

# Outcomes from Stream Restoration in the Past – Stream Stabilization (pre-2010 period of Chesapeake Bay Agreement)



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# Panelist

- **Richard Starr – Ecosystem Planning and Restoration**
- **Scott Lowe – McCormick and Taylor**
- **Bill Stack – Center for Watershed Protection**
- **David Wood – Chesapeake Stormwater Network**

# “Stream Stabilization”

**Any type of stream/floodplain  
construction activity**

**Panel Focus:**

- Drivers
- Stabilization Activities
- Outcomes

# 1970's – 1980's

- **1972 CWA – Protect Nation's Drinking Water**

- Focused on water quality

- **1980's**

- **Primary Drivers:**

- Flood control
- Infrastructure protection
- Mineral source
- Waste disposal
- Irrigation
- Agricultural
- Transportation
- Recreation

- Low ecological uplift



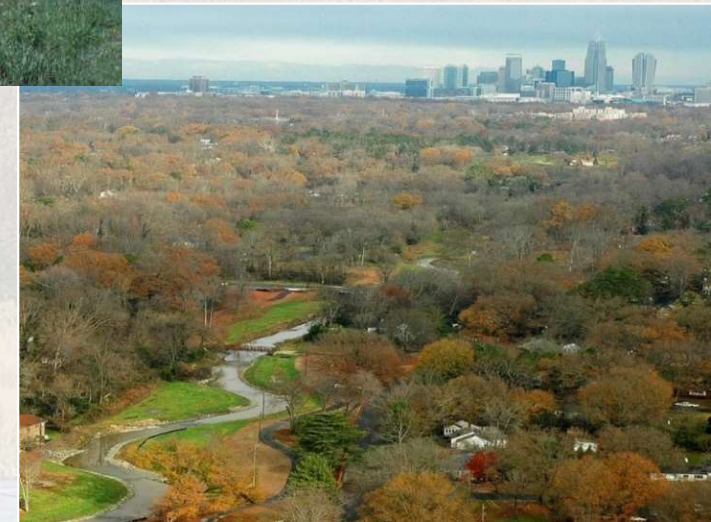
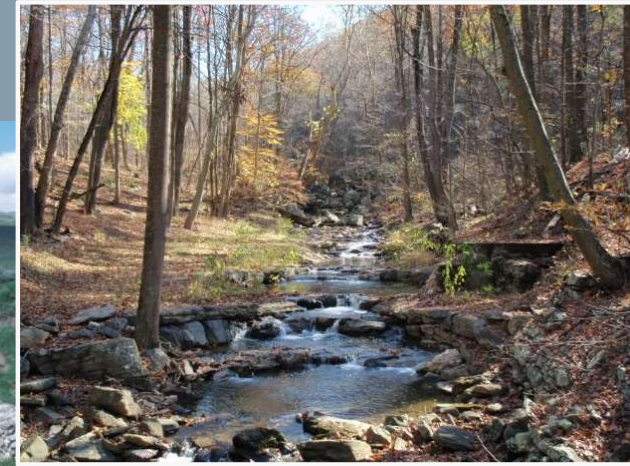
# 1990's

## ■ Primary Drivers

- Similar to 1980's
- Shift in perspective of stream values
- Natural Channel Design
- Mitigation
- Voluntary restoration
- Dam removal

## ■ Primarily stream channel restoration focus

## ■ Improved instream ecological uplift



# 2000's

## ■ Primary Drivers

- EPA 2008 Mitigation Rule – function focused
- SWM regulations
- Legacy sediment research
- Floodplain restoration design
- Mitigation
- Voluntary restoration
- Dam Removal

- Development of varying design objectives and approaches
- Designs start to consider floodplain processes more
- Instream and floodplain ecological uplift



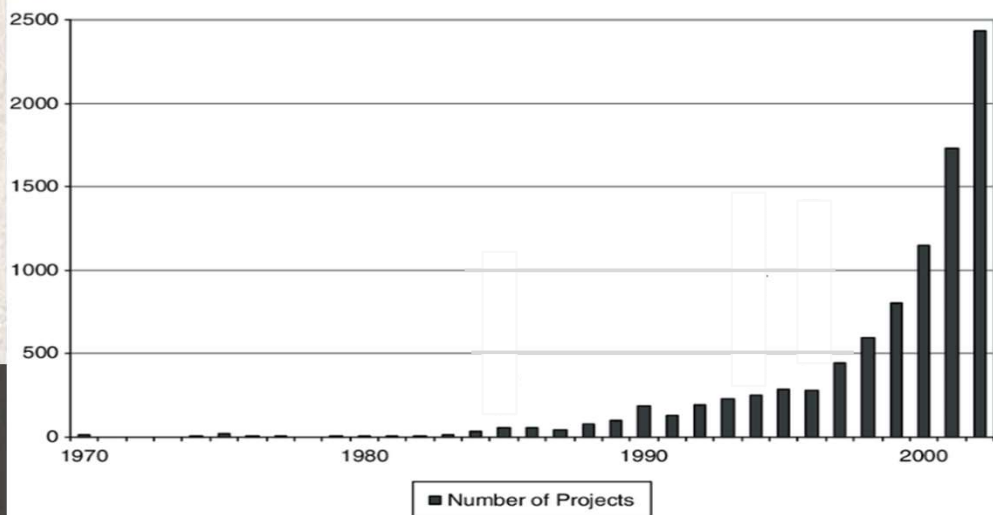
# 2010

## ■ Primary Drivers

- Chesapeake Bay EO
- Mitigation,
- TMDL reductions
- Voluntary restoration

## ■ Development of varying design objectives and approaches continue

## ■ Greater instream and floodplain ecological uplift



Number of stream restoration projects in the US per year, as reported by the National River Restoration Science Synthesis project (Bernhardt et al. 2005)