

# **STRENGTHENING THE NPDES MS4 PROGRAM**

**10<sup>TH</sup> ANNUAL REGIONAL STORMWATER SEMINAR**

**SOUTHEAST STORMWATER ASSOCIATION**

**ATLANTA, GA**

**APRIL 17, 2015**

# TODAY'S TOPICS

- **EPA TMDL MEMO UPDATE**
- **GREEN INFRASTRUCTURE IN MS4 PERMITS**
- **TRASH FREE WATERS PROGRAM**
- **FRAMEWORK FOR A CLIMATE READY NPDES PROGRAM**

# **EPA TMDL MEMO UPDATE**

# EPA 2014 TMDL MEMO UPDATE

- MEMORANDUM REPLACES THE NOVEMBER 12, 2010, MEMORANDUM ON THE SUBJECT OF STORMWATER WASTELOAD ALLOCATIONS AND WQBELS
- 2014 MEMORANDUM PROVIDES ADDITIONAL CLARITY AND UPDATES:
  - RECOMMENDATIONS ON THE ESTABLISHMENT OF WATER QUALITY-BASED REQUIREMENTS FOR POLLUTANTS OF CONCERN
  - EXAMPLES OF HOW TO MORE CLEARLY ALLOCATE POLLUTANT LOADS AMONG SPECIFIC TYPES OF STORMWATER POINT SOURCES DURING TMDL DEVELOPMENT
  - INFORMATION REGARDING INCREASINGLY EFFECTIVE APPROACHES TO ADDRESS WATERS IMPAIRED BY STORMWATER SOURCES

# 2014 MEMO/MS4 COMPENDIUM

## WATER QUALITY-BASED EFFLUENT LIMITS

- RECOMMENDS THAT WHERE MS4 DISCHARGES HAVE THE REASONABLE POTENTIAL TO CAUSE OR CONTRIBUTE TO A WQS EXCEEDANCES, NPDES PERMITTING AUTHORITIES EXERCISE ITS DISCRETION TO INCLUDE **CLEAR, SPECIFIC, AND MEASURABLE PERMIT REQUIREMENTS AND, WHERE FEASIBLE, NUMERIC EFFLUENT LIMITATIONS** AS NECESSARY TO MEET WATER QUALITY STANDARDS
- NPDES AUTHORITIES HAVE FLEXIBILITY IN HOW THEY EXPRESS WQBELS, INCLUDING USING SYSTEM-WIDE REQUIREMENTS RATHER THAN OUTFALL-SPECIFIC LIMITS
- RECOMMENDS, WHERE FEASIBLE AND APPROPRIATE, NUMERIC REQUIREMENTS THAT ATTEMPT TO MAINTAIN PRE-DEVELOPMENT RUNOFF CONDITIONS

# 2014 MEMO/MS4 COMPENDIUM (CONTD.)

## BMP-TYPE LIMITS

- WHERE BMP-TYPE LIMITS WILL BE USED TO IMPLEMENT A TMDL, THE LIMITS SHOULD BE CLEAR, SPECIFIC, AND MEASURABLE
- THE ADMINISTRATIVE RECORD NEEDS TO PROVIDE ADEQUATE DEMONSTRATION THAT THE BMPS REQUIRED WILL BE SUFFICIENT TO IMPLEMENT THE WLA
- PERMIT SHOULD INCLUDE INTERIM MILESTONES WHERE NEEDED TO ENSURE THAT PROGRESS IN IMPLEMENTING BMPS IS TRACKED

# 2014 MEMO/MS4 COMPENDIUM (CONTD.)

## MONITORING

- PERMIT COULD SPECIFY ACTIONS THE PERMITTEE MUST TAKE IF BMPS ARE NOT PERFORMING PROPERLY OR MEETING EXPECTED LOAD REDUCTIONS
- PERMIT REQUIREMENTS SHOULD CONSIDER THE VARIABLE NATURE OF STORMWATER AS WELL AS THE AVAILABILITY OF RELIABLE AND APPLICABLE FIELD DATA DESCRIBING THE TREATMENT EFFICIENCIES OF REQUIRED BMPS

# **POST-CONSTRUCTION REQUIREMENTS FOR MS4 PERMITS**





# POST-CONSTRUCTION IN MS4s

- FOR MS4 PERMITS, EPA IS STRONGLY ENCOURAGING STATES TO INCORPORATE PERMIT LANGUAGE TO FACILITATE THE DEVELOPMENT AND INCLUSION OF GREEN INFRASTRUCTURE AND LOW IMPACT DEVELOPMENT PRACTICES IN MS4s
- REGION 4 MUNICIPAL EXAMPLES
  - CITY OF ATLANTA (STORMWATER ORDINANCE)
  - CITY OF AUBURN, AL
- REGION 4 STATE EXAMPLES
  - TENNESSEE
  - SOUTH CAROLINA

# **BARRIERS TO STRENGTHENING MS4 PERMITS – POST CONSTRUCTION STANDARDS**

1. POORLY IMPLEMENTED MUNICIPAL STORMWATER MANAGEMENT PLAN ADOPTION PROCESS
2. NO AUTHORIZATION TO CHARGE FOR STORMWATER GENERATION
3. LACK OF STATE AND LOCAL ENFORCEMENT OF STORMWATER MANAGEMENT RULES
4. SPLINTERED OR INCOMPLETE STATE-LEVEL DESIGN GUIDELINES FOR GI
5. LACK OF INTEGRATION AMONG LOCAL, STATE AND REGIONAL GOVERNMENTAL ENTITIES

# OVERCOMING BARRIERS TO POST-CONSTRUCTION

## FOR STATES AND EPA:

- ENSURE THAT POST CONSTRUCTION/GI MEASURES ARE PROVIDED IN PERMITS FOR NEWLY DESIGNATED MS4s
- PROVIDE ADDITIONAL TECHNICAL ASSISTANCE
  - WORKSHOPS, MODELS, AND CONTRACTUAL SUPPORT, IF POSSIBLE
- FIND ADDITIONAL METHODS TO GENERATE GREATER PUBLIC UNDERSTANDING AND POTENTIAL SUPPORT FOR GREEN INFRASTRUCTURE
  - CONDUCT EDUCATION AND OUTREACH FOR COMMUNITIES
  - ENSURE BROADER STAKEHOLDER PARTICIPATION WITHIN MS4 FRAMEWORK

# OVERCOMING BARRIERS TO POST-CONSTRUCTION (CON'T)

- ENSURE AND MAINTAIN LOCAL CONTROL RATHER THAN ALLOW STATE AND FEDERAL AGENCIES TO MANDATE STANDARDS
  - ex., Atlanta Post-Construction Ordinance
- MAKE AVAILABLE COST BENEFIT ANALYSES SHOWING THE COST EFFECTIVENESS OF GREEN INFRASTRUCTURE AND ITS POSITIVE IMPACTS ON THE LOCAL ECONOMY

# TRASH FREE WATERS PROGRAM



# U.S. ENVIRONMENTAL PROTECTION AGENCY'S TRASH FREE WATERS PROGRAM

**EPA GOAL STATEMENT:** SIGNIFICANTLY REDUCE THE AMOUNT OF TRASH ENTERING U.S. WATERBODIES AND THE OCEAN THROUGH ACTIONS TAKEN BY GOVERNMENT (AT ALL LEVELS), THE BUSINESS COMMUNITY, AND INDIVIDUAL CITIZENS, APPROACHING ZERO LOADINGS OF TRASH INTO AQUATIC ECOSYSTEMS WITHIN 10 YEARS.

# **EPA'S TRASH FREE WATERS PROGRAM**

## **NATIONAL PROJECTS ADDRESS ESSENTIAL LEVERAGE POINTS IDENTIFIED BY STAKEHOLDERS:**

- CALCULATING THE DIRECT AND INDIRECT COSTS OF TRASH TO SOCIETY
- ASSESSING ECOLOGICAL AND HUMAN HEALTH EFFECTS FROM MICROPLASTICS IN THE MARINE FOOD CHAIN
- EXPLORING PUBLIC/PRIVATE PARTNERSHIPS FOR LITTER PREVENTION AND BEHAVIOR MODIFICATION
- DEFINING CREDIBLE METRICS TO ASSESS THE SUCCESS OF AQUATIC TRASH REDUCTION PROGRAMS

# EPA'S TRASH FREE WATERS PROGRAM

## **REGIONAL STRATEGIES ENHANCE STATE AND LOCAL TRASH PREVENTION**

**PROGRAMS:** SERVE AS CATALYST/FACILITATOR OF STRATEGIC PLANNING.

CONSULT WITH GOVERNMENT, BUSINESS, NGO, AND CITIZEN STAKEHOLDERS.

IDENTIFY COLLECTIVE ACTIONS THAT ENHANCE TRASH PREVENTION “DRIVERS”

AND REMOVE “BARRIERS.” FACILITATE PROJECT IMPLEMENTATION. MEASURE

RESULTS.

- REGION 4 IS TARGETING AREAS WHERE THERE ARE SIGNIFICANT TRASH ISSUES/CONCERNS AND ENSURING THAT APPROPRIATE LANGUAGE TO ADDRESS SUCH CONCERNS ARE INCORPORATED INTO THE PERMIT
  - MOBILE AREA PERMITS



# FRAMEWORK FOR A CLIMATE READY NPDES PROGRAM



# FRAMEWORK FOR A CLIMATE READY NPDES PROGRAM

- METHODS, DATA AND MODELS
  - IMPROVE METHODS FOR USE IN DEVELOPING PERMITS
- CLIMATE-READY WASTEWATER TECHNOLOGIES & APPROACHES
  - GREEN INFRASTRUCTURE
- TRAINING AND OUTREACH
- PERMIT PROVISIONS

The background is a light blue gradient with several realistic water droplets of various sizes scattered across the surface. The droplets have highlights and shadows, giving them a three-dimensional appearance.

**QUESTIONS?**