

## Summary of Water Quality Planning Programs and Hazard Mitigation Frameworks

Local Hazard Mitigation Planning Steps		Water Quality Planning Steps		
Local Mitigation Planning Handbook (FEMA 2013)	Watershed (USEPA 2008)	Source Water Protection (USEPA 2018)	Stormwater Management (USEPA 2007)	
<b>1. Determine the planning area and resources</b> Determines the planning area and the participating jurisdictions, who will lead the plan, and the resources needed to support the planning process.		<b>DOCUMENT PURPOSE</b>		
Helps local governments in developing or updating a <b>local hazard mitigation plan</b> . Provides guidance to develop/update plans to meet the requirements of 44 CFR section 201.6 for FEMA approval and eligibility to apply for FEMA Hazard Mitigation Assistance grants. Also offers practical approaches and examples for communities to engage in effective planning to reduce long-term risk from natural hazards and disasters.	<b>Watershed plans</b> are a means to resolve and prevent water quality problems that result from both point source and nonpoint source problems. Watershed plans are intended both to provide an analytic framework to restore water quality in impaired waters and to protect water quality in other waters adversely affected or threatened by point source and nonpoint source pollution.	<b>Source water assessments</b> provide water utilities, community governments, and others with information needed to protect drinking water sources. The 1996 amendments to the Safe Drinking Water Act (SDWA) outline six steps for conducting source water assessments for public water systems (PWSs).	The objectives of <b>stormwater management planning</b> are to: (1) identify potential sources of stormwater pollution on a construction, industrial and/or municipal site; (2) describe stormwater control measures and Best Management Practices (BMPs) that will be used to reduce or eliminate pollutants in stormwater discharges from the project site; and (3) identify the procedures the operator of the project site will implement to comply with the terms and conditions of the site-specific general permit.	
<b>2. Build the planning team</b> Assemble a planning team of representatives from each jurisdiction and partner organization. These planning partners have the expertise to develop the plan, and their organizations have the authority to implement the mitigation strategy developed through the planning process.		<b>PLANNING STEPS</b>		
This is the core group of people responsible for developing and reviewing drafts of the plan, creating the mitigation strategy, and submitting the final plan for local adoption.	<b>1. Build partnerships</b> (a) Identify key stakeholders (b) Identify issues of concern for inclusion in the watershed plan (c) Set preliminary goals (d) Conduct public outreach	<b>1. Delineate the source water protection area (SWPA)</b> States delineate (map) the land area that could contribute pollutants to the water supply for each public water system.	<b>1. Apply for NPDES stormwater permit coverage for the jurisdiction or entity if applicable</b>	
<b>3. Create an outreach strategy</b> Develop an outreach strategy that identifies what you want to accomplish through your outreach efforts, who to involve in the process, and how and when to effectively engage the community.	<b>2. Characterize the watershed</b> (a) Collect existing data (b) Analyze data (c) Identify causes and sources of pollution to control (d) Identify data gaps and collect additional data if needed (e) Quantify pollutant loads	<b>2. Inventory known and potential sources of contamination</b> This inventory can provide a list and map of facilities and activities within the delineated area that might release contaminants into the source water.	<b>2. Follow permit requirements that can be permittee-specific. For example, for a Small MS4 there is a requirement to develop a SWMP that addresses six minimum control measures:</b> (a) Public Education and Outreach on Stormwater Impacts (b) Public Involvement/Participation (c) Illicit Discharge Detection and Elimination (d) Construction Site Runoff Control (e) Post-Construction Stormwater Management in New Development and Redevelopment (f) Pollution Prevention/Good Housekeeping for Municipal Operations	<b>1. Apply for NPDES stormwater permit coverage for the jurisdiction or entity if applicable</b>
<b>4. Review community capabilities</b> Assess your community's existing authorities, policies, programs, and resources available to accomplish mitigation.	<b>3. Finalize goals and identify solutions</b> (a) Set overall goals and management objectives (b) Develop indicators/targets (c) Determine load reductions needed (d) Identify critical areas (e) Develop management measures to achieve goals	<b>3. Determine the susceptibility of the water supply to contamination</b> The state combines the inventory results with other relevant information to decide how likely a water supply is to be contaminated by identified potential sources of contamination.	<b>3. Implement the SWMP using appropriate stormwater management controls, or BMPs</b>	<b>5. Evaluate the effectiveness of the SWMP</b>
<b>5. Conduct a risk assessment</b> Conduct a risk assessment to determine the potential impacts of hazards to the people, economy, and built and natural environments of the community.	<b>4. Design an implementation program</b> (a) Develop implementation schedule	<b>4. Notify the public about threats identified in the contaminant source inventory and what they mean to the PWS.</b>	<b>6. Address stormwater impacts to any threatened / impaired waters (i.e., TMDLs)</b>	

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<p><b>6. Develop a mitigation strategy</b> Describe how the community will accomplish the overall purpose, or mission, of the planning process.</p> <p><b>7. Keep the plan current</b> Develop procedures to monitor, evaluate, and update the mitigation plan over time.</p> <p><b>8. Review and adopt the plan</b> Incorporate feedback from the planning team, stakeholders, and the public on the final plan document. Accomplish final review and adoption of the plan document by the community and acquire FEMA plan approval.</p> <p><b>9. Create a safe and resilient community</b> Learn about common challenges communities face in implementing their mitigation strategy, suggestions for how to overcome mitigation barriers, and some funding and resources available to help.</p>	<p>(b) Develop interim milestones to track implementation of management measures</p> <p>(c) Develop criteria to measure progress towards meeting watershed goals</p> <p>(d) Develop monitoring component</p> <p>(e) Develop information/ education component</p> <p>(f) Develop evaluation process</p> <p>(g) Identify technical and financial assistance needed to implement plan</p> <p>(h) Assign responsibility for revising the plan</p>	<p><b>5. Implement management measures to prevent, reduce, or eliminate risks to your drinking water supply.</b> These measures can be tailored to address each threat or array of risks specific to each PWS.</p> <p><b>6. Develop contingency planning strategies that address water supply contamination or service interruption emergencies.</b> Water supply replacement strategies are important in the event of water drinking water supply disruption.</p>	<p><b>7. Provide reports on program status</b></p>	
			<p><b>5. Implement watershed plan</b></p> <ul style="list-style-type: none"> <li>(a) Implement management strategies</li> <li>(b) Conduct monitoring</li> <li>(c) Conduct information/education activities</li> </ul> <p><b>6. Measure progress and make adjustments</b></p> <ul style="list-style-type: none"> <li>(a) Review, evaluate information</li> <li>(b) Prepare annual workplans</li> <li>(c) Report back to stakeholders and others</li> <li>(d) Make adjustments to program</li> </ul>	