





Check out another recent Integrated Planning webcast

- User Guide to Integrated Stormwater and Wastewater Planning
 - Feb. 20, 2018 1-3pm
 - WEF Members: https://wefcom.wef.org/viewdocument/userguide-for-integrated-stormwate
 - Non-WEF Members: http://knowledgecenter.wef.org/products/1214

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Our Next Speakers



Deborah Nagle Office of Science and Technology



Chris Kloss Water Permits Division

Water Environn Federation

Office of Water, U.S. EPA



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A Community-Based Approach to Long-Term Stormwater Planning

- EPA met with states, communities, businesses, industry groups, academia, and NGOs about the best ways to improve stormwater programs
- Communities cannot afford to wait to address the flooding and public health hazards of stormwater
- Many cities have found that an effective, comprehensive approach to managing stormwater includes green infrastructure practices that complement gray infrastructure to manage rain where it falls



Communities Want To...

- Protect public health by providing clean, safe water and resilient infrastructure
- Make smart investments in water systems that promote economic development and attractive communities
- Identify efficiencies and sequence investments to successfully meet Clean Water Act obligations



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Steps & Elements of the Guide Correspond to the Elements of the Integrated Planning Framework

Draft Long-term Stormwater Planning Guide		Integrated Planning Framework
Step 1 - Assess Where You Are Now	Element 1 – Identify the goals	Element 1 – Description of water quality, human health, and regulatory issues
	Element 2 – Describe water quality and human health issues to be addressed in the plan	
	Element 3 – Describe existing stormwater systems and their performance	Element 2 – Description of existing wastewater and stormwater systems and current performance
Step 2 - Analyze Opportunities	Element 4 – Stakeholder communication and involvement	Element 3 – Stakeholder communication and involvement
	Element 5 – Identify, evaluate and select stormwater management alternatives based on identified goals and objectives	Element 4 – Identifying, evaluating, and selecting alternatives and proposing implementation schedules
Step 3 - Move Toward Implementation	Element 6 – Document a process for proposing investments and implementation schedules	
	Element 7 – Document a process for evaluating the performance/success of the plan's projects.	Element 5 – Measuring success - evaluation of monitoring data, pilot studies
What's Next?	Build It Communicate It Refine it	Element 6 – Improvements to the Plan (adaptive management)
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Goals of Long Term Plans

The four communities are interested in pursuing similar goals for their long term stormwater plans:

- Develop Asset Management Program
- Manage Flooding
- Sustainably Finance a Stormwater Program
- Create and Implement Stormwater Development Standards and Educate developers
- Integrate Stormwater into Downtown Redevelopment areas and other Economic Development Plans

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- Pursue Stormwater Opportunities in Transportation Projects
- Improve Water Quality and Manage Water Holistically
- Increase Collaboration Throughout the Local Watershed
- Increase the Resiliency to Urban Heat and Water Demand



Our Next Speakers



Jim Pletl Chair, NACWA Water Quality Committee



Chris Hornback Deputy CEO, NACWA NACVA ())))



















An IP for everything is too daunting?

- You define the scope
- CWA expects compliance with all requirements at the same time - that's daunting!
- Focus on desired environmental and human health outcomes and related actions



Don't have the resources to do something new like an IP?

- You cannot afford to ignore IP!
- IP...
 - maximizes benefit/\$ investment
 - encourages more effective and efficient operations (innovation)
 - breaks down organizational silos, streamlines work





IP should be considered by all communities...



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- Costs of providing services will continue to rise
- Environmental and human health goals will likely continue to be more challenging to meet
- Community expectations grow over time
- If these stressors do not apply today they certainly will in the near future



















Advice on Regulatory Engagement

- Where you are in the process may impact the benefits of integrated planning
- Engage the agencies early and often
- Develop a relationship
- Consider the financial risks & make sure your government officials understand the commitments in the plan
- Include something to offer the regulators ("win-win")

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• Be prepared to go higher up



















Clean Water Services

- Regional wastewater and stormwater district in cooperation with:
 - 12 member cities
 - Washington County
- Service population >560,000
- Operates four wastewater treatment facilities
- Implements municipal stormwater program
- River flow management and regional water supply planning

Outcome: Watershed Health



Today, We Face Complex Environmental Problems









Hydro Modification



Aging Infrastructure



Stormwater

Phase II Permit



CSO and SSO



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Regulations

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Water







Regulatory Framework With Innovation? (!!!)

- First watershed-based permit
- Water quality trading
 Innevative temperature trad
 - Innovative temperature trading
 - Restoration and flow augmentation
- Mass bubbled loading
 - TSS, Ammonia, Phosphorus







Benefits of the Watershed-Based Permit

- System-based approach rather than managing impact from individual WWTFs
 - Optimize existing infrastructure
 - Reduce chemical cost
 - Reduce energy cost
- Allows support for a complex TMDL
- Provides pathway for restoration improvements
- Creates a shift to watershed-scale management

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Outcome-Based Integrated Planning

- Innovative regulatory framework
- Leverage partnerships
- Integrated project implementation
- Collaborative culture

Stakeholder Involvement: Leverage Partnerships

- Integrated planning provides a framework to leverage partnerships and resources
- Provides greater
 watershed outcome



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