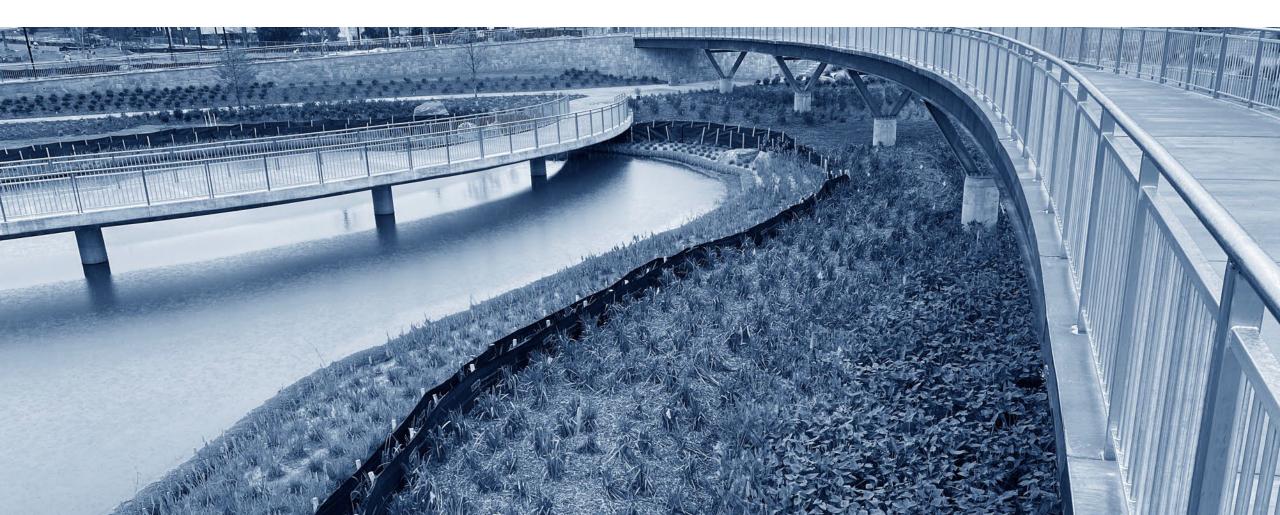


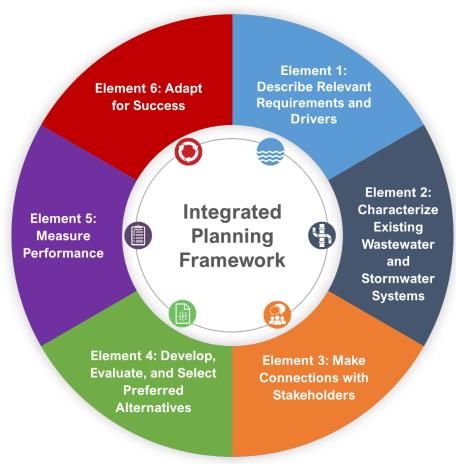
### Integrated Planning with NPDES Permits: Stormwater and Wastewater Together

Robyn DeYoung, Heather Huddle, and Rachel Urban



# What Is U.S. EPA's Integrated Planning Framework?

- A voluntary opportunity for municipalities to achieve water quality goals by prioritizing wastewater and stormwater projects using stakeholder input that encourages innovative approaches like green infrastructure.
- Integrated planning can include other environmental and community priorities, including climate resiliency, as long as reprioritization provides equal or greater water quality benefits.



# Integrated Planning Focuses on Prioritizing Stormwater and Wastewater Related Investments



# May Address Requirements under Clean Water Act:

- 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 Priorities Can an Integrated Plan Account for?

Integrated planning may also consider other environmental and community priorities, as long as reprioritization 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.

## 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 prioritize reduction of pollution sources rather than only controlling or treating discharges.

## 6 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.



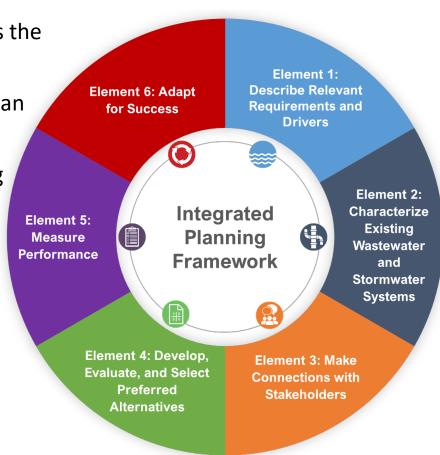
4. A process for choosing alternatives and proposing implementation schedules.



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.



### Integrated Planning Resources

- Integrated Planning StoryMap -<a href="https://storymaps.arcgis.com/stories/20e0e046df084e1ba1ecfac3414edc07">https://storymaps.arcgis.com/stories/20e0e046df084e1ba1ecfac3414edc07</a>
- Integrated Planning Fact Sheets <a href="https://www.epa.gov/npdes/integrated-planning-implementation-documents">https://www.epa.gov/npdes/integrated-planning-implementation-documents</a>
  - The Basics
  - Getting Started
  - Funding the Development of an Integrated Plan
  - Funding Integrated Plan Implementation
  - Determining Drivers and Requirements
  - Adapting for Success
- Excel Workbook Tool to prioritize projects using Stakeholder feedback
- Copies of Integrated Plans across the country

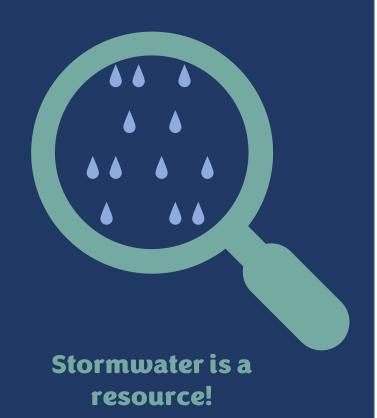
Integrated Planning website - <a href="https://www.epa.gov/npdes/integrated-planning-municipal-stormwater-and-wastewater">https://www.epa.gov/npdes/integrated-planning-municipal-stormwater-and-wastewater</a>

Coming Soon!
Toolkit for
Permitting
Authorities

## Video of Lakewood Ohio's Experience:



#### The Need for a Stormwater Focus



Stormwater is a growing source of pollution, and a more focused, future-looking solution is needed

- Early adopters of the integrated planning framework were largely driven by sewer overflow and wastewater treatment focused compliance requirements.
- Thoughtful planning, stakeholder engagement, and coordination across departments, however, has utility in all communities.
- We saw an opportunity to emphasize these principles with some communities whose main drivers and goals were stormwater focused.
- Working with four communities to develop and pilot the materials, we developed a suite of resources to support long-term planning and analyses around stormwater assets.



Stakeholder Involvement



Asset Management



Funding/ Financing



Stormwater
Infrastructure
Opportunities



Roadway Projects



Development and Redevelopment Policies

Planning to manage stormwater now and in the future can **create opportunities** for communities to rediscover and use stormwater as a resource, **smartly invest** in resilient infrastructure, **revitalize waterways**, and **add green space** that makes communities more enjoyable and welcoming.

**Involve stakeholders** who care about a broad range of topics beyond wastewater and stormwater.



# Stakeholder Involvement



Asset Management



Funding/ Financing



Stormwater Infrastructure Opportunities



Roadway Projects



Development and Redevelopment Policies

### Listen and Adjust Based on Input

Identifying a variety of stakeholders and actively engaging them throughout the process is essential.

- Invites people to participate at the beginning.
- Includes stakeholders with varying interests and concerns so that approaches are more comprehensive.
- ◆ Listens to stakeholders without preconceived notions of what the outcomes will be.
- ◆ Provides an opportunity to hear new challenges or impacts community members may be facing.



Stakeholder Involvement



Asset Management



Funding/ Financing



Stormwater Infrastructure Opportunities



Roadway Projects



Development and Redevelopment Policies

#### Get to Know the Infrastructure

Asset management programs can be integrated into capital improvement plans and community financial plans.

- Focuses on data-driven actions and procedures.
- ◆ Takes a proactive approach to managing stormwater infrastructure.
- Better leverages resources.
- Ensures adequate operation and maintenance.
- Keeps better track of expected pollutant reductions.



Stakeholder Involvement



Asset Management



# Funding/<br/>Financing



Stormwater Infrastructure Opportunities



Roadway Projects



Development and Redevelopment Policies

### Sustainably Support the Program

Communities want to sustainably support a successful stormwater program and implement infrastructure projects.

- ◆ Provides sufficient funding for administrative support, design, construction, operation, and maintenance over time.
- ♦ Considers a variety of funding mechanisms available including dedicated municipal revenue sources as well as external financing options that can be combined.



Stakeholder Involvement



Asset Management



Funding/ Financing



Stormwater
Infrastructure
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Development and Redevelopment Policies

### **Look for Strategic Opportunities**

Most communities update, replace, or design new stormwater infrastructure, including green infrastructure, to protect their communities from local flooding and reduce pollutants.

- ◆ Thoughtfully design, plan, and integrate capital investments with larger community projects and priorities.
- ♦ Looks for opportunities to improve stormwater management when other investments are happening.
- ♦ Saves community members the hassle of construction work disruptions in the same place multiple times.
- ◆ Plans for, considers, and addresses future climatic conditions.



Stakeholder Involvement



Asset Management



Funding/ Financing



Stormwater Infrastructure Opportunities



Roadway Projects



Development and Redevelopment Policies

### Manage Roadway Stormwater

There are many options to reduce stormwater from transportation infrastructure and rights of way.

- Looks for opportunities to incorporate green infrastructure.
- Promotes innovative stormwater designs with multiple benefits.



Stakeholder Involvement



Asset Management



Funding/ Financing



Stormwater Infrastructure Opportunities



Roadway Projects



Development and Redevelopment Policies

### Develop With the Future in Mind

Development policies outline project requirements that can make a difference now and in the future.

- Prevents or reduces local flooding.
- Protects natural resources like green space and waterways.
- Promotes desirable development.
- Protects infrastructure.
- ♠ Increases resiliency by promoting better stormwater management.

## Resources/ More Information

www.epa.gov/npdes/integratedplanning-municipal-stormwater-andwastewater

www.epa.gov/npdes/stormwater-planning

