Update on Integrated Stormwater and Wastewater Planning

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ACWA Meeting October 2020

What Is Integrated Planning?

✓Integrated planning is…

A voluntary opportunity for municipalities to meet Clean Water Act (CWA) obligations by sequencing wastewater and stormwater projects that also allows the use of innovative approaches like green infrastructure.

Integrated planning does NOT…

- Change regulatory standards.
- Remove obligations to comply with the CWA.
- Weaken existing permitting limits or requirements.

Audience Poll Question

How familiar are you with EPA's integrated municipal stormwater and wastewater planning approach framework?

A. I've never heard of it, until now
B. I've heard about it, but it hasn't applied directly to my job
C. I know about it and I have communicated with at least one municipality
D. I know about it and I have read an integrated plan from at least one municipality
E. I am very familiar with it and have worked on incorporating an integrated plan in a permit

What Regulated Sources of Water Pollution Can an Integrated Plan Address?

- Combined sewer overflows (CSOs)
- Sanitary sewer overflows (SSOs)
- Wastewater treatment facility (WWTF) discharges
- Municipal separate storm sewer system (MS4) discharges

What Other Types of Environmental Objectives Can an Integrated Plan Account for?

Integrated planning may also consider other environmental and community objectives, as long as prioritization provides equal or greater water quality benefits, including:

- Water conservation and reuse.
- Biosolids waste management.
- Resiliency and flooding.
- Environmental justice.
- Safe drinking water.
- Green infrastructure, including land conservation.
- Other public health priorities such as air quality.

Elements of an Integrated Plan

	1. A description of the water quality, human health and regulatory issues the plan addresses.
	2. A description of existing wastewater and stormwater systems in the plan and how they currently function.
	3. A process for continuous stakeholder engagement during the planning process and during plan implementation.
	4. A process for choosing alternatives and proposing implementation schedules.
	5. A process for measuring the success of an implemented alternative.
	6. A process to improve the plan over time by choosing new or modified projects and implementation schedules.

Benefits of Integrated Planning

Many municipalities and wastewater utilities that developed integrated plans have gained:

	Faster water quality improvements and health protections.
	More cost-effective and affordable infrastructure investments.
	Consideration of investments that support other community objectives.
	Innovative long-term solutions that reduce pollution sources rather than just controlling or treating discharges.

Water Infrastructure Improvement Act

- Signed on January 14, 2019.
- Created an Office of the Municipal Ombudsman within the EPA Administrator's Office.
- Amended the CWA to codify integrated planning and define it as a plan developed in accordance with EPA's 2012 "Integrated Planning Framework."
- Required a Report to Congress by January 14, 2021, on permits and enforcement actions with integrated plans developed since the 2012 Framework.
- Defined green infrastructure and formalized EPA's Green Infrastructure Program in the CWA.

EPA's First Municipal Ombudsman Hired

Ombudsman's role:

- Coordinate with EPA offices
- Help communities navigate EPA resources
- Advocate for fair processes and uniform application of CWA policies

More information:

- Water Environment Federation podcast, June 2020
- Municipal Ombudsman, EPA webpage
- Contact Jamie Piziali – Piziali.Jamie@epa.gov

EPA Activities Underway on Integrated Planning

- Memos sent to EPA regions in 2019 to inform municipalities about the opportunity to develop an integrated plan.
- Webcasts on integrated planning
- Report to Congress will be delivered in first quarter of 2021.
- Office hours for state permitting authorities and municipalities (UNC Environmental Finance Center).
- Roadmap for integrated planning.
- Permitting authority checklist.
- Technical assistance to municipalities and states.

Roundtable discussion with Permitting Authority's - January 2021

Integrated Planning Technical Assistance

- The Environmental Finance Center is providing technical assistance to:
  - State Permitting Authorities reviewing integrated plans
  - Municipalities developing an integrated plan

This will be available: December 1, 2020 – August 31, 2021

- For more information contact:
  - Evan Kirk emkirk@sog.unc.edu
  - Ellen Kohler ejkohler@umd.edu

Audience Poll Question

What would be the most meaningful way to improve the efficacy of incorporating integrated planning elements in future NPDES permits?

A. I'm not interested because it doesn't apply to my day to day responsibilities

B. Learning from other permitting authorities about how they handled it

C. Reading a handbook that walks through the integrated planning process

D. Having a check list of integrated planning elements when reviewing a plan

E. Having example permit terms and conditions to use when developing a permit

AS OF 10/1/2020

Plans Implemented in Permits

- **Richmond, VA:** integrated permit (WWTF, CSOs, MS4)
- **Atlanta, GA:** CSO permits
- **Akron, OH:** WWTF permit
- **Columbus, OH:** WWTF permit modification
- **Boone, IA:** WWTF permit
- **Columbia, MO:** WWTF permit, MS4 permit
- **Lawrence, KS:** WWTF permits
- **Springfield, MO:** MS4 permit
- **Seattle, WA:** CSO permit

Implemented Plans That Address Nutrients

- **Akron, OH:** Plan proposed a reduction in phosphorus loading and compliance with statewide nutrient reduction strategy.
- **Columbia, MO:** Plan included WWTF upgrades to meet more stringent ammonia limits.
- **Richmond, VA:** Plan proposed to expand secondary treatment capacity at WWTF and to install green infrastructure.
- **Seattle, WA:** Plan proposed three stormwater projects using a combination of gray, green, and programmatic measures to reduce nutrient loads.
- **Johnson County, KS:** Plan included major facility upgrades for nutrient removal, staggered throughout planning period to reduce rate impacts.
- **Lawrence, KS:** Plan included nutrient removal at WWTF.
- **Lima, OH:** Plan included wet weather operation of nitrification towers to reduce nitrogen.
- **New Bedford, MA:** Plan recommended upgrading aeration system and reducing CSO volume to reduce total nitrogen from baseline conditions of 11,700 pounds/year to 6,100 pounds/year.

Thank you!

For more information:

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Visit:

https://www.epa.gov/npdes/integrated-planning-municipal-stormwater-and-wastewater