

Institutional Capacity for Stormwater Management Operation and Maintenance Strategy Worksheet: RB-S6

<p>Strategy: Develop local institutional capacity to ensure implementation and proper operation, maintenance, upgrades and replacement of stormwater management systems for the purposes of flow control and pollutant loading controls, in a manner that assists with implementation of municipal stormwater NJPDES permits to be required by NJDEP and is consistent with a comprehensive, regional stormwater management program.</p>	<p>Strategy Priority: H (H/M/L)</p>
<p>Objectives Addressed by Strategy: NSSM-O3B: By 2010, achieve surface water quality standards for physical, biological and chemical parameters in all subwatersheds of the Watershed Management Area. LRSW-O2B. By 2010, there will be no net increase in stormwater pollutant loads from new development or redevelopment that may cause or contribute to violations of water quality standards. LRSW-O4B. By 2008, agencies of the federal, state, county and municipal governments in the Lower Raritan WMA will develop and implement plans for financing stormwater management programs. LRLI-O1A. By 2004, understand municipal, county and state capabilities for watershed management in the Lower Raritan WMA to guide watershed strategy development and implementation. MNP-O2B: Engineers, planners, developers and regulators educated about the regulations, planning documents and best management practices currently available to reduce nonpoint source pollution and appropriate for the Millstone WMA</p>	<p>Strategy Schedule: 2003+ (Begin/End)</p>
<p>Narrative Description of Strategy: Stormwater requirements for new developments are determined by local land use boards (with the advice of municipal engineers), NJDEP, Soil Conservation Districts, County Planning Boards (where they affect county roads and stormwater systems) and the Delaware & Raritan Canal Commission (in certain areas affecting the Canal). Post-development stormwater system upgrades, retrofits and replacements are usually the function of county and municipal engineers or property managers. Operation and maintenance (O&M) functions fall to homeowners associations, property managers and public works departments. At each step, the responsible individuals and entities may or may not (and often do not) have sufficient expertise, understanding of the watershed, financial/staff resources or a combination of these. Flow management may also require changes “upstream” of the engineered structures, and these changes are not the direct responsibility of any one entity. New NJPDES municipal stormwater permits (proposed January 2003 as part of NJAC 7:14A) will increase the municipal workload and requirements regarding water quality. Those municipal stormwater permits will link to additional NJDEP stormwater management regulations (proposed January 2003 at NJAC 7:8), which address both quality and flow. The stormwater pollutant mitigation will require actions affecting pollutant movement from the land surface into stormwater systems, pollutant movement within the systems, pollutant discharge from the systems, and pollutant fate and transport within the receiving waters. To meet TMDL requirements or avoid the need for TMDLs, watershed-based approaches and “universal” approaches (e.g., NJPDES municipal stormwater permits) will both be needed, and must be integrated. These integrated programs do not exist yet, nor do programs to evaluate the long and short term effectiveness of water quality controls in stormwater systems. No example seems to exist in the Raritan Basin of a completed integrated and effective stormwater management program.</p> <p>This strategy addresses the need for watershed-based approaches to stormwater system O&M (applying to engineered, bio-engineered and natural components) and the need for increased institutional capacity to achieve consistently effective O&M. Other strategies address methods of reducing stormwater flows and pollutants from new and existing land uses. Stormwater management is the only water-related utility function that lacks a utility institutional structure. Therefore, the Raritan Project recommends that stormwater O&M be placed on a utility basis. There are three institutional structures for doing so (e.g., sections of municipal or county government, new or multi-purpose utility authorities, private contracts) but all are based on a utility service fee that is related to the service required for each landowner. New Jersey law currently does not allow the assessment of such stormwater management fees. Stormwater management in NJ is either a landowner responsibility or covered by the general property tax; the latter raises significant equity concerns because forest owners pay for stormwater management while major tax-exempt developed land uses do not. Once stormwater utility fees are authorized, the choice of institutional structure will be driven by municipality or county decisions related to size, cost-effectiveness, interest in shared services, interest in cooperative management of shared watersheds (See Strategy RB-7, Watershed-based Stormwater Management Plans), etc. Given funding and an institutional structure, other governmental and nongovernmental entities can play a significant role and potentially share data and other resources. This strategy proposes roles for Soil Conservation Districts and Mosquito Commissions, but other cooperating agencies are possible, such as sewer utilities that could help maintain structural stormwater facilities. Finally, effective O&M requires that systems are built properly and that all who design, build, operate and maintain such systems are trained properly.</p>	

Strategy Name: Institutional Capacity for Stormwater Management Operation and Maintenance

Areawide WQM Plan Consistency Determination Issues: Potential amendment to require that NJPDES municipal stormwater permits affecting impaired water bodies be coordinated to maximize effectiveness of controls (see Rouge River National Wet Weather Demonstration Project, Michigan).

Action Plan (Steps or Tasks)	Responsible Parties for Planning, Design & Implementation	Responsible Parties for Oversight	Resource Needs (L,M,H,VH)	Committed or Recommended Resources	Major Challenges and Opportunities	Evaluation Method & Indicators	Schedule and Milestones for Implementation
1. Assess statewide costs for bringing existing stormwater management up to modern regulatory standards and then operate and maintain them properly	C: R: NJDEP	C: R: NJ Clean Water Council	L-M	C: R: Section 319 funds	Developing effective method of analysis. Will be valuable for updating Clean Water Needs Survey for EPA	Total and annualized costs for stormwater O&M and retrofits	
2. Evaluate national experience in stormwater utilities and determine most critical lessons for NJ legislation – both to emulate and avoid	C: Morris County Planning Board R:	C: NJDEP, Project committee R: NJ Clean Water Council	L-M	C: Section 604b funds R:		Consultant report of national lessons learned, NJ recommended uses	2003 (Contract approval expected January 2003)
3. Authorize creation of utility fee-based stormwater utility functions both as sections of local governments and as utility authorities	C: R: NJ Legislature with NJDEP, NJDCA and BPU support	C: R: NJ Clean Water Council	L	C: R: Existing resources	Must ensure: utility fees are equitable, justifiable, used for authorized purposes; utility functions are directly tied to regulatory requirements and local needs; systems are as environmentally sensitive as possible	Legislative approval of new law, with broad support from counties, municipalities, environmental community, development community	2004

Strategy Name: Institutional Capacity for Stormwater Management Operation and Maintenance

Page 3 of 4

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4. Augment statutory authorizations to municipalities to require developer-funded endowments for long-term O&M by municipality where system becomes public, and for homeowner ass'n O&M requirements	C: R: NJ Legislature with NJDEP and NJDCA support	C: R: Raritan Basin Council	L	C: R: Existing resources	♦ Deposits must address equity issues. ♦ Homeowner ass'n reports must be verified by inspectors ♦ Municipal examples exist	Legislation passed Improved long-term O&M	
5. Establish statutory requirement that responsible entities for stormwater O&M inspect new facilities for compliance with construction designs prior to accepting O&M responsibility	C: R: NJ Legislature with NJDEP, SSCC and NJDCA support	C: R: Raritan Basin Council	L	C: R: Existing resources	O&M is much easier if mgt facilities are built properly	Legislation passed Improvement of construction	
6. Identify or develop O&M manuals for practitioner use	C: NJDEP R: Stormwater utilities	C: R: NJDEP	L-M	C: R: Existing resources	CALTRANS O&M research, Ocean County 1987 manual, NJDEP BMP manual	O&M practices that are regarded as sufficient by top-level practitioners	
7. Establish developer and inspector certification program and requirement for on-site project supervisor to ensure "as-built" condition is equivalent to system design as approved	C: R: NJDEP, NJDCA, SSCC	C: R: Raritan Basin Council	M	C: R: Existing resources, program or certification fees	Delaware program model is available and effective	Percentage of affected personnel with certification Improvement of construction	

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Page 4 of 4

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8. Develop integrated, watershed-based municipal stormwater permits for impaired streams to maximize water quality benefits	C: R: NJDEP, SSCC	C: R: WMA Committees	M per watershed H overall	C: R: Existing resources	National example of watershed-based municipal permits exists in Detroit, Michigan area	Number of watershed-based municipal permits relative to total need	
9. Maximize use of cooperater agency field capabilities to manage stormwater systems	C: R: SCDs, Mosquito Commissions	C: R: Stormwater O&M lead entity	M	C: R: Utility resources	SCDs have system data, can GPS, inspect basins & outfalls, etc. Mosquito Commissions can identify failing systems and health vector hazards	Cost reductions for utility services	