



North Carolina Coastal Federation

CITIZENS WORKING TOGETHER FOR A HEALTHY COAST

Southeast Regional Office

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Mission: *To provide citizens and groups with the assistance needed to take an active role in the stewardship of North Carolina's coastal water quality and natural resources.*

Citizens Working Together for a Healthy Coastal Environment



The Grey to Blue Project



CITY OF
WILMINGTON
NORTH CAROLINA

WITHERS & RAVENEL

BRADLEY AND HEWLETTS CREEKS WATERSHED RESTORATION PLAN



The City of Wilmington

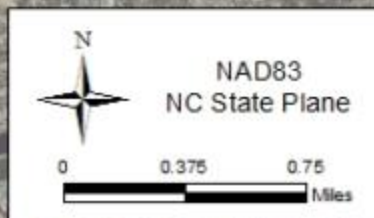
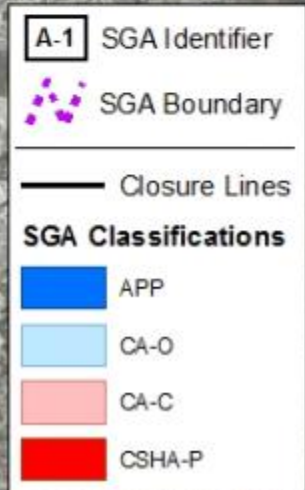
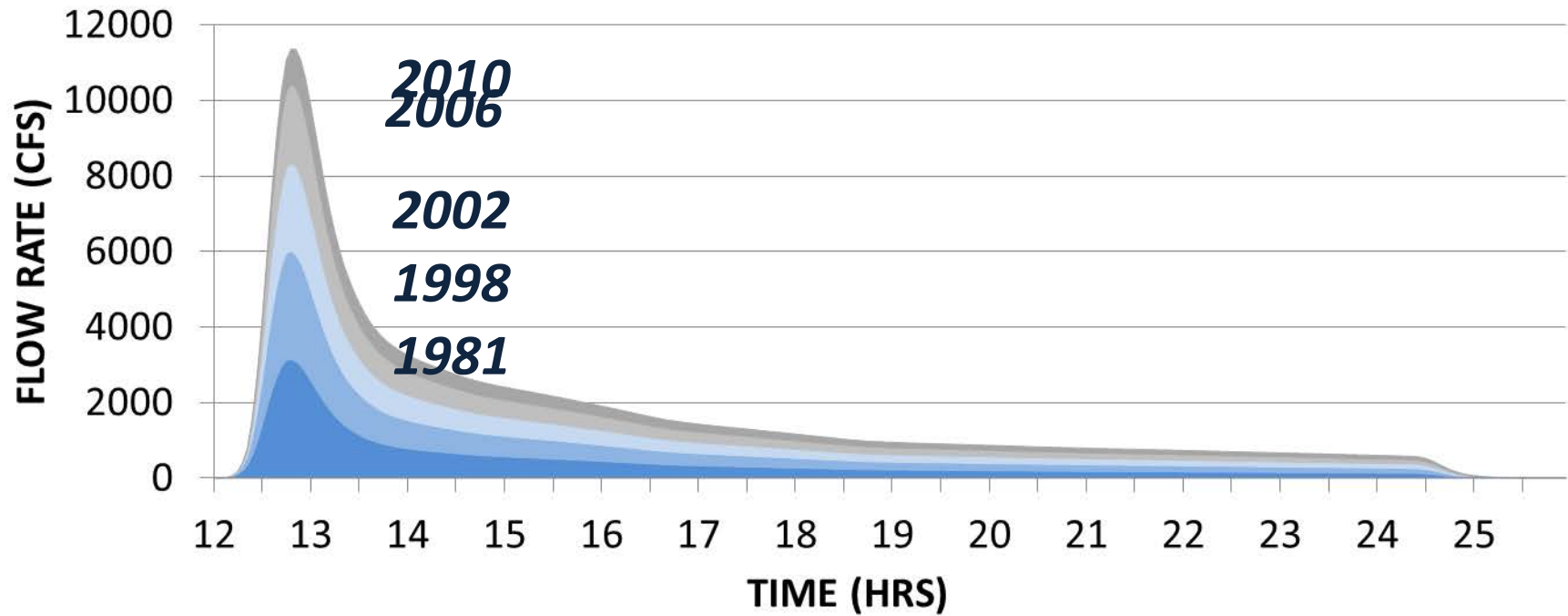
With Contributing Partners:
North Carolina Coastal Federation
Withers & Ravenel Engineers
Town of Wrightsville Beach
UNCW Center for Marine Science

Funded by:
NC Division of Water Quality - Section 319 Grant

Bradley and Hewletts Creeks Water Quality Recovery Plan | i



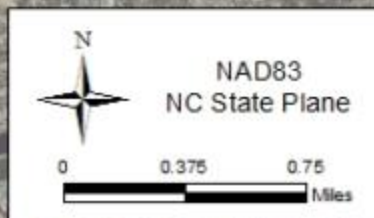
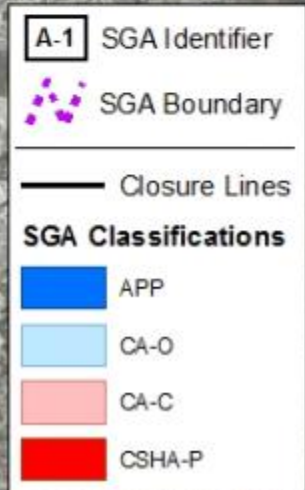
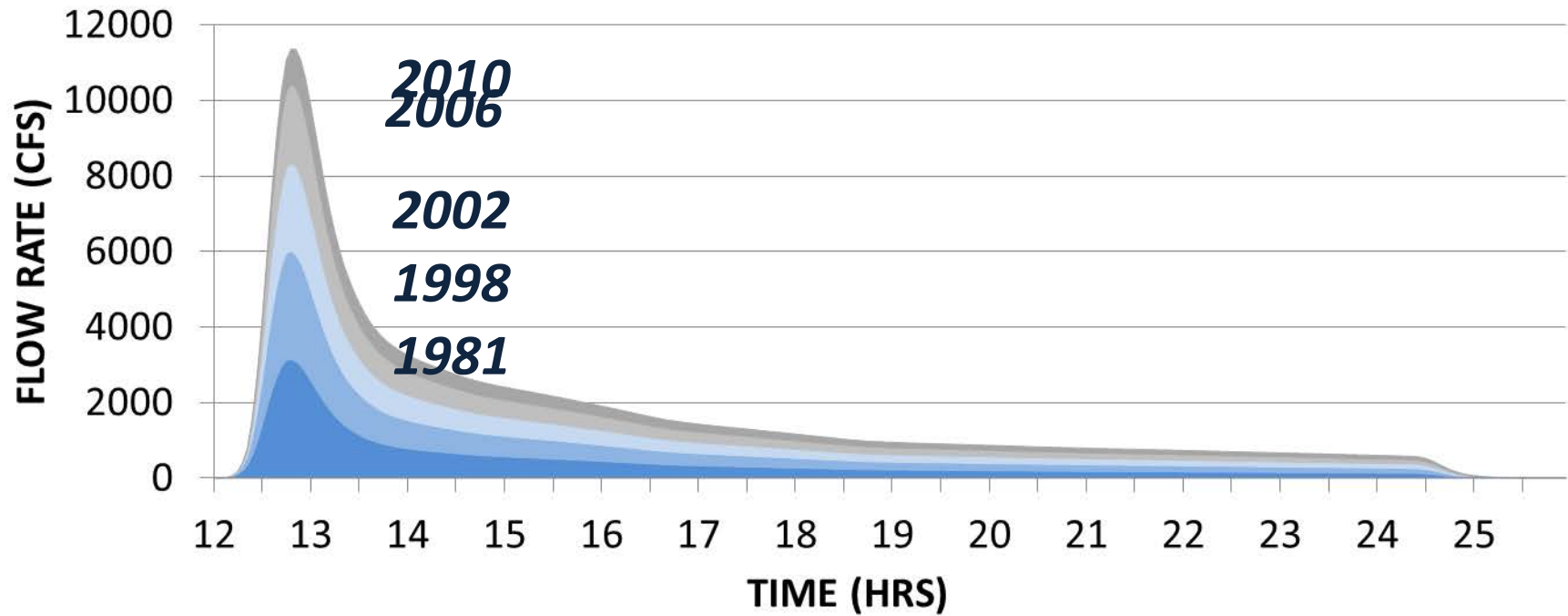
HEWLETTS CREEK WATERSHED 1-YR STORM HYDROGRAPHS



Water Quality Classifications and Shellfish Harvesting Area Classifications



HEWLETTS CREEK WATERSHED 1-YR STORM HYDROGRAPHS



The Grey to Blue Project

- Reduce runoff to volumes prior to shellfish closures
- Volume reduction targets quantified in gallons
- Scenario based tool evaluates retrofit strategies
- GIS Atlas tracks incremental progress
- Water quality monitoring to gauge success (or failure)



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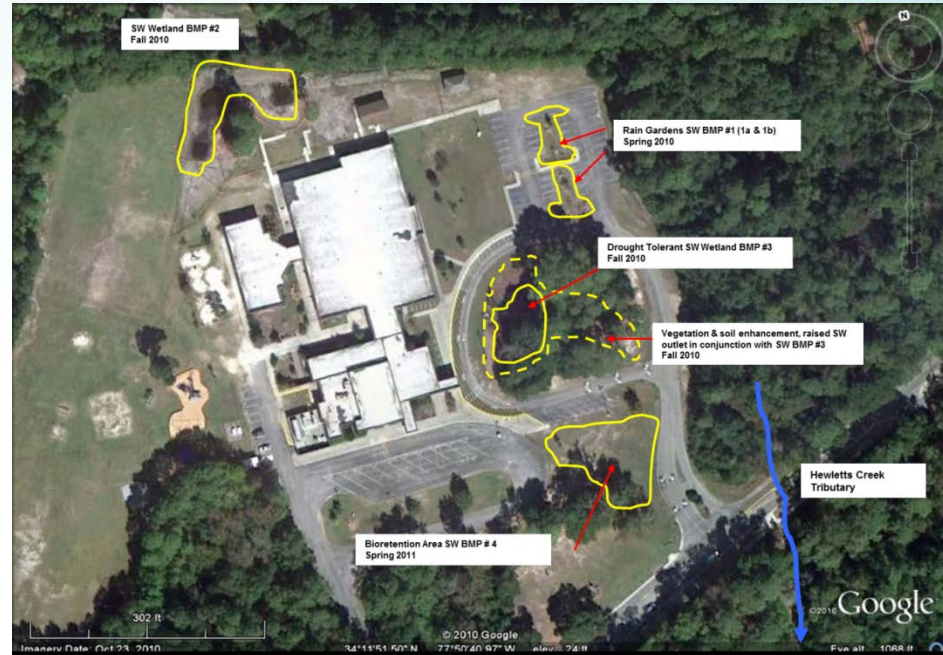
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Bradley and Hewletts Creeks Watershed Restoration Plan

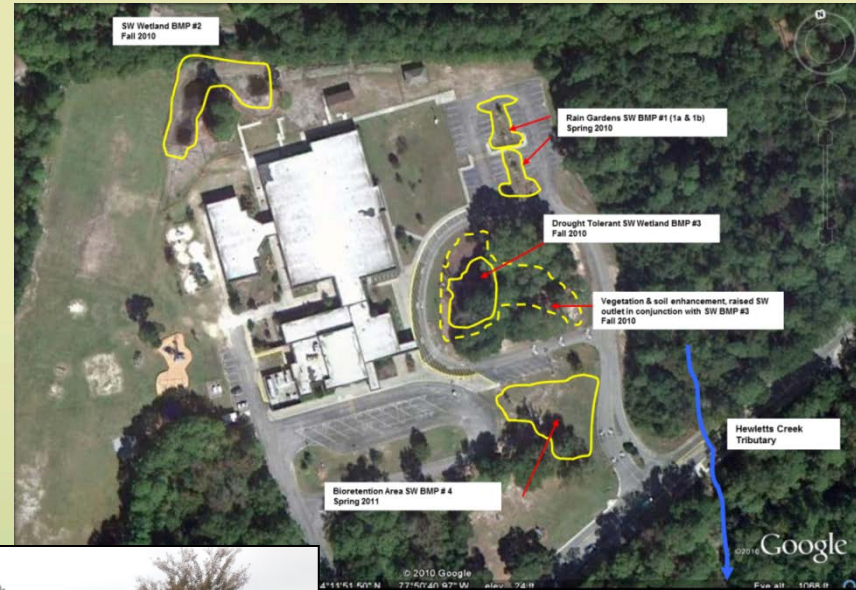
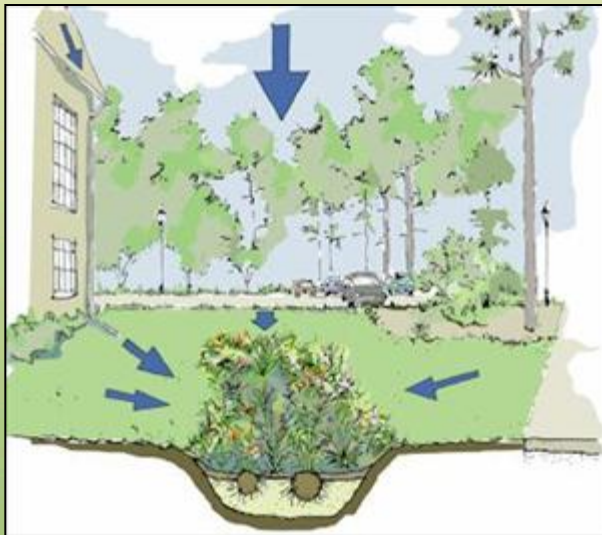
| Type of Stormwater Infiltration Practice | Potential for Beneficial Hydrograph Modification | | |
|--|--|------------|------------|
| | Good Soils | Fair Soils | Poor Soils |
| Rooftop Disconnection | High | High | Medium |
| Disconnected Impervious Surfaces | High | High | Medium |
| Restore Natural Areas | High | High | Medium |
| Stormwater Wetland | High | High | Medium |
| Linear LID for Streets, Roads | High | Medium | Medium |
| Landscape (Large) LID Retrofits | High | Medium | Medium |
| Wet Detention Basin | High | Medium | Low |
| Raingarden | High | Medium | Do Not Use |
| Bioretention | High | Medium | Do Not Use |
| Infiltration Swale, Basin | High | Medium | Do Not Use |
| Permeable Pavement | High | Medium | Do Not Use |
| Riparian Buffer Restoration | Medium | Low | Low |
| Plant Trees | Low | Low | Low |
| Rainwater Harvesting | Low | Low | Low |
| Green Roofs | Low | Low | Low |

Table 8. Appropriate stormwater reduction practices based upon potential for beneficial hydrograph modification.

The Grey to Blue Project- Bradley Creek and Alderman Schools



The Grey to Blue Project



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NO
PARKING
ANY
TIME

NOTICE
IT IS UNLAWFUL
TO MOOR BOATS OR
VESSELS OF ANY KIND
EITHER PERMANENTLY
OR TEMPORARILY OR
BEYOND STREETWAYS
OR RIGHT-OF-WAYS
BETWEEN THE SHORE
AND PIER HEAD LINE
VIOLATORS WILL BE FINED \$500.00



Fred and Alice Stanback Coastal Education Center



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