



North Carolina EEP *Planning and Restoring*



Presented to the Fishing Creek Stakeholder Team 11/29/06

By Rob Breeding, NCEP Watershed Planning, Eastern Region



North Carolina EEP *Creation*

NC DENR



- Merging of three programs' resources and functions

NC DOT



USACE



US Army Corps
of Engineers®





North Carolina EEP *Mission*

**To Restore, Enhance and Protect
Watershed Functions Throughout North
Carolina including:**

- **Water Quality**
- **Habitat (aquatic and terrestrial)**
- **Hydrology**



North Carolina EEP *Components*

Strategic
Planning

Implementation
of *Proactive*
Watershed
Improvement
Projects

**Ecologically
Effective
Projects**

★ Local
Watershed
Planning

Monitoring
& Research

Program
Partnerships



North Carolina EEP *Strategic Planning*



DOT Fortuneteller

- Uses DOT Mitigation Needs Projections to direct efficient use of dollars and resources
- Determines where Local Watershed Planning initiatives will be developed



North Carolina EEP *Watershed Planning*

Two Levels of Planning:

- Targeted Local Watersheds=River Basin Restoration Priorities (RBRP's)
- Local Watershed Planning Initiatives



North Carolina EEP *Watershed Planning*

Cataloging Unit (CU) Screening:

- Strategic Planning uses DOT projections to prioritize CU's
- Watershed planners screen inclusive Hydrologic Units (HU's) using a GIS-based methodology
- A *phased* Local Watershed Plan is initiated in the chosen HU's



North Carolina EEP *Watershed Planning*

Four Phases of an LWP: **Phase I**

- *All currently available data* for the watershed is collected and interpreted as comprehensively as possible
- Gaps and additional data needs are identified



North Carolina EEP *Watershed Planning*

Four Phases of an LWP: **Phase II**

- Additional data is collected & interpreted
- A preliminary findings report is developed with a consultant
- A stakeholder process is initiated



North Carolina EEP *Watershed Planning*

Four Phases of an LWP: **Phase III**

- A written LWP is produced for the watershed utilizing preliminary findings, consultant models and stakeholder input
- Prioritized recommendations to bring the most functional uplift to the watershed are produced



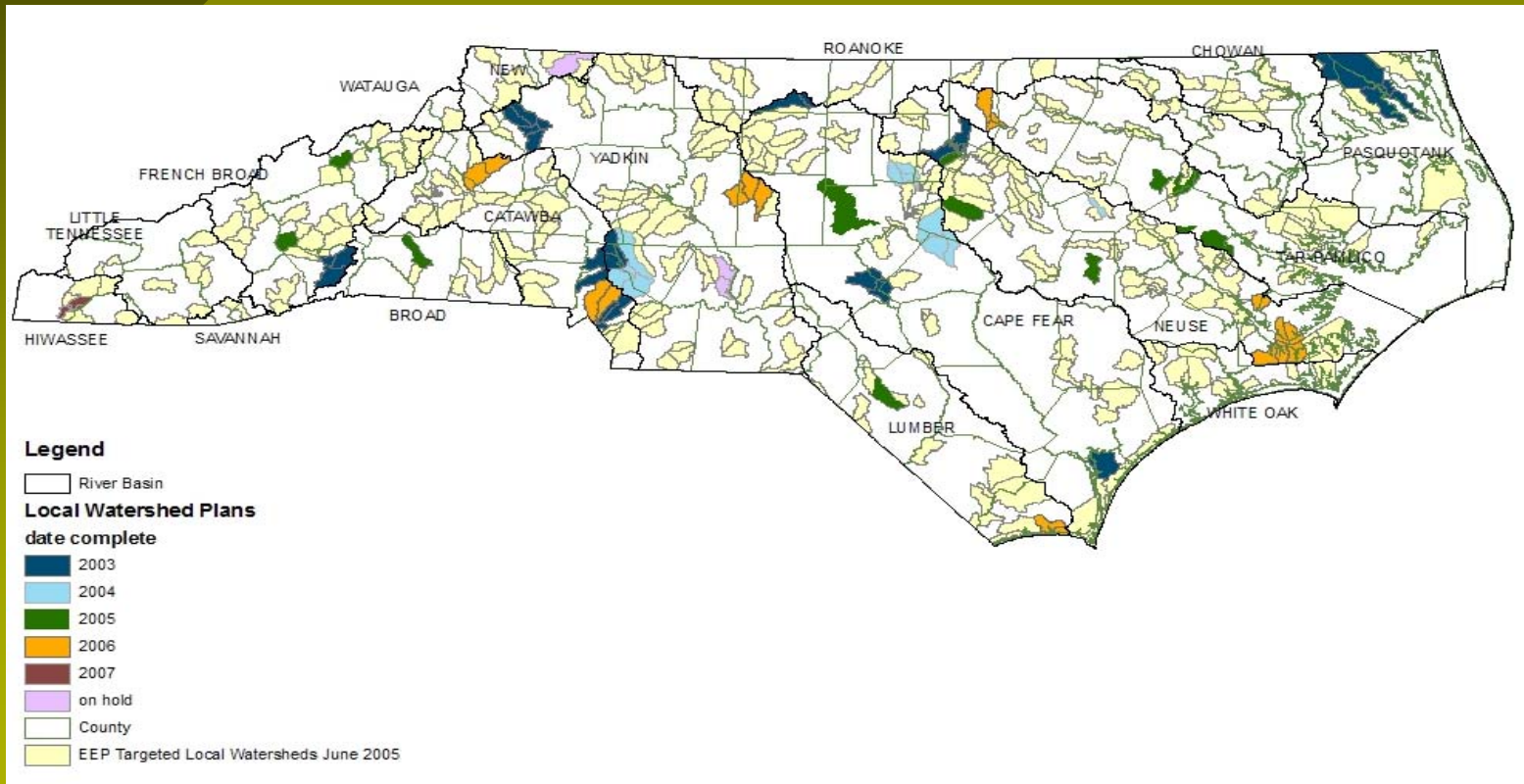
North Carolina EEP *Watershed Planning*

Four Phases of an LWP: **Phase IV**

- Logistical details are worked out to facilitate turning recommendations into real projects
- Landowner contact
- “Preimplementation” business



North Carolina EEP Watershed Planning



RBRPs and LWPs



North Carolina EEP *Watershed Planning*

- HU maps showing River Basin Restoration Priorities (RBRP's) can be found at:

<http://www.nceep.net/services/lwps/localplans.htm>

- Local Watershed Planning Initiative summaries & other links can be found at:

<http://www.nceep.net/pages/lwp.htm>



North Carolina EEP *Implementation*

How We Identify Sites...

- LWP's — Focus on identifying projects which will provide the greatest benefit
- Site Searches:
 - GIS-based search
 - Other state, federal, and non-profit agencies and organizations
 - Sites suggested by citizens



North Carolina EEP *Implementation*

How We Select Sites...

- Located in an EEP Targeted Local Watershed
- Permanently protected by a conservation easement
- Construction access
- Stream Projects: minimum 50 ft buffer on both sides of channel, minimum length of at least 2,000'
- Wetland Projects: minimum acreage dependent on location



North Carolina EEP *Implementation*

Implementation Toolbox...

- Stream restoration, enhancement and preservation
- Wetland restoration, enhancement and preservation
- Riparian buffer restoration
- Stormwater Best Management Practices (BMPs)
- Alternative BMP mitigation is on the horizon...



North Carolina EEP *Stream Restoration*

before...





North Carolina EEP *Stream Restoration*



...after



North Carolina EEP *Stream Restoration*



Tools...



North Carolina EEP *Wetland Restoration*

before...





North Carolina EEP *Wetland Restoration*



...after



North Carolina EEP *Stormwater Wetland*

before...





North Carolina EEP *Stormwater Wetland*



...after



North Carolina EEP *Monitoring & Research*

- EEP's newest arm
- Twofold purpose:
 - Insure project success
 - Develop methods and criteria
- Unique due to specialist expertise





North Carolina EEP *Monitoring & Research*

- Eastern NC stream assessment methodology development by ECU et al
- New water quality methods development by DWQ et al
- Unique partnerships
- BMP's for mitigation credit
- Alternative mitigation



North Carolina EEP *Monitoring & Research*

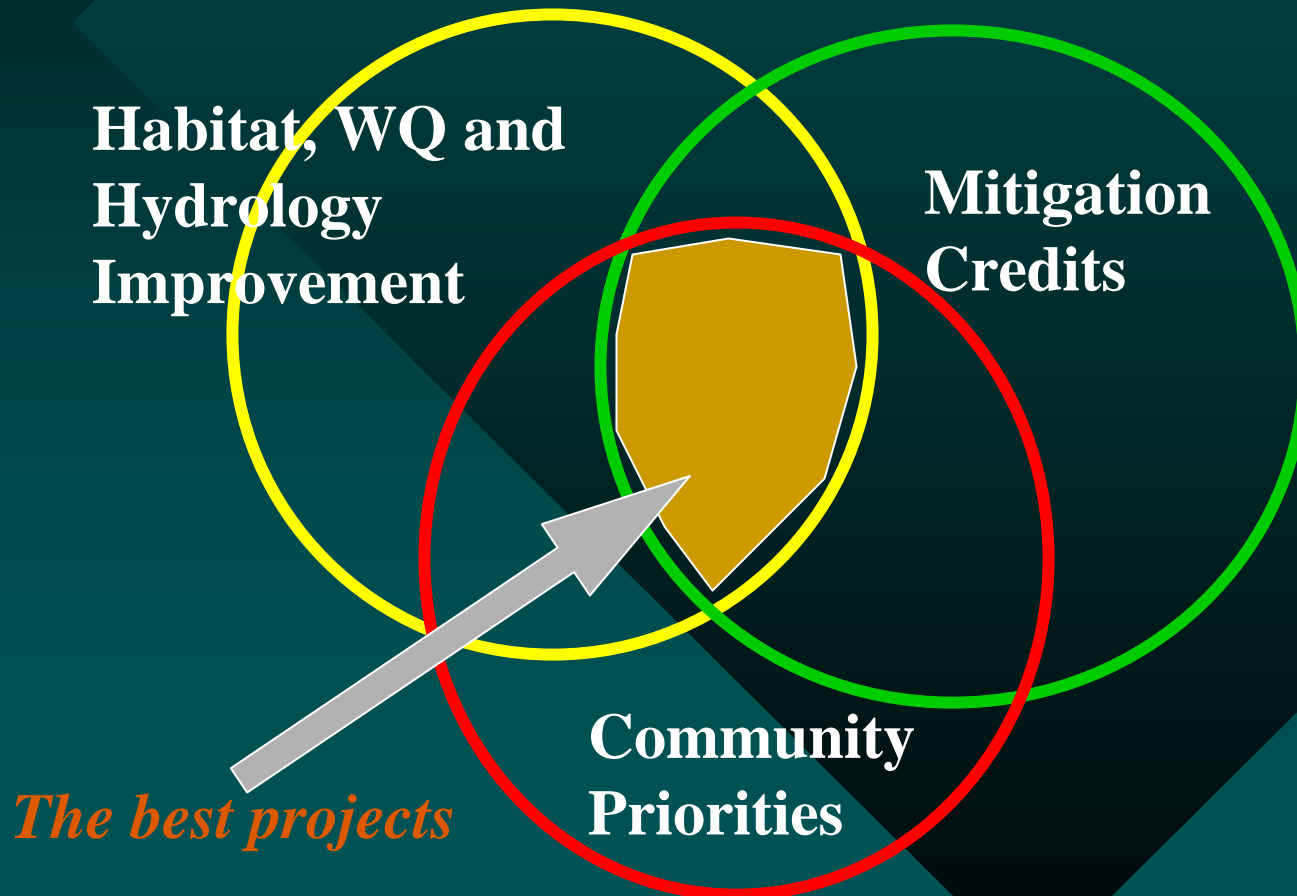
Non-Traditional Mitigation?:

- Stormwater BMPs
- Agricultural BMPs
- Oyster reefs
- Seagrass beds



North Carolina EEP

The Ultimate Balance





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Questions?



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Contact Information:

- Planning rob.breeding@ncmail.net
- Implementation marc.recktenwald@ncmail.net
- Monitoring & Research mac.haupt@ncmail.net

Website: <http://www.nceep.net>