

Millstone Watershed Management Area Stormwater Flows and Flooding, PL-566 Strategy Worksheet: MSW-S1C4

Strategy: Stormwater Management From New Development MSW-S1C4: Offset the effects of increased stormwater volume from new developments. (See MNP-S1B1 for a more detailed procedure of ordinance adoption. See MNP-S1B2 and MNP-S1B3 for more detailed action steps on regulatory review and making regulatory changes or new laws and regulations.)	Strategy Priority: H (H/M/L)
Objectives Addressed by Strategy: MSW-O1C: Prevention of flood damages from future land uses	Strategy Schedule: (Begin/End)
<p>Narrative Description of Strategy: This strategy identifies mechanisms that can be used to reduce stormwater runoff from new developments. These mechanisms are normally implemented due to local requirements in municipal and county ordinances. NJDEP’s Stormwater Management Rules will provide the minimum requirements for stormwater management from new development. This strategy identifies additional actions to reduce stormwater flow impacts from new development. Detailed action steps were developed for adopting ordinances and changing or creating new regulations in the NPS strategies and will not be reproduced here. Please refer to strategies MNP-S1B1, MNP-S1B2 and MNP-S1B3 for additional action steps to implement this strategy.</p> <p>The Millstone River has a history of flooding problems that have been well documented since the early twentieth century. These flooding problems range from chronic overtopping of low-lying roadways that traverse the River and its flood plain to severe but less frequent flooding of residential, commercial, and institutional structures. Most of these structures are located in older communities, some of which have historic status. Similar flooding problems occur along the River’s major tributaries, including the Stony Brook, Beden Brook, and Six and Ten Mile Run. In studies to date, urbanization has not been identified as a significant reason for the flooding problems described above. Instead, the primary cause of the flooding problems is due to the location of these structures and roadways, which were constructed in the Millstone River’s natural flood plain prior to our current understanding of flood plain hydrology and hydraulics</p>	
Areawide WQM Plan Consistency Determination Issues: Possible NPS reduction strategy for TMDLs, but not as the strategy’s primary purpose of flow reduction.	

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. Through municipal or county ordinances, encouragement, incentives, or other mechanisms, increase on-site infiltration from new development sites where feasible.	C: R: Municipalities; Counties; Millstone WMAC; RB TAC (evaluate feasibility)	C: R: Municipalities; Counties; Millstone WMAC	L M – H if incentives.	C: R: Existing resources; Foundation grants; 319 grants	C: Finding the correct mechanism or combination of mechanisms to achieve NJDEP standards	Increased use of on-site infiltration Compliance with new NJDEP stormwater management regulations	NJDEP BMP Manual

C = Committed; R = Recommended; NJWSA: New Jersey Water Supply Authority; NJDEP: New Jersey Department of Environmental Protection; SBMWA: Stony Brook – Millstone Watershed Association; NJGS: New Jersey Geological Survey; USGS: United States Geological Survey; NLN: Natural Lands Network;

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2. Through municipal or county ordinances, encouragement, incentives, or other mechanisms, redistribute volume of stormwater and evaluate the best time to release the peak flow into the stream from new development sites.	C: R: Municipalities; Counties; Millstone WMAC; RB TAC (evaluate feasibility); SCDs (approvals of detention retention facilities)	C: R: Municipalities; Counties; Millstone WMAC	L M – H if incentives.	C: R: Existing resources; Foundation grants; 319 grants	C: Finding the correct mechanism or combination of mechanisms to reduce stormwater volume and peaks. Doing more than just reproducing the pre-development peak flow.	Decreased stormwater impacts in streams and on terrain.	
3. Through municipal or county ordinances, encouragement, incentives, or other mechanisms, minimize the (effective) impervious cover from new developments.	C: R: Municipalities; Counties; Millstone WMAC; RB TAC (evaluate feasibility); SCDs (approvals)	C: R: Municipalities; Counties; Millstone WMAC	L M – H if incentives.	C: R: Existing resources; Foundation grants; 319 grants	C: Finding the correct mechanism or combination of mechanisms to reduce impervious surfaces.	Reduced stormwater flows.	
4. Through municipal or county ordinances, encouragement, incentives, or other mechanisms, maximize the vegetation on new development sites (rain gardens; limit tree cutting, etc).	C: R: Municipalities; Counties; Millstone WMAC; RB TAC (evaluate feasibility); SCDs (approvals)	C: R: Municipalities; Counties; Millstone WMAC	L M – H if incentives.	C: R: Existing resources; Foundation grants; 319 grants	C: Finding the correct mechanism or combination of mechanisms to maximize new development vegetation.	Reduced stormwater flows.	

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5. Through incentives, or other mechanisms (municipal or county ordinances), encourage the use of roof gardens for roof runoff control.	C: R: Municipalities; Counties; Millstone WMAC; RB TAC (evaluate feasibility); SCDs (approvals)	C: R: Municipalities; Counties; Millstone WMAC	L M – H if incentives.	C: R: Existing resources; Foundation grants; 319 grants	C: Finding the correct mechanism or combination of mechanisms to get a developer to try roof gardens. O: Novelty. Produces E&O opportunities.	Reduced stormwater flows.	

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