

## **Support to RI Municipalities in Complying with Phase II Minimum Measures**

*Draft URI NEMO, May 2006*

*Subject to RIDEM and RIDOT approval*

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### **Approach**

1. URI will invite regulated municipalities and other non traditional stormwater managers (local groups) to participate in a Phase II Storm Water Training and Technical assistance program to meet Phase II permit requirements and support implementation of local stormwater programs. The invitation will include a survey of local needs to guide program development.
2. Local groups who choose to join and actively participate in this assistance program will receive training opportunities and support over the next 3 years. All training and technical support will be directed to assisting these groups comply with Phase II permit requirements.
3. Local groups participating in the program will be able to demonstrate compliance with Public Education and Involvement requirements (Minimum Control Measures # 1 and # 2), and partially comply with other minimum control measures.
4. The level of participation and implementation actions necessary to satisfy these permit requirements will be determined in cooperation with the Stormwater Advisory Committee, including an ad hoc Municipal Technical Committee, and input from municipalities on local interests and needs. A preliminary outline of minimum requirements for participation in training programs follows. This will be finalized to include a tier of implementation options based on municipal capacity and resource protection needs. Priority water resources include for example, drinking water supplies, special resource protection waters, and impaired waters with an approved TMDL.
5. Local groups will be encouraged to participate in the complete program addressing a range of minimum control measures. Those choosing either not to participate in the program or to participate in only portions of the program will be required to demonstrate equivalent compliance.
6. Communication with the local groups will be primarily by email, website and mail, with occasional meetings as needed. We expect that most contact would occur through participation in training and technical assistance programs.
7. Option for tracking participation – RI NEMO will track participation in each training program offered and provide this information to DEM. Local groups will be responsible for reporting participation, implementation of outreach activities and other accomplishments in annual Phase II annual reports.

# Outline of Municipal Assistance and Local Actions Meeting Minimum Measures

*DRAFT URI NEMO May, 2006*  
*Subject to RIDEM and RIDOT approval*

## 1. Public Education and Outreach (Minimum Measure #1)

### 1.1 Training and technical support provided:

- a) Develop educational materials addressing pollution prevention topics for priority resources and specific audiences using templates that communities can use directly or adapt to local needs. These will incorporate consistent message(s) statewide while targeting specific audiences. To the extent possible existing resources developed by communities will be used.
- b) Make educational resources available to local groups via communication with local group members by email, mail and website. (Also through biennial statewide workshops and regional meetings as described in following section 2.1 b. 3.)
- c) Provide guidance in distributing educational materials for maximum effectiveness using a range of strategies including for example, newspaper articles and notices, local newsletters and utility bills, direct mail to targeted audiences, local displays and signs, local events, websites, and other venues.
- d) Provide coordination in sharing resources and successful outreach methods. This may include for example, coordination in printing educational materials to substantially reduce costs.
- e) Develop model education and outreach programs with options for implementation based on target pollution sources and resource protection needs. Model programs will be developed using a tier of educational strategies designed to implement a “basic” and “high level” education program. Each basic and high level program will offer a menu of educational outreach options providing flexibility for each community to meet outreach objectives. The basic level will be designed for small communities with limited capacity with outreach targeted to priority water resources such as drinking water supplies and impaired waters with an approved TMDL. The high level program will be designed for more developed cities and towns with greater capacity to implement an education program with outreach directed to protection of priority water resources, implementation of TMDL recommendations, and targeted stormwater pollution sources community-wide.
- f) The model education and outreach program will include education strategies to support adoption of updated municipal policies and ordinances. This will include educational materials and outreach methods designed to raise awareness of the need for local action, description of proposed ordinance revisions, and methods to promote awareness and compliance with new requirements among builders and developers, applicants for building permits, realtors and homebuyers, and existing homeowners.

## **1.2 Local actions:**

- a) Based on model outreach programs with menu of options, select education and outreach activities to implement either a basic or high level outreach program. Communities shall demonstrate that the program level is suitable based on municipal capacity and resource protection needs, subject to RIDEM review and approval. Cities and towns with established education programs may demonstrate compliance through comparable activities.
- b) Identify public outreach needs to support adoption and implementation of updated municipal policies. Address specific target audiences and include as one element of outreach program above.
- c) Undertake education and outreach activities as resources are made available through the project, in keeping with objectives of the model program selected. The materials and delivery methods will evolve as the program proceeds.

## **2. Public Involvement and Participation (Minimum Measure #2)**

### **2.1 Training and technical support provided:**

- a) Provide guidance in enhancing public involvement and participation, using successful examples from RI communities including:
  - Model practices for forming active stormwater advisory committees and increasing participation of council, board and commission members in stormwater management issues.
  - Forming partnerships with water suppliers, watershed councils, and other organizations with a stake in resource protection,
  - Outline of strategies for general public involvement.
- b) Develop and conduct public outreach workshops for municipal officials. The audience for these workshops is council, board and commission members, stormwater committee members, staff, water suppliers, watershed councils, neighborhood organizations and the general public, ideally as a work session involving local officials and staff. Workshops will be developed on the following subjects and modified as needed during the life of the project based on local interests and Stormwater Advisory Committee input. In all cases titles are draft!
  - 1) New Approaches to Local Stormwater Management. Topics: Impacts of land use on local water resources, new approaches to stormwater management (DEM standards and LID); Phase II requirements, and assistance available to meet minimum requirements.
  - 2) Getting your message out: Municipal Stormwater Education and Outreach. Topics: Implementing local education and outreach programs using educational materials and strategies developed under this project, strategies for expanding public involvement and participation, meeting minimum requirements for basic and high level programs, coordinating efforts to reduce costs, and strategies to support municipal policies and ordinances. May be offered as follow up to statewide workshop on this topic.

- 3) Building Better Stormwater Management into Local Ordinances. Topics: More in-depth review of current methods to reduce impervious cover and LID practices; alternatives for incorporating updated DEM standards and model practices into local plans, ordinances and regulations; and strategies for tailoring standards to priority resource protection areas. Limited follow up technical assistance to implement model practices may be offered based on local interest and available staff resources.
- c) Publicize and conduct workshops. These may be scheduled by request of local officials, to include neighboring communities and those sharing a watershed or groundwater resource. Minimum participation may be required.
- d) Offer Workshop 4, Stormwater Education and Outreach as a biennial statewide workshop, offered at least twice during the project. This may be offered as part of a longer program.
- e) Make workshop presentations and materials available on project website.

## **2.2 Local actions:**

- a) Establish or expand broad based local stormwater committee to oversee implementation of the Storm Water Management Program Plan, participate in this training and technical assistance program, track annual progress, and make recommendations to city or town council for improved stormwater management.
- b) Demonstrate efforts to update and expand public involvement and participation based on technical support provided and model outreach program adopted.
- c) Conduct annual council meeting with stormwater committee to review progress, make recommendations and request support for annual implementation actions, and set annual action agenda.
- d) Participate in one statewide training program on stormwater education and outreach.
- e) Host or participate in at least one of three local stormwater management workshop described above, and encourage participation by council, board and commission members who make land use decisions.

## **3. RIDEM Stormwater Manual (Minimum Measure #5)**

### **3.1 Training and technical support provided:**

Technical training will be provided through statewide workshops on the updated State Stormwater Standards Manual offered in partnership with the Southern Rhode Island Conservation District, Fuss & O'Neill consultants, and others as needed. At least biennial workshops will be offered for municipal staff and local officials as follows:

- a) Training in use of the updated State stormwater standards manual. This will provide an overview of updated standards including: best management practices using nonstructural methods such as vegetated drainage swales and small scale filtering and infiltration systems

designed to control runoff volume and maintain infiltration; and application of revised methodologies for design of stormwater basins and other structural controls.

- b) Methods to estimate stormwater runoff volume, rates, and comparison of pre- and post-development hydrology to design stormwater controls (using TR 55).
- c) Additional technical training will be provided on application of LID practices, with training topics and type of training or technical assistance determined based on local needs.
- d) As a public outreach element, URI will work with DEM and training consultants to develop supporting educational materials summarizing new standards, need to update local land use ordinances and regulations, and other information for municipal officials, developers, building permit applicants and residents.

### **3.2 Local actions:**

a) Town staff and board members responsible for project review will in at least 2 training programs as follows:

- 1. Town engineering and planning staff will participate in at least 2 technical training programs on the design manual, one overview of the updated DEM stormwater manual and one specialized program on use of nonstructural “low impact development” (LID) techniques or use of TR55 for . Department of public works staff responsible for design, routine care and maintenance of municipal roads, parking areas and stormwater facilities will also participate as appropriate.
- 2. Planning staff and others responsible for review of development applications, including members of Planning Technical Review Committee will participate in at least 1 technical training program on either the DEM stormwater manual or LID.
- 3. Board members responsible for project review are strongly encouraged to attend at least one technical training program on the manual or LID.

b) Update land development ordinances and regulations for consistency with RIDEM standards.

- In cooperation with the Local Stormwater Committee, town staff or board members will review existing stormwater provisions within the Zoning Ordinance and Land Development and Subdivision Regulations and evaluate consistency with updated state stormwater standards, including requirements for maintaining pre-development runoff conditions, use of LID practices, and design and assessment of structural controls.
- Identify sections in need of updating and draft revisions based on DEM standards and model ordinance provisions developed under section XXX of this outline. Since DEM updated standards are minimum for statewide use, model provisions should be used to guide selection of enhanced standards for stormwater treatment and volume control to protect or restore priority water resources. In annual MS4 progress reports, list existing sections and revisions either drafted or adopted.
- Work with local stormwater committee, planning board and town council to finalize revisions and seek support for adoption. Communities may wish to seek professional assistance from design professionals and/or planners with experience in applying updated stormwater control practices and drafting such amendments.

- Hold public work sessions and hearings to adopt revisions.
- c) Demonstrate capacity to apply updated state stormwater standards.
- Town staff, in cooperation with the local stormwater committee, will evaluate local capacity to apply updated stormwater practices in local projects initiated by the city or town, in reviewing applications for development and redevelopment through building permits and applications to planning and zoning boards, and in inspecting installation and maintenance of such facilities. This review will evaluate existing capability based on staff expertise in applying updated state methods, and time available for such reviews.
  - Document existing capacity and identify methods to acquire adequate review capacity, including amendments to permit application fees and provisions allowing town to hire consulting professionals for project review, at applicant expense.
  - Include amendments to ensure review capacity in local ordinance /regulatory updates.
- d) Design education program to support adoption and implementation of amendments to comprehensive plans, ordinances and regulations needed to ensure consistency with state standards and to provide capacity for project review and inspection.
4. Outline strategy for reaching municipal officials, builders and residents based on model outreach practices developed in Sections 1 and 2 of this outline.
5. Incorporate and distribute educational materials as needed, including for example:
- basic summary of updated stormwater standards and need for local amendments to ensure consistency;
  - Information on complying with updated standards for building permit applicants;
  - Information for new homeowners and realtors where on-lot bioretention areas and other stormwater practices are located to ensure proper care and maintenance.
  - Use of deed restrictions to notify new land owners of location, function and maintenance requirements of on-lot stormwater facilities such as swales and bioretention areas.

#### **4. Good housekeeping (Minimum measure # 6)**

##### **4.1 Training and technical support provided:**

- a) Develop and conduct biennial workshops for DOT and municipalities addressing the following topics. Information delivery will focus on enhancing capacity of supervisors and field engineers using a “Train the trainer” approach to educate field staff responsible for routine roadway maintenance and public facilities management.
- DPW site design, operation and maintenance.
  - Municipal storm sewer system design, operation and maintenance
  - Grounds management (training provided by URI Cooperative Extension Education Center based on DOT and local needs)
- b) Develop supporting educational materials under section 1 of this outline.

#### **4.2 Local actions:**

- a) Dept of public works supervisors, field engineers, and facilities operation and maintenance staff will participate in at least 2 training programs listed above.
- b) Supervisors and field engineers will document training provided to field staff and report pollution control practices adopted annually as a result of training.

### **5. IDDE – Illicit discharge detection and elimination training (Minimum Measure #3)**

#### **5.1 Training and technical support provided:**

- a) RIDEM will conduct a statewide workshop on developing and implementing an IDDE program, addressing the following topics:
  - Mapping storm sewer systems.
  - Adopting an ordinance for control of illicit discharges
  - Implementing an IDDE ordinance and establishing an inspection program.
  - IDDE field techniques based on current manuals by NEIWPC and others.
  - Coordinating with state and local stormwater system owners to solve interconnection issues.
- b) URI will provide support in organizing this program. In addition, URI is offering programs in use of GPS for stormwater system mapping, targeting communities who have not yet completed this task.

#### **5.2 Local actions:**

- a) Municipal staff will participate in one IDDE workshop offered by EPA.
- b) Participation in GPS workshops on mapping stormdrain outfall locations is recommended but not required.
- c) Municipalities will demonstrate compliance with RIDEM minimum measures for implementation of IDDE programs, as required in annual reporting.

### **6. Development and Amendment of Local Ordinances and Enforceable Policies (Minimum Measure # 3, 4 & 5)**

#### **6.1 Training and technical support provided:**

- a) Determine the need for model policies and ordinance provisions concerning for example, the following topics. Where considered necessary, develop model provisions and provide biennial training.
  - Soil Erosion
  - Stormwater system maintenance (municipal and privately owned)
  - Illicit discharge
  - Redevelopment standards
  - Stormwater utility districts

- Pet Waste

- b) The emphasis will be on elements that can be incorporated into municipal operating procedures, comprehensive plans, zoning ordinances, and subdivision and land development regulations, to include the following:
- Updated soil erosion and sediment controls incorporating current standards with provisions for field inspection where needed.
  - Updated stormwater runoff controls appropriate townwide and enhanced standards to maintain runoff volumes and provide a high level of pollutant removal in priority areas including drinking water supplies, special resource protection waters and impaired waters.
  - Pre-construction coordination and communication with field staff.
  - Ensuring proper review of plans and proper field inspection.
- c) Model provisions will be developed using a tier of strategies with basic program elements appropriate for small communities with limited capacity. High level, comprehensive programs will be designed for larger communities and those with priority resources requiring a high level of protection or restoration.
- d) Conduct training in application of model provisions through a statewide training program offered biennially and through regional workshops hosted by municipal officials, as described in section 2.1 b “Building Better Stormwater Management into Local Ordinances”

## **6.2 Local actions:**

Town staff and key board members will participate in at least 2 regional or statewide training programs.

Local stormwater committee, with support from town staff, will:

- Review comprehensive community plans, ordinances and regulations to identify sections where above topics are currently addressed.
- Identify alternatives to ensure consistency with updated state standards, including preparation of draft ordinance amendments.
- Draft ordinance amendments and develop /implement strategy for adoption.

## **7. Budget Planning (Minimum Measure # 5)**

### **7.1 Training and technical support provided:**

Training in this topic will address:

- Development of operational and capital budgets.
- Identify funding sources for stormwater management programs.
- Establish permit application fees to cover costs of stormwater review and field inspection by either staff or independent contractors.
- Identify creative strategies to fund stormwater programs using for example: stormwater system maintenance fees based on impervious area, and pollutant trading fees and credits to offset increased stormwater runoff impacts.

## **7.2 Local actions:**

Town staff will participate in at least 1 training program in the following (at least one person from town)

- Provide evidence of sufficient local resources to cover cost of reviewing stormwater management /erosion and sediment control plans, and field inspection by staff or consulting professionals where needed in priority resource areas and/or high risk sites for erosion and runoff. Typically, such needs will be met by permit application fees and provisions to hire consulting professionals as needed at applicant expense.
- Where resources are considered insufficient for application review using updated stormwater design practices, identify how needs will be met, including proposed increase in application fees and/or ordinance amendment allowing the municipality to hire consulting professionals as needed at applicant expense.

## **8. Additional RIDOT Training (Minimum Measure # 3, 4, 5, & 6)**

Annual training for RIDOT staff will be designed to augment existing programs currently offered by RIDOT through the winter training program. This may include any of the training modules developed under this program based on DOT staff training needs and schedules. However, topics of greatest interest include use of the state stormwater manual as noted above, good housekeeping and pollution source reduction practices for public works facilities, and erosion control.

## Summary of Training Topics and Schedule

Training topic	Phase II Minimum Measure	Frequency	Responsibility
<b>1 and 2. Public Education and Involvement:</b> a) Statewide workshops for municipal officials in developing a Municipal Stormwater Education and Outreach program.	# 1 & 2	Biennial	URI
b) Regional workshops to build capacity for improved local stormwater management on following topics: • New Approaches to Local Stormwater Management.	# 1 & 2	X	URI
• Getting your message out: Municipal Stormwater Education and Outreach.	# 1 & 2	X	URI
• Building Better Stormwater Management into Local Ordinances.	# 1, 2, 5	X	URI
<b>3. Stormwater Manual</b> a) Basic training on use of updated standards and methodologies for treatment system design and assessment.	# 5	Annual*	RIDEM with consultant under contract to SRICD
b) Implementation of LID practices. Scope to be determined based on state and local needs and may include direct technical support.	# 5	1	Consultant under contract to SRICD
c) Application of TR55 to hydrologic analysis and control of runoff volume and infiltration using LID practices.	# 5	2	SRICD
<b>4. Good Housekeeping</b>	# 6	Biennial	SRICD
<b>5. Illicit Discharges</b>	# 3	1	DEM with URI support
<b>6. Model Ordinances &amp; Enforcement</b>	# 3, 4 & 5	Biennial	URI and SRICD
<b>7. Budget Planning</b>	# 5	1	DEM
<b>8. Additional DOT staff training</b>		Annual	Project Partners

### Notes:

\* Stormwater manual training for government and private sector is biennial, with training offered to DOT and other government staff in alternate years.

X – Regional workshops scheduled by request and hosted by municipality to include neighboring communities within shared watershed or aquifer recharge area.

Biennial workshops will be held at least twice during course of the 3 ½ year project.

Required Minimum Control Measures:

1. Public Education and Outreach
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Stormwater Runoff Control
5. Post Construction Stormwater Management
6. Pollution Prevention and Good Housekeeping in Municipal Operations