Floodplains Matter

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Floodplains Play a Role in Clean Water Act

- Help achieve CWA goals
- Connect upland and aquatic environments
- Remove pollution, reduce coastal storm surges, slow runoff
- Provide habitat (Make up 70% of all wetland acreage)
- Increase resilience to climate change
EPA Water Management Programs that Affect Health & Management of Floodplains

- Waters of the US (WOUS) proposed rule
- Climate Change
- Using Natural Infrastructure to Manage Stormwater
- Healthy Watersheds
- Working with Federal Partners
Protecting Waters of the U.S
Waters Protected by Clean Water Act “Jurisdiction”

- The scope of CWA jurisdiction affects all CWA programs
- CWA covers “navigable waters”: waters of the United States, including territorial seas
- CWA does not define “Waters of the United States
- The current regulatory definition is essentially unchanged since the late 1970s
Proposed “Waters of the U.S.” (WOUS) Rule

- Based on science
- Defines “Waters of the U.S.” for all CWA programs, in light of the Supreme Court decisions
- Protects most seasonal and rain-dependent streams.
- Protects waters near rivers and streams
- Protects other types of waters to be evaluated on a case-specific analysis
- Retains existing CWA exemptions
Wetlands are Protected

- Wetlands and open waters near rivers and streams are protected.
- Floodplain itself IS NOT a water of the US.
- Rule makes clearer that wetlands and other waters located within floodplains are included in definition of waters that are “adjacent” to traditional navigable waters.
Proposed WOUS Rule: Defining “Floodplains”

- Waters adjacent to traditional navigable water, interstate water, territorial seas, tributaries, and jurisdictional impoundments are waters of the U.S.
- Currently “adjacent” means “bordering, contiguous, or neighboring”
- The proposed rule defines the term neighboring: “includes waters located within the riparian area or floodplain....”
Proposed WOUS Rule: Defining “Floodplains”

• Further defines “floodplain”: “an area bordering inland or coastal waters that was formed by sediment deposition from such water under present climatic conditions and is inundated during periods of moderate to high water flows”
• Because of floodplain variation, use BPJ to determine if water is located in a floodplain
Latest Peer Reviewed Science:
Draft Report - Connectivity of Streams & Wetlands to Downstream Waters

• Scientific evidence on connectivity or isolation of:
  • Non-tidal streams, including headwaters
  • Wetlands & certain open waters in riparian zones & floodplains
  • Wetlands outside of riparian zones & floodplains, including “geographically isolated wetlands”
1. Streams are “hydraulic highways,” and are the dominant source of water in most rivers.

2. All tributaries, regardless of size or flow duration are connected to, and have important effects on, downstream waters.

3. Transformation of material in small streams (e.g. nutrient processing) have large effects on downstream water quality.

4. Wetlands and open waters in riparian areas and floodplains are integrated with river networks.
Waters within the floodplain are strongly connected to downstream waters.

Riparian and floodplain areas connect upland and aquatic environments: biological, physical, chemical.

They sustain water quality & productivity of downstream rivers, lakes, and estuaries.

They reduce flood peaks and help maintain flow by storing excess water from streams and rivers.

They provide important refuge for plant and animal populations during times of stress.
We Want Comments and Input on the Proposed Rule

90 day public comment period

July 21 comment period closes
Climate Change & Water Programs
Climate change is affecting our waters

• Changes in the intensity of precipitation events
• Loss of snow pack and earlier snowmelt
• Longer and more intense droughts
• Shifts in seasonal timing of precipitation
• More intense coastal and inland storms
• Combined with other stressors, climate change is overwhelming the capacity of ecosystems to buffer impacts from floods, storms and drought.

• U.S. National Climate Assessment, 2014
President’s Plan for Climate Change

Taking action to build national resilience to climate change impacts

• Build Stronger Communities and Infrastructure
• Protect Natural Resources & Economy
• Use Sound Science to Manage Impacts
Example: Climate Ready Estuaries

- Work with 28 National Estuary Programs to develop risk-based approach to climate change
- Assess climate change vulnerabilities
- Support demonstration projects
- Develop and implement climate change adaptation strategies
- Engage and educate
Using Natural Infrastructure to Manage Stormwater
Low Impact Development (LID) & Floodplain Protection

- LID mimics pre-development site hydrology
- EPA promotes LID policies to protect water quality from stormwater impacts
- LID reduces runoff volume/pollutants via retention, infiltration, water harvest
- LID can help reduce flooding and improve floodplain resiliency
- By 2040, adoption of LID would avoid $100 million in annual flood-related losses
Green Infrastructure (GI) & Floodplain Protection

- GI can reduce flood risks and vulnerability of natural systems
- Helps maintain floodplain storage and improves infiltration capacity of floodwaters
- Adoption of GI could reduce costs of compensation for flood losses and disaster recovery
- Adoption of American Society of Civil Engineers, Task Force on Flood Safety and Policies, cites the benefits of natural system
Protecting Clean Waters, Including Floodplains
• Protects the resiliency of watersheds still in good condition so they can maintain important functions
• Protects aquatic ecosystems across large scales
• Builds state capacity to identify healthy, functioning watersheds and develop strategies to protect them, including floodplains
Working with Federal Partners

- Federal Interagency Floodplain Management Task Force
- EPA/NAFSMA
- EPA/FEMA MOU
- EPA/HUD/DOT
Working With Federal Partners

- National Drought Resilience Partnership
- Principles and Guidelines
• Puget Sound National Estuary Program established by CWA in 1987
• Achieve goals by using a non-regulatory approach and working with partners.
• The Puget Sound Partnership (PSP) is working to implement “Floodplains by Design.”
Floodplains matter: they help achieve CWA goals

- Floodplains matter: they help achieve CWA goals
- Floodplains provide many environmental and economic benefits
- The proposed “Waters of the U.S. Rule” is important for wetlands and other waters within floodplain
- Other EPA programs help preserve and restore floodplains
- We need Partners