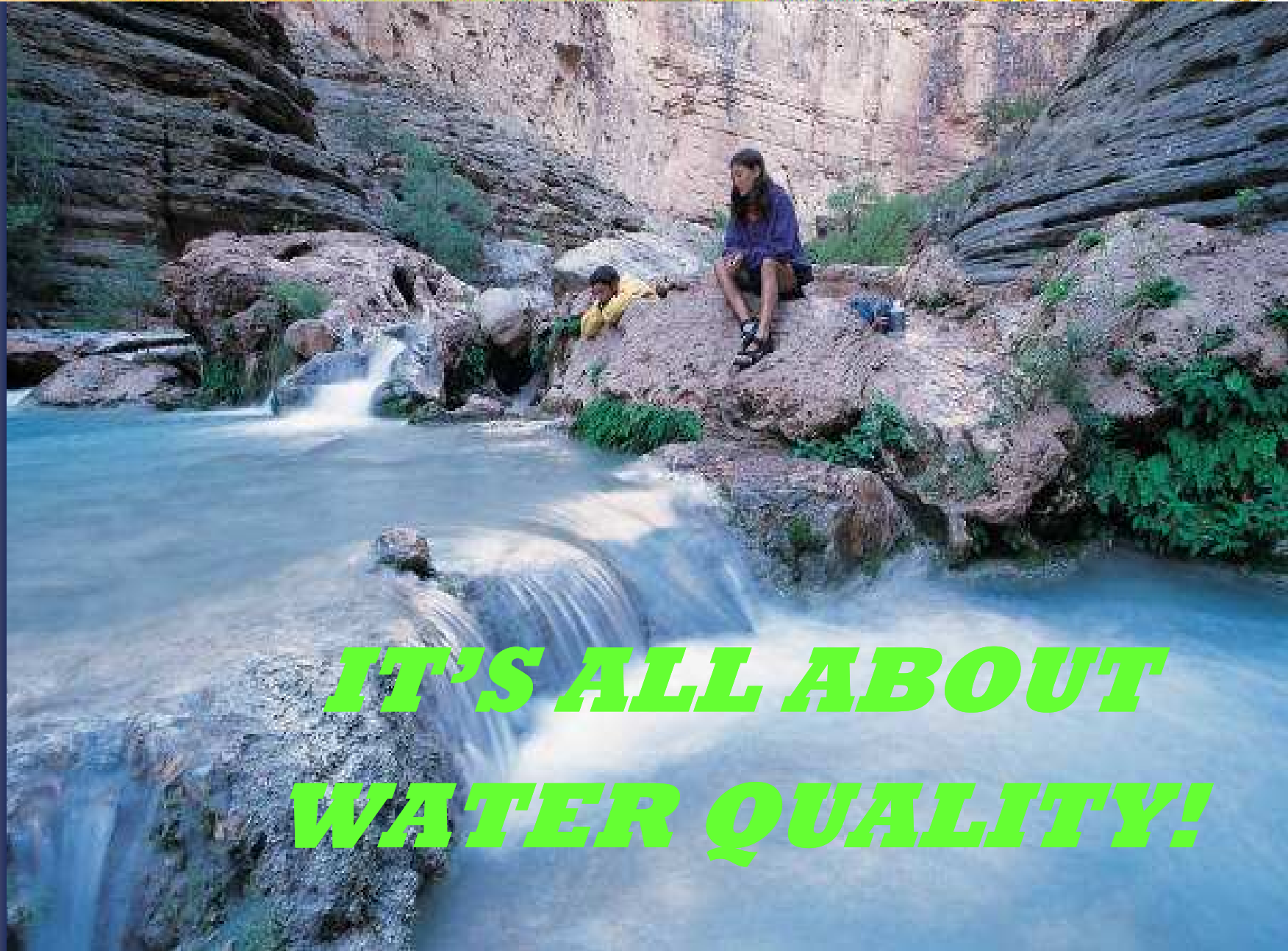
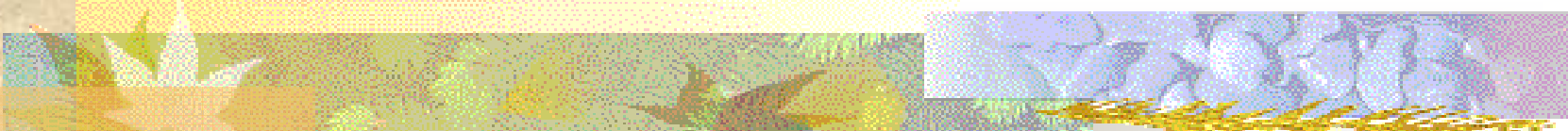


**Tackling Floatable
Trash & Debris
in the Passaic River,
Hackensack River
& Newark Bay:
Current Efforts
& New Approaches**

**April 4, 2008
Montclair State University**



***IT'S ALL ABOUT
WATER QUALITY!***



Topics of Discussion:

- **Introduction**
- **Boom Technology**
- **Netting Technology**
- **Treatment Plants**
- **Engineered Point Source Approach**



New Jersey CSOs:

- **Number of NJ CSO Communities – 34**
- **Number of NJ CSO Outfalls – 277**
- **Installed Base of Trash & Floatable Equipment in NJ – 138**
- **Other System/Separation – 91**
- **Number Unfinished – 48**

More to come



Boom Technology

- **Early 1990's**
- **Why booms?**
- **Effectivines....**



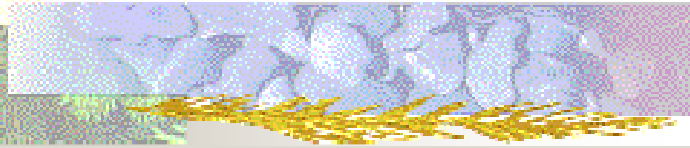
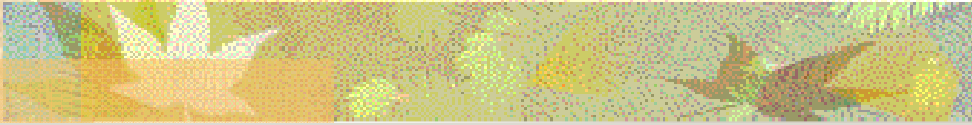
Simple Containment Boom at the headwall of a CSO outfall in Westchester Creek



Elaborate Containment Boom on the Bronx River



**UMI TrashCat™ skimming back bay
wetland areas of New York City's Jamaica Bay**

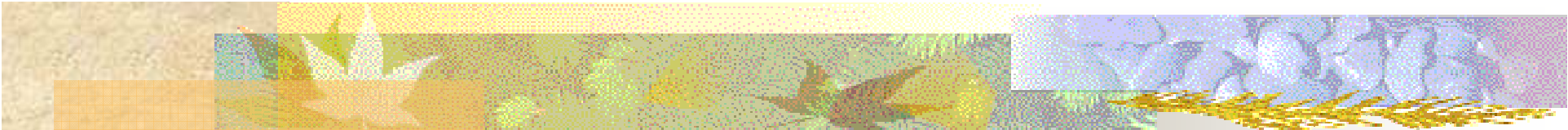


Boom Conclusions



Netting Technology

- **How it evolved**
- **Applications today**



Types of Netting Systems

End-of-Pipe Netting System



- **Installs Between Kneewalls**
- **Serviced with a Jib Crane**



In-Line Netting System



- **Completely Underground**



- **Installed Up Stream of Outfall**
- **Most Common Design**
- **Completely Hidden**

Floating Netting System

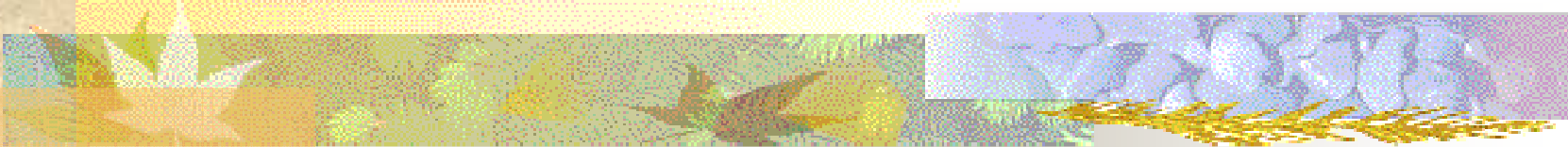
- Floats at water level at end of outfall
- Modular & prefab for fast installation
 - Type 316 SS
 - USCG Foam
 - Fiberglass Grating
- Serviced by Boom Truck





Differentiation:

- **Nets**
- **Booms**
- **Treatment Plants**



Engineered Point Source Approach . . .

[Big Ending . . .]

John Meakim
Engineers Plus



***IT'S ALL ABOUT
WATER QUALITY!***