From Data to Decisions

Developing the Watershed Improvement Plan

The Watershed Institute

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What is a Watershed Improvement Plan

Required by the 2023 MS4 permit

Plans to be developed by Municipalities to:

- Improve water quality by reducing contribution of pollutant parameters found in a Total Maximum Daily Load (TMDL)
- Improve water quality by reducing contribution of pollutant parameters causing water quality in Integrated Report
- Reduce flooding

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Clean Water Act

The objective of this chapter is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.

It is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985;

It is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983;

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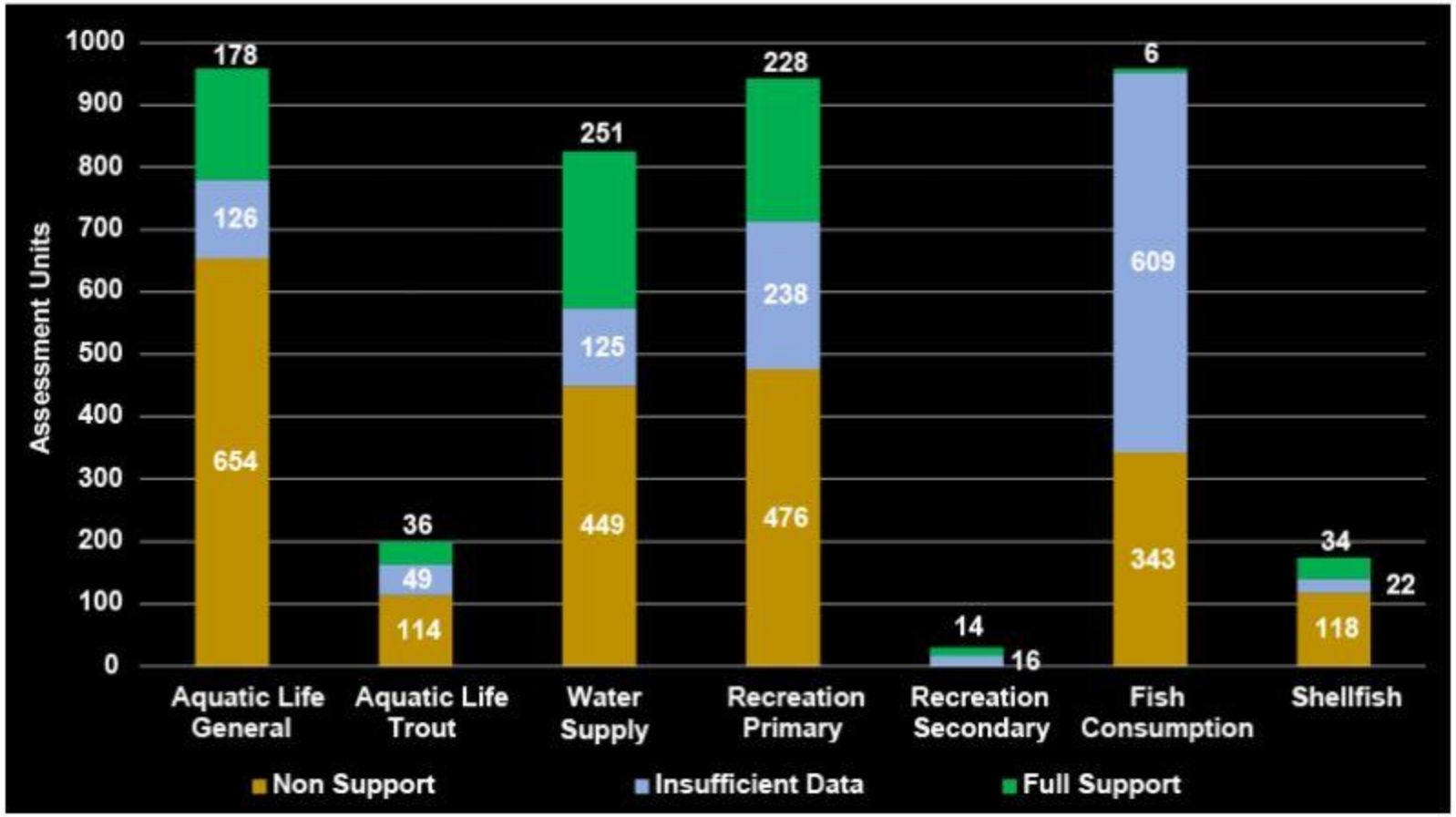
New Jersey Water Pollution Issues



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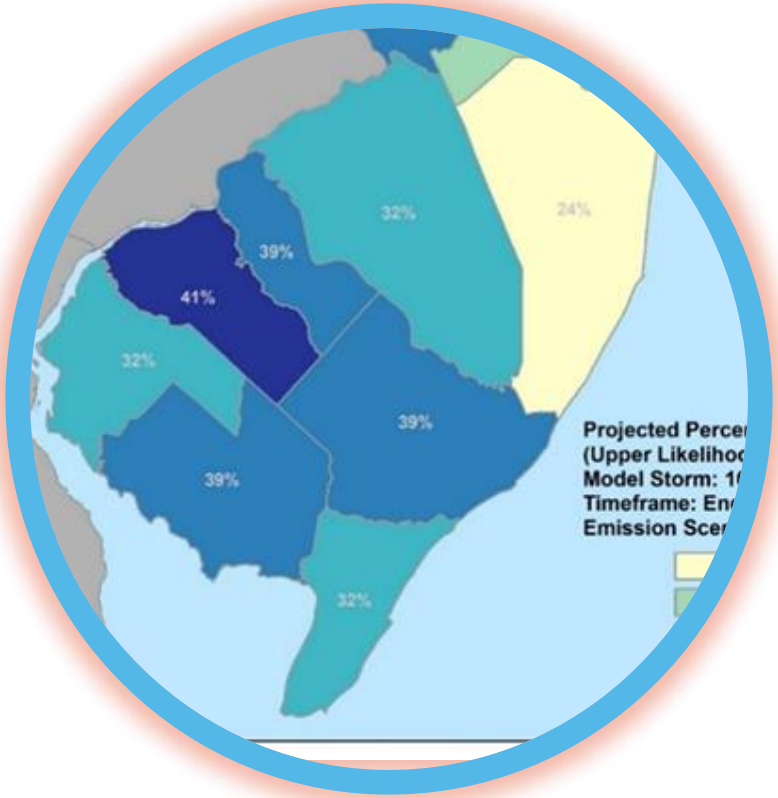
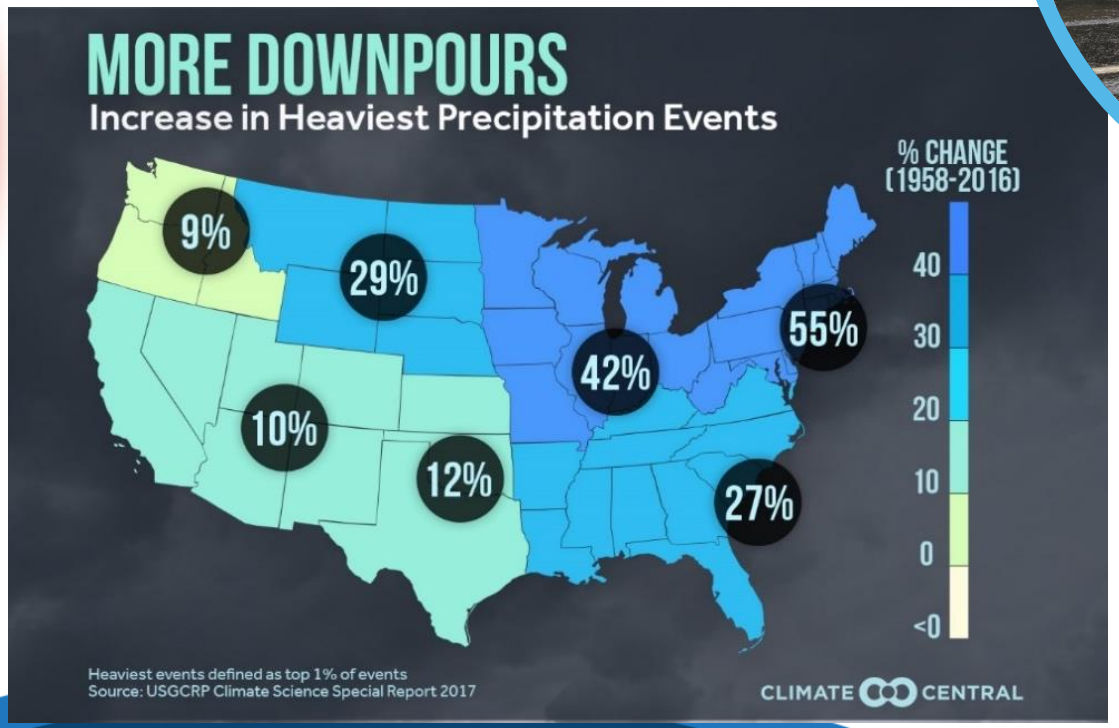
Flooding





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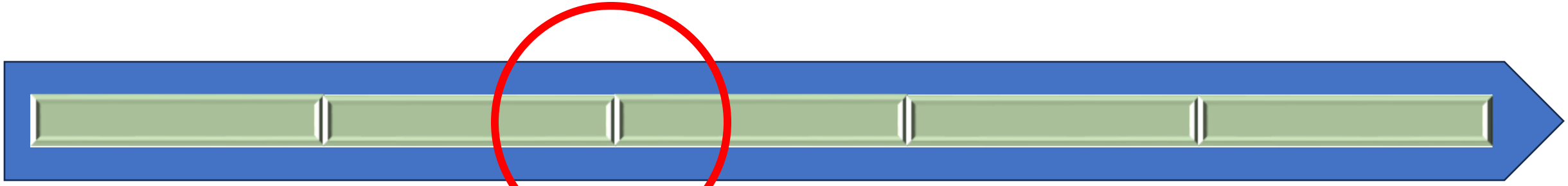
WIP Timeline



Year 1/Phase 1

Watershed Inventory Report: MAPPING

DUE DATE: End of 2025

Year 4/Phase 2

Watershed Assessment Report: PLANNING

DUE DATE: End of 2026

Year 5/Phase 3

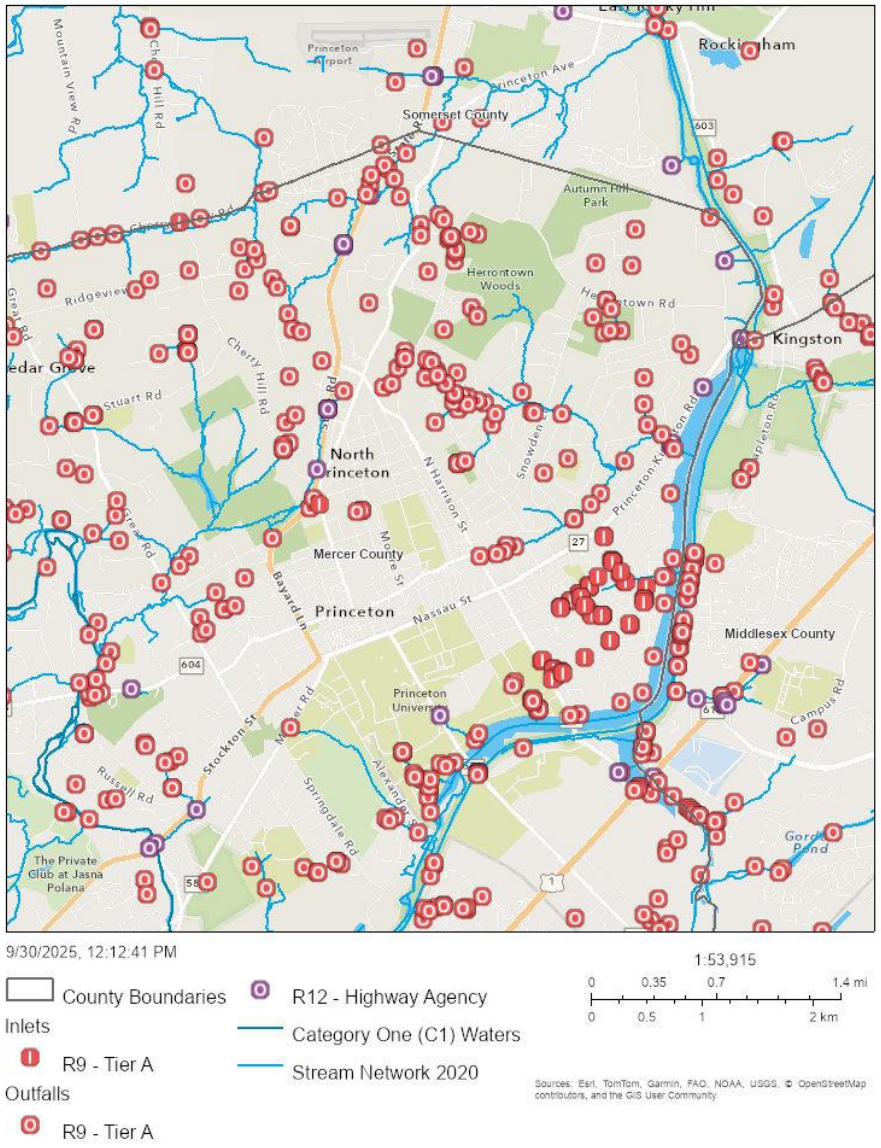
Watershed Improvement Plan: Finalization of Plan

DUE DATE: End of 2027

Watershed Inventory Report

- All outfalls
- Drainage areas for each outfall
- Receiving waterbodies for those outfalls
- Water Quality Classification
- Interconnection from municipality into another entity
- Drainage areas for those interconnection
- Interconnection into municipality from another entity
- All storm drain inlets
- Areas associated with each TMDL
- Area associate with each water quality impairment
- Overburdened communities
- Impervious areas
- Location of BMPs

NJ-GeoWeb Map



Watershed Assessment Report

- Assessment of potential water quality improvement projects
- Estimate of percent reduction in loading of TMDL/Impaired
- Public Participation 60 days/Feedback
- Estimate of funding for each project and identification of funding
  - NJ Water Bank
  - SWU
  - 319
  - FEMA
  - Etc.
- Estimate of implementation schedule

Table 11. Distribution of TSS WLAs and LAs among source categories for the Lower watershed

Long Term Average Daily Load (kg/d TSS)	Lower Millstone/Raritan River (except Beden)*		
	Existing Condition	TMDL Allocation	Percent Reduction
Sum of Wasteload Allocations (WLAs)	13,791	8,590	37.7%
Treated Effluent from WWTP Discharges#	3,127	4,325	-38.3%
Stormwater from Residential Land Cover Areas	5,835	2,334	60.0%
Stormwater from Other Urban Land Cover Areas	4,829	1,932	60.0%
Sum of Load Allocations (LAs)	42,171	25,741	39.0%
Boundary Inputs**	39,091	23,575	39.7%
Tributary Baseflow	460	460	0.0%
Stormwater from Agricultural Land Cover Areas	1,523	609	60.0%
Stormwater from Forest and Barren Land Cover Areas	399	399	0.0%
Stormwater from Wetlands Land Cover Areas	698	698	0.0%
Total Margin of Safety (% of LC)	n/a	1,219	3.4%
Reserve Capacity (% of WWTP load)	n/a	156	3.6%
Loading Capacity (LC)	55,961	35,707	36.2%

Watershed Improvement Plan Report

- Summary of proposed locations and load reductions
  - Public and private systems
- Summary of public comments
- Regulatory Requirements of proposed projects
- Proposed implementation schedule
- Schedule of public information sessions
- Problems identified outside of the jurisdiction
- Costs of project and funding opportunities
- Prioritization of projects in overburdened communities

Business As Usual

- 13 Municipalities
- 13 plans
- 1 River - Multiple tributaries
- How do you coordinate 11 plans?

Most efficient? More effective?

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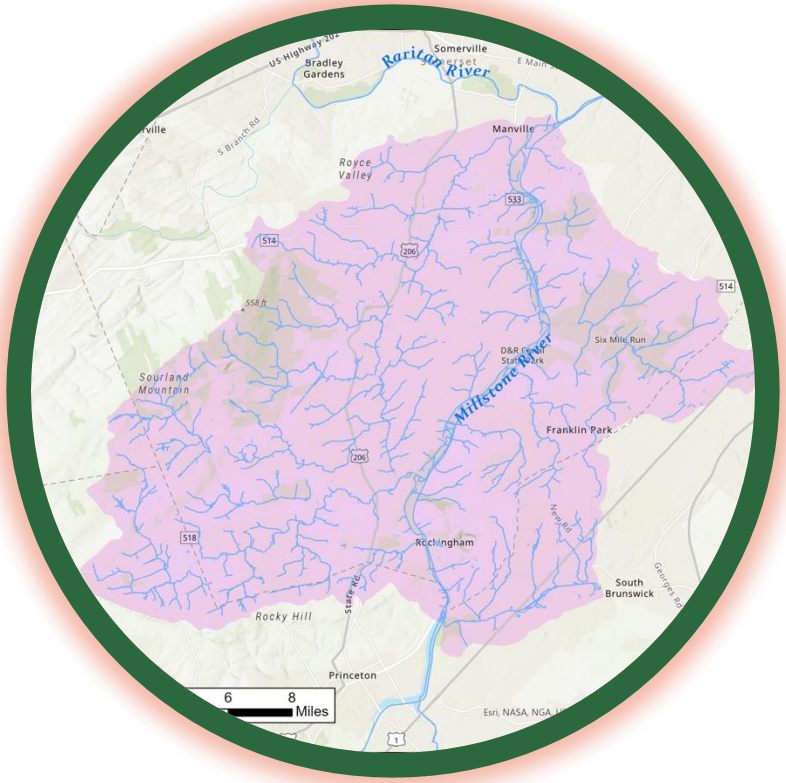
Go it alone? Or Work together?



- 13 Municipalities
- 1 River - Multiple tributaries
- 1 plan
- Implementation of projects in optimal locations
- Share resource shared cost

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How to Start

- Identify the region
- Identify key stakeholders
  - Engineering/Stormwater
  - Elected Officials
- Convene Meeting
- Select Consultant
- Pass Resolution

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Learn More


Tired of Flooding and Polluted Waterways?
You don't have to fix it on your own
Regional Watershed Improvement Plans:
• Reduce costs
• Yield more effective projects
• Expand potential locations and types of solutions
• Align technical analysis and data
• Leverage stronger grant applications and funding strategies
• Increase compliance with MS4 obligations


Start Today! Download the Guide
Guide to Regional Watershed Improvement Plans
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From Data to Decisions

Developing Watershed Improvement Plans

Learn more at **thewatershed.org**

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