWMP.**

# Background

- **TDOT is required to comply with the Federal Clean Water Act**
- **TDEC is responsible for regulatory permitting for TDOT construction projects**
- **TDOT and TDEC will jointly monitor construction sites to ensure compliance**


STATE OF TENNESSEE

NPDES PERMIT

GENERAL NPDES PERMIT
FOR DISCHARGES OF STORM WATER
ASSOCIATED WITH CONSTRUCTION ACTIVITIES

PERMIT NO. TNR100000

Under authority of the Tennessee Water Quality Control Act of 1977 (T.C.A. 69-3-101 et seq.) and the authorization by the United States Environmental Protection Agency under the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (33 U.S.C. 1251, et seq.) and the Water Quality Act of 1987, P.L. 100-4, except as provided in part 4.4 (Discharges into Impaired or High Quality Waters) of this general permit, operators of point source discharges of storm water associated with construction activities into waters of the State of Tennessee, are authorized to discharge storm water associated with construction activities in accordance with the following permit monitoring and reporting requirements, effluent limitations, and other provisions as set forth in parts 1 through 8 herein, from the subject outfalls to waters of the State of Tennessee.

This permit is issued on: June 16, 2005

This permit is effective on: June 27, 2005

This permit expires on: May 30, 2010

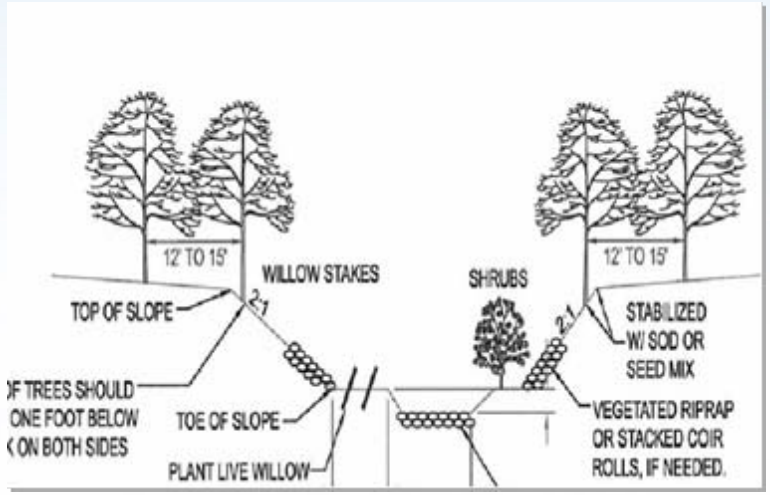
Paul E. Davis, P.E., Director
Division of Water Pollution Control

Partners in Cleaner Construction
TDEC TDOT
RBF CONSULTING

# How TDOT Develops a Project

# SSWMP Elements – Planning

- **Revisions to TDOT's Environmental Procedures Manual**
  - Resources: Streams, springs, wetlands, protected species habitat
    - Step 1: Identify resources
    - Step 2: Avoid resources
    - Step 3: Mitigation – Onsite
    - Step 4: Mitigation – Offsite




- **Ensure identified resources are protected during construction**

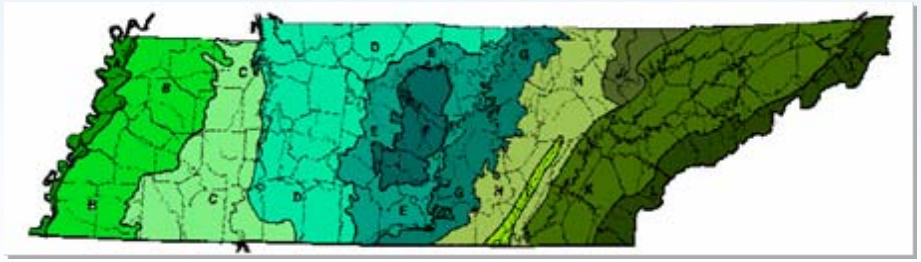
# SSWMP Components – Planning (cont'd)

- **Early Coordination and Organization**
  - Internal: Interdisciplinary Project Planning Team
  - External Agencies: FWS, TVA, USACE, TDEC, TWRA

- **New Project Tools**
  - Statewide Environmental Management System
  - Commitment Tracking (PPRM)

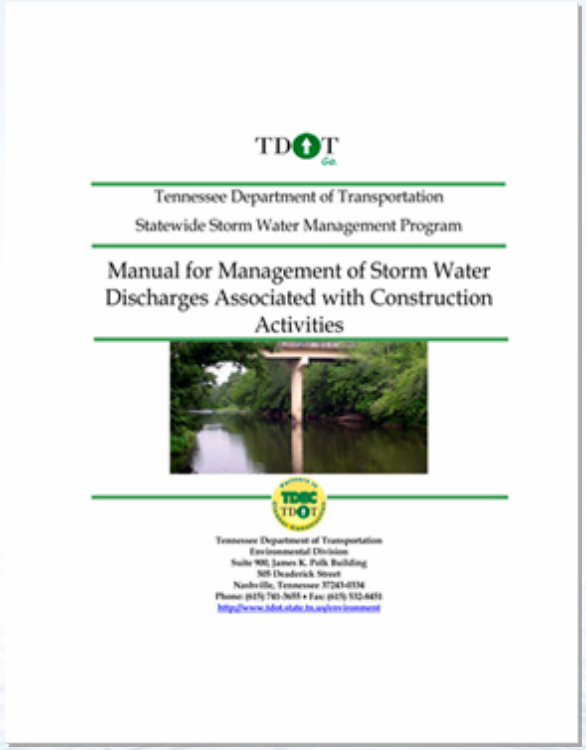
# SSWMP Components – Design

- **GIS Tools**
  - Hydrology
  - Impaired, Tier II and Tier III streams
  - TMDL watersheds
  - Impervious surfaces
  - NPDES CGP dischargers
  - Public lands
  - Q3 flood data
  - Known sinkholes and Class V injection wells
  - Soils
  - Federal and state threatened and endangered species data, and
  - State species deemed in need of management
  - Habitat for T&E species
  - WQ monitoring stations
  - Wetlands
  - Buffer zones, as they relate to the NPDES CGP
  - Cultural features
  - Topography
  - Caves
  - State and federally owned parks, natural areas and wildlife refuges



# SSWMP Components – Construction

- **New Construction Compliance Manual**
- **Field administration of TDOT construction projects**
  - TDOT Responsibilities
  - Contractor Responsibilities
  - TDEC Responsibilities
- **Project Phasing**
- **Temporary EPSC**

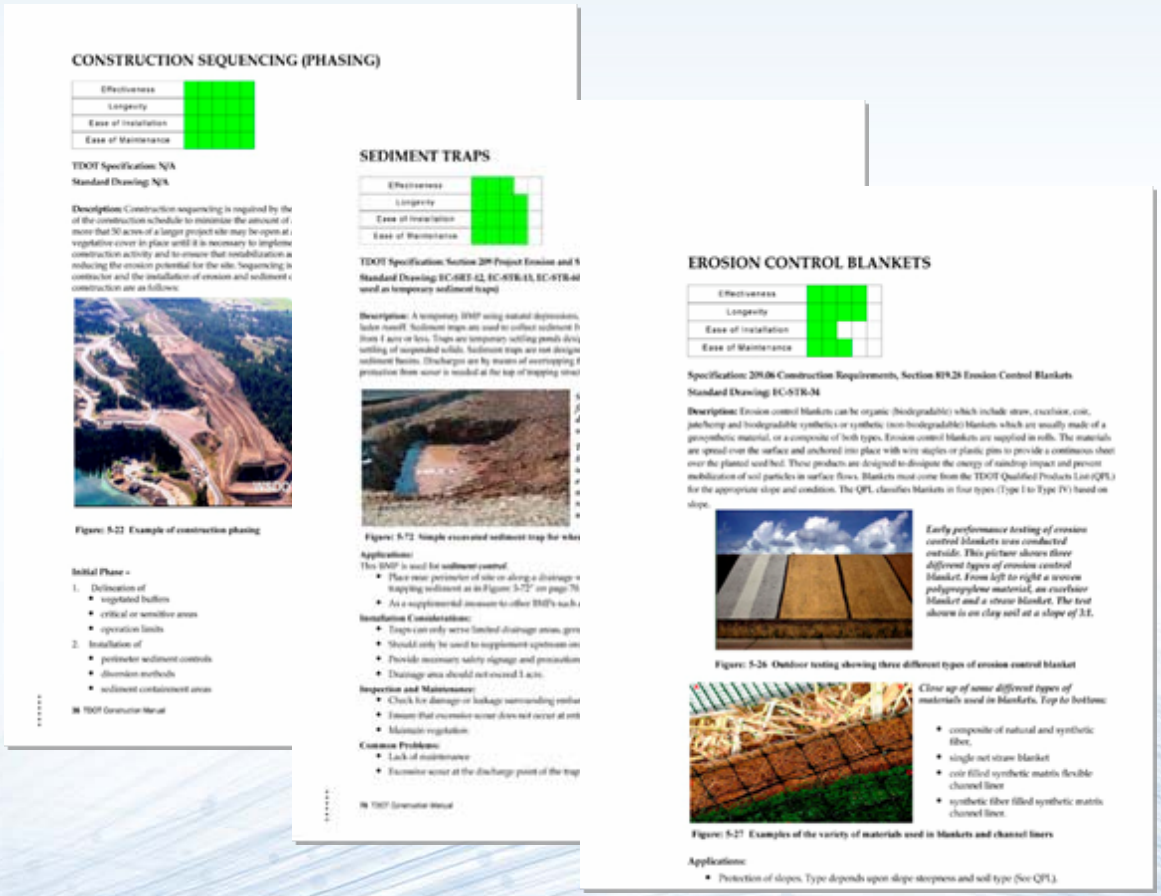


# SSWMP Components – Construction (cont'd)

- **Storm Water Management of Construction Projects**
  - Mobilization Activities
  - Regulatory Compliance
    - Inspection
    - Records
    - Maintenance of BMPs
  - Troubleshooting
  - Field Procedures
  - Installation, Repair, and Maintenance of BMPs

# SSWMP Components – Construction (cont'd)

- **New Tools:**
  - Materials
  - Installation
  - Maintenance
  - Repair



CONSTRUCTION SEQUENCING (PHASING)

SEDIMENT TRAPS

EROSION CONTROL BLANKETS

# SSWMP Components – Construction (cont'd)

- **New Manual for Use of Borrow and Waste Sites:**
  - Ensures high standards are applied to offsite areas of the project:
    - Requires a Waste and Borrow Site Plan
    - Review of regulatory permits
    - Engineering study and plans
    - Inspection and maintenance of all EPSC measures
    - Review of Final stabilization
    - Permit close-out

# SSWMP Components – Operation

- **Project mitigation commitments are tracked to ensure:**
  - Monitoring
  - Sampling
- **TDOT Maintenance forces will:**
  - Maintain final stabilization
  - Repair erosion control measures

# SSWMP Component – Program Rationale, Evaluations, and Recommendations

- **Provides detailed recommendation for program including:**
  - Additional staff positions (EDG/ECO)
  - Training
  - Product approval procedures
  - Water quality monitoring recommendations
  - ROW purchase recommendations

# Comprehensive Inspection Program

- **Revised the Construction Site Inspection Process:**
  - TDOT self monitoring with TDEC oversight
  - Training for inspectors and contractors
  - TDOT site inspectors in TDOT construction offices and Environmental Compliance Officer at Regional Offices
  - Incorporate a tracking mechanism
  - Site inspection frequency continuously evaluated
  - Modify construction contract language

# Training

- **Five Training Courses:**
  - **Course 1: Storm Water Practice Inspection and Maintenance** (4hr Class / 4hr Field)
    - EPSC BMPs
    - Inspection documentation, and compliance CGP
    - Self-monitoring program
    - Troubleshooting of BMPs

    **Audience:** TDOT Site Inspectors, Project Supervisors, Storm Water Coordinators, Consultants, **Contractors (Estimators, Operations Officers, Site Supers/PM),** TDEC

  - **Course 2: Construction Site Management** (8hr Class)
    - Implementation and administration of the SWPPP
    - ARAPs, documentation
    - Coordination between divisions
    - Operation of the construction site
    - Management: of self-monitoring program, inspections

    **Audience:** TDOT Project Supervisors, Storm Water Coordinators, **Contractors (Estimators, Site Supervisors/Project Managers)**

# Training

- **Course 3: Preparation of the SWPPP** (8hr Class)
  - Preparation of SWPPP and EPSC plans
  - Selection of EPSC measures
  - Design (TDOT standard drawings)
  - Protect sensitive areas, compliance with CGP, mitigation measures

  **Audience:** TDOT Designers, **Contractors (Estimators and Operating Officers),** SWPPP Consultants, Project Supervisors, TDEC

- **Course 4: Stream Determinations** (8hr Class and Field)
  - Stream determination protocols
  - Identifying intermittent and/or headwater streams

  **Audience:** Site Inspectors, SWPPP Consultants, Ecology Staff, Ecology Consultants, TDEC

- **Course 5: Natural Channel Design** (8hr Class and Field)
  - Introduction to natural stream channel design
  - Mitigation design techniques
  - Associated permitting

  **Audience:** Environmental Design Group Staff, Consultants, TDEC


**www.tn.gov/tdot/sswmp**

**Links to each product**

**Link to Public Meeting announcement**

# Opportunities for Public Input

- **Public Hearings**

  Monday, February 5, 2007 (6-8 pm)
  Christian Brothers High School
  Heffernan Hall
  5900 Walnut Grove Rd.
  Memphis, TN 38120-2174

  Tuesday, February 6, 2007 (6-8 pm)
  Adventure Science Center
  800 Fort Negley Blvd.
  Nashville, TN 37203

  Thursday, February 8, 2007 (6-8 pm)
  TDOT Region 1 Auditorium
  7345 Region Lane
  Knoxville, TN 37914

- **Written Comments**

  Submit written comments to:
  Mr. Doug Delaney
  Environmental Division Director
  Tennessee Department of Transportation
  James K. Polk Building, 505 Deadrick Street, Suite 700
  Nashville, TN 37243-0349
  ***Written comments must be received by March 1st, 2007***

# Project Schedule

**Public Meetings**

February 5, 6, 8

**Final Draft**

April 2007

**Final Submittal to TDEC**

May 10, 2007

# Questions & Answers