



North Carolina General Assembly

# *Study of the Merger of Ecosystem Enhancement Program & Clean Water Management Trust Fund*

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## Final Briefing

June 2007



DYE MANAGEMENT GROUP, INC.

# Highlights

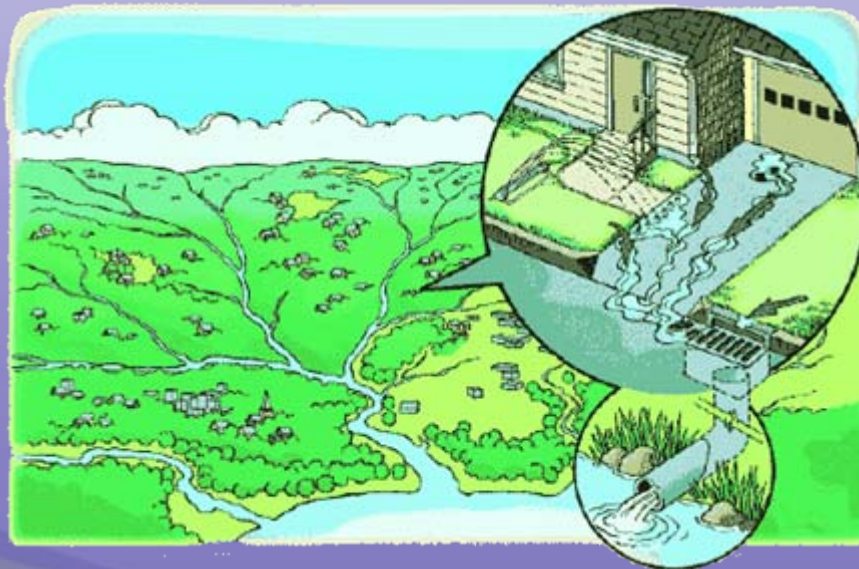
- Merger of EEP and CWMTF not recommended; instead aggressively pursue programmatic synergies
- NCDOT and NCDENR must renegotiate EEP MOA to increase flexibility
- NCDOT and EEP must work together to manage surplus issues
- NCDOT and EEP should transition from advanced mitigation to just-in-time mitigation including two-phased TIP
- Implementation will require senior executive engagement from NCDOT and NCDENR

# Agenda

- Study context
- Study scope and approach
- Summary of findings
- Key recommendations
- Implementation timelines and responsibilities

# Regulatory Framework

- §401 and § 404 of Clean Water Act established basis for regulations requiring permits and mitigation as a condition of a permit when impacting “waters of the United States”
- Companion North Carolina statutes and regulations for “waters of the State”
- EPA, U.S. Army Corp of Engineers and DWQ have lead responsibility



# What is Mitigation?

- Goal is “no net loss”
- Minimum requirement is 1:1, but may be done at higher ratios to provide insurance against failure or to compensate for off-site/out-of-kind replacement
- In North Carolina, mitigation is traditionally done in the same USGS eight-digit “cataloguing unit” as the impact





# North Carolina

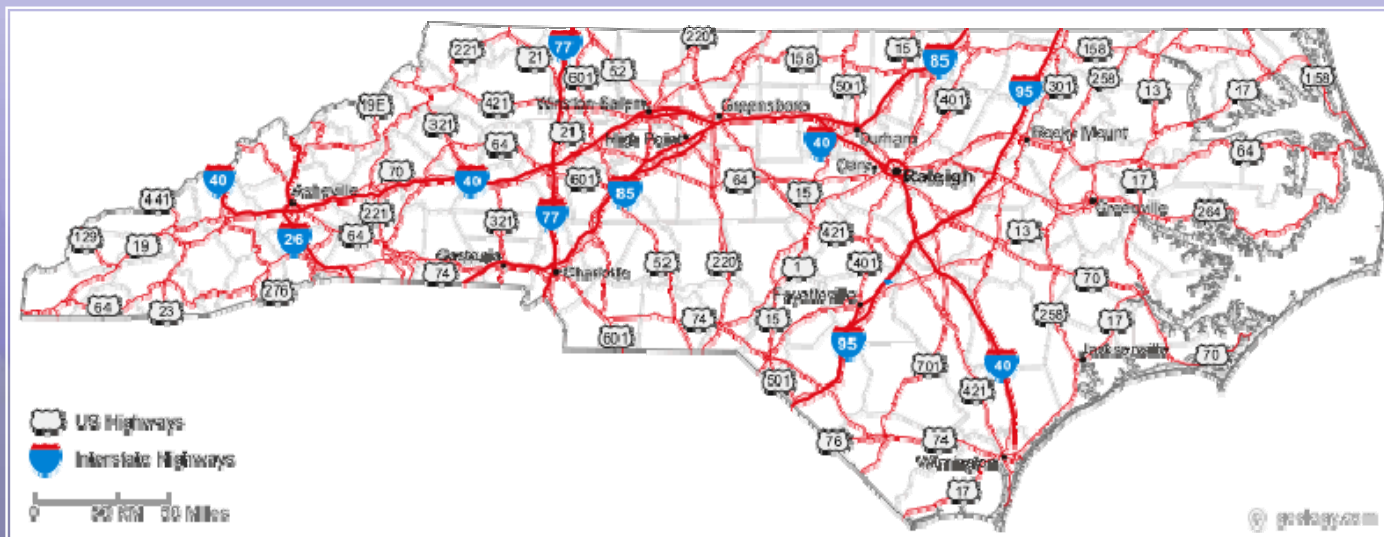
- Contains 5.7 million acres of wetlands, 95% of this in the coastal plain region of the state
- 93 natural heritage aquatic areas of national concern and state significance
- 70% of rare and endangered species in the state are wetland dependent





# North Carolina Highway Trust Fund

- Adopted in 1989 and included:
  - Completion of the Intrastate Highway System, a 3,600 mile network of four-lane highways
  - Construction of urban loops





# Mitigation Prior to 2003

- NCDOT managed own mitigation program
  - Mitigation was project specific
  - A large number of projects delayed due to mitigation
  - Increased cost of construction
  - Impacted NCDOT credibility with stakeholders
- State established the Wetlands Restoration Program (WRP) as an in-lieu fee program



# Ecosystem Enhancement Program



- Advanced mitigation
- Programmatic watershed based approach
- Mitigation required to be in 8-digit cataloguing unit
- Seven year build-out leveraging high quality preservation lands to start-up

Payne Dairy (Jumping Run Creek) stream restoration site



Aerial shot of the site prior to construction



Photo showing the relocated and more sinuous channel

# Clean Water Management Trust Fund

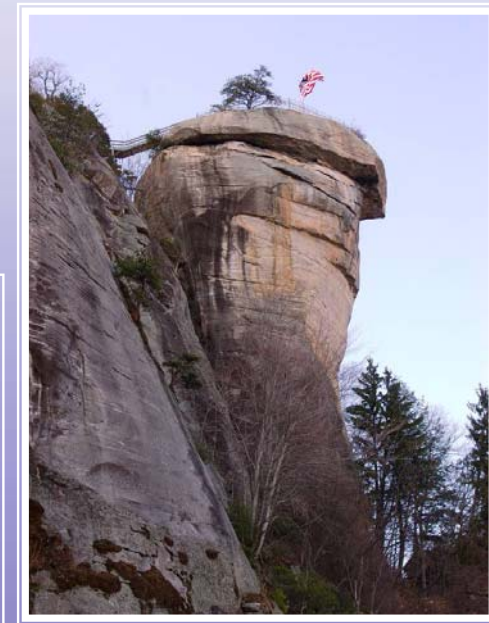
- Established by the legislature in 1996
- Voluntary grants based program
- Five program areas
- Not allowed to provide compensatory mitigation



Wastewater: Lake Fontana



Stormwater/Restoration: Wilson Bay



Acquisitions: Chimney Rock

# Study Background (1 of 2)



- As the EEP ramped up a number of questions were raised by various policy-makers and other stakeholders:
  - Overall cost effectiveness of EEP
  - Appropriateness of EEP's mission/goals/objectives
  - Whether requiring mitigation within a specific 8-digit cataloguing unit was creating operational complexities and significantly increasing the cost of mitigation for NCDOT
  - Practicality of delivering advanced mitigation given the lack of stability in NCDOT's "demand forecast"



# Study Background (2 of 2)



- Questions were also raised about potential synergies between the EEP and the CWMTF:
  - Potential of removing the restriction on the CWMTF participating in compensatory mitigation
  - Allowing some CWMTF or other state funded projects be applied as mitigation credits for transportation projects
  - Opportunities to work with regulators in certain cases to utilize non-traditional mitigation approaches for projects



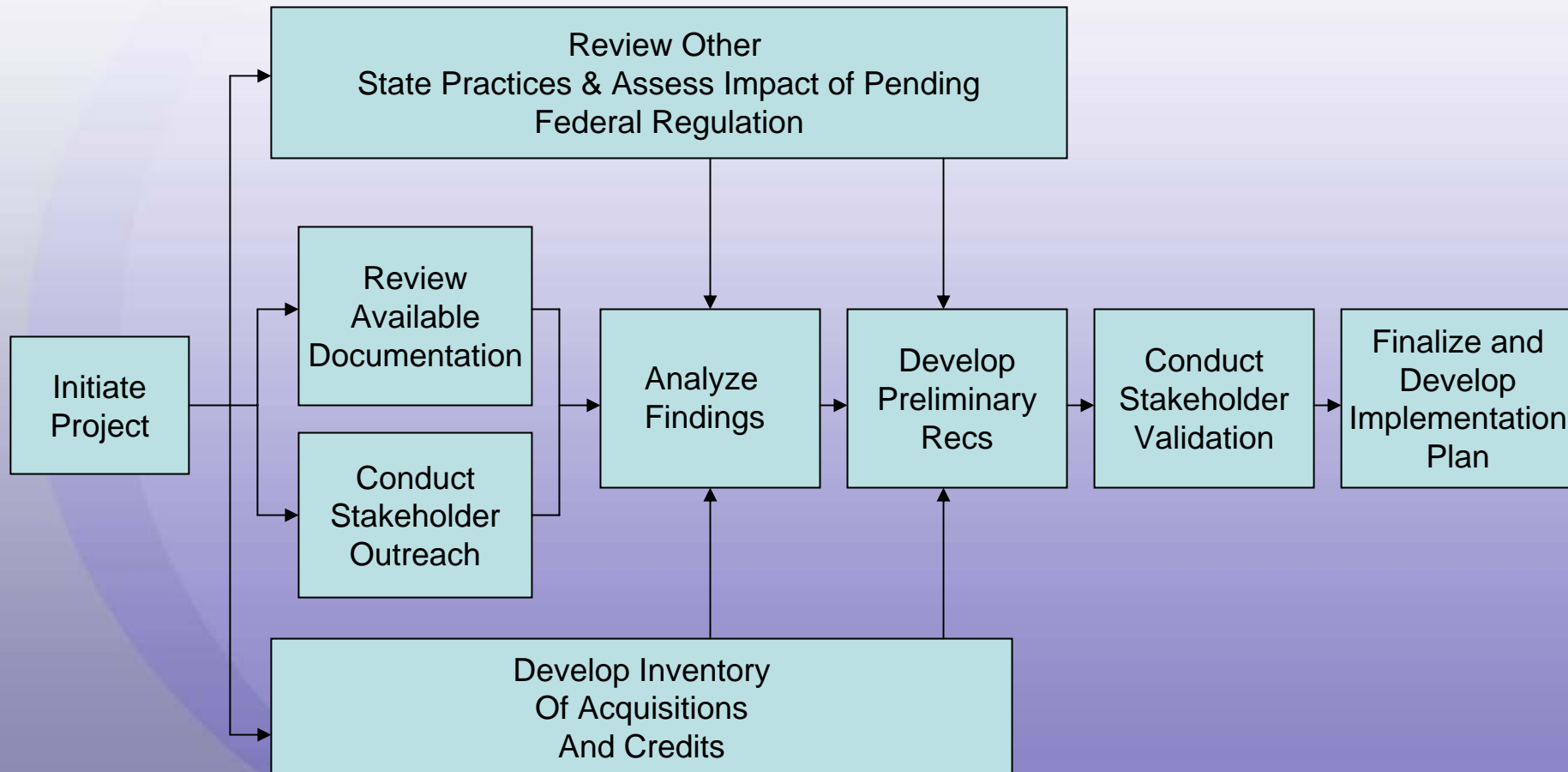
# Study Scope (1 of 2)

- Review current organizational structure and key work processes of EEP and CWMTF
- Compare EEP's processes with NCDOT's mitigation program
- Assess potential role of mitigation banks
- Review practices in peer states and assess applicability
- Assess impact of proposed federal rule making on EEP
- Develop an inventory of acquisitions/credits to assess the extent of the mitigation surplus

# Study Scope (2 of 2)

- Conduct an alternatives analysis of potential organizational models:
  - Status quo
  - Status quo with modifications designed to achieve efficiencies and promote enhanced programmatic synergies between EEP and CWMTF
  - Merger of EEP and CWMTF programs
  - Returning responsibility for mitigation to NCDOT
  - Implementing a private mitigation banking model

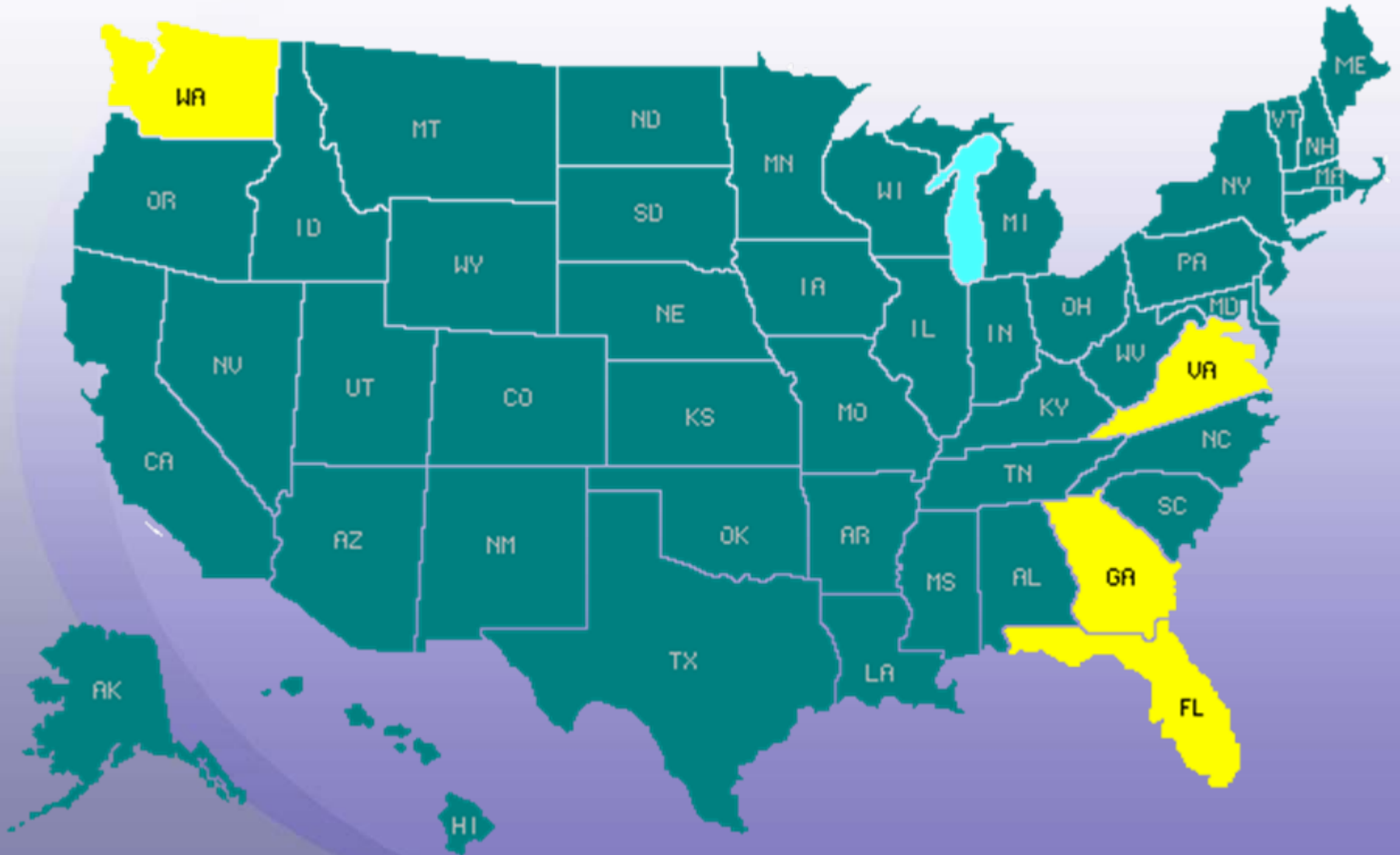
# Project Approach



# Stakeholder Interviews

Stakeholder Group	Interviews
CWMTF management and staff	4
CWMTF board members	2
CWMTF grantees	2
EEP management and staff	8
NCDENR senior management	1
State regulatory agency staff	1
Federal regulatory agency staff	5
NCDOT Board members, management and staff	7
FHWA Division staff	4
EEP on-call consultants/contractors/full delivery providers	3
Environmental advocacy groups	1
State Property Office	1
Private mitigation bankers	2
<b>Total interviews:</b>	<b>41</b>

# Review of Peer States





# Summary of Findings (1 of 8)



- No permit has been delayed for mitigation since the initiation of the EEP:
  - Mitigation has been removed from the critical path for obtaining permits and letting highway construction projects
  - NCDOT has avoided at least \$6.5 million in potential construction cost increases due to delayed lettings

# Summary of Findings (2 of 8)



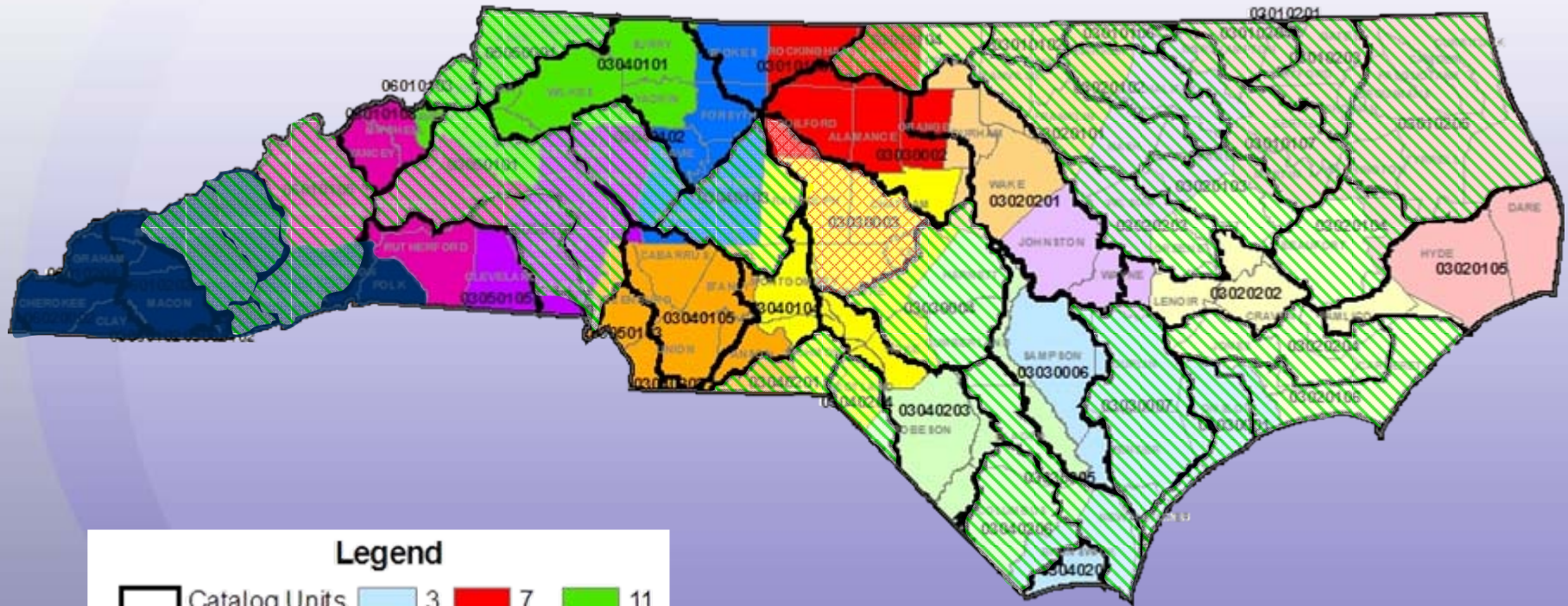
- There is a fundamental disconnect in EEP's strategy/approach:
  - Inability to accurately predict needs in order to have the right amount of mitigation in the ground in the right place five years ahead of the project being let

# Summary of Findings (3 of 8)




- There will likely be a surplus of mitigation in a number of cataloguing units as a result of:
  - Volatility in the TIP
  - Inexperience in forecasting mitigation requirements on the part of NCDOT
  - Lack of any flexibility to apply credits outside the cataloguing unit being impacted
  - An overly aggressive program on the part of both NCDOT and the EEP to acquire high-quality preservation lands; to date, approximately \$100 million has been spent to acquire high-quality preservation lands

# Stream Restoration Mitigation Projection Surplus – June 2010



## Legend

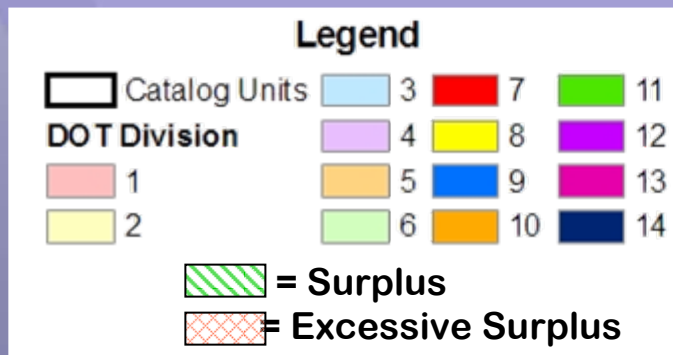
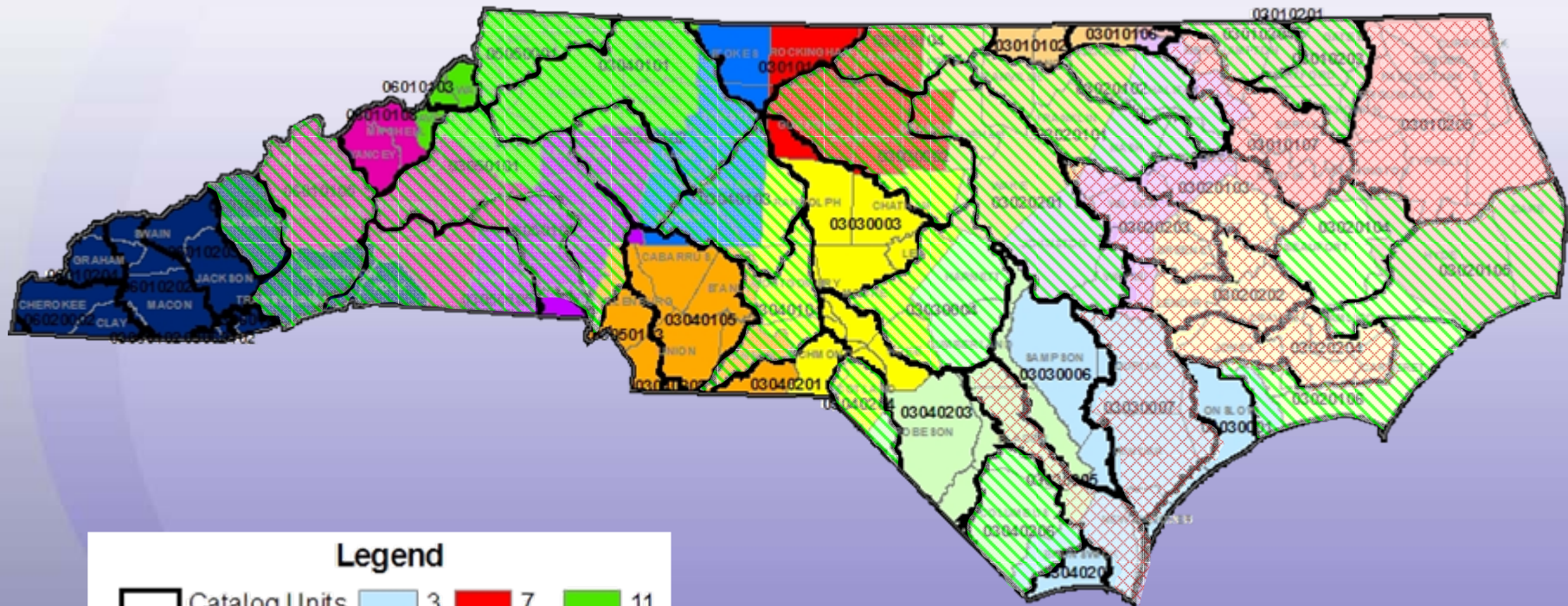
 Catalog Units	 3	 7	 11
<b>DOT Division</b>	 4	 8	 12
 1	 5	 9	 13
 2	 6	 10	 14

 = Surplus

 = Excessive Surplus

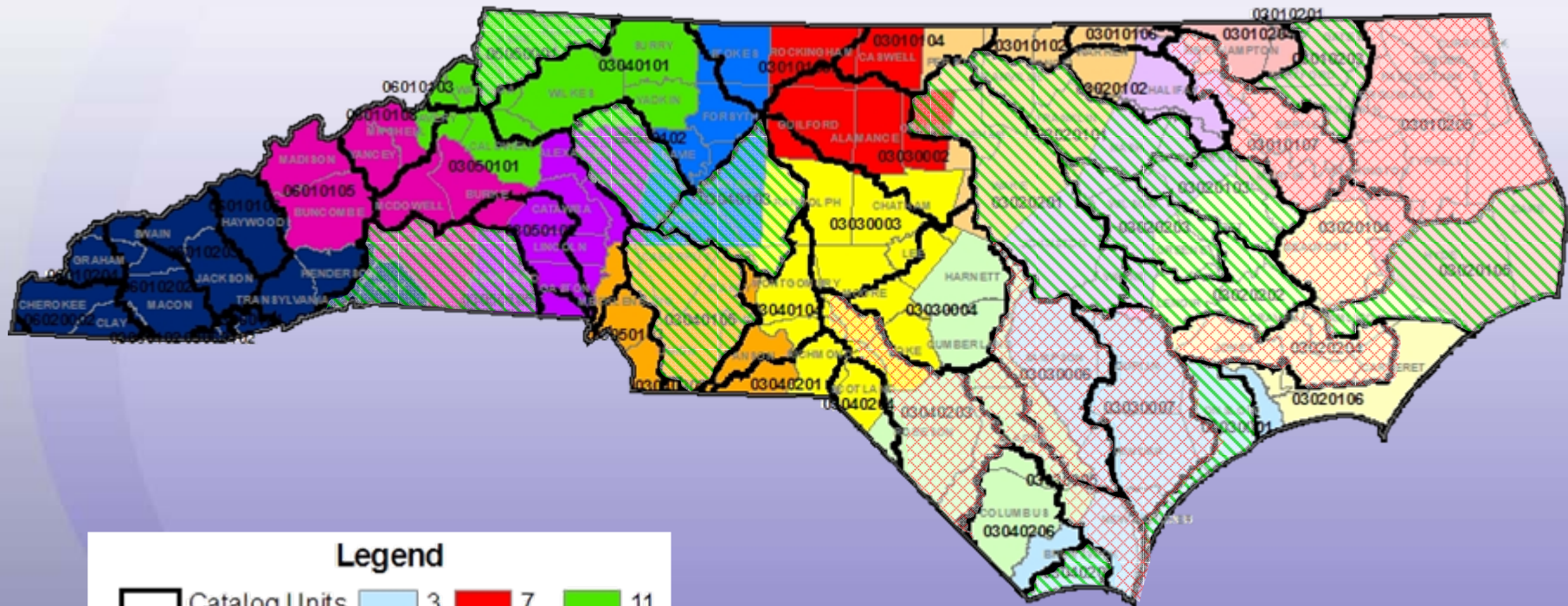


# Riparian Restoration Mitigation Projection Surplus – June 2010





# Nonriparian Restoration Projection Surplus – June 2010



# Summary of Findings (4 of 8)



- EEP is recognized nationally as a model program; however, there are no states actively trying to replicate an EEP-like program for a variety of reasons.
  - Number and degree of maturity of mitigation banks in many states
  - Extensive organizational change management required to implement an EEP-like program
  - Implementation cost
  - Uncertainty concerning the impact of the proposed federal mitigation rules

# Summary of Findings (5 of 8)



- Draft of proposed federal mitigation banking rules would eliminate in-lieu fee programs:
  - Likely cause substantial restructuring of the EEP
  - Responsibility for mitigation could be transferred back to NCDOT
  - EEP is well respected by regulators at the federal level and a number of comments on the proposed rule voiced support for EEP-like programs
  - Reasonable likelihood that the final rule will allow programs similar to the EEP to continue

# Summary of Findings (6 of 8)



- Several of our peer states make extensive use of mitigation banks for transportation projects; however, mitigation banks have traditionally not been very strong in North Carolina:
  - Very narrow definition of service area (cataloguing unit)
  - Banks not economical in some areas due to limited demands for services
  - State-sponsored “competition”

# Summary of Findings (7 of 8)



- EEP and the CWMTF have worked together:
  - EEP buying “projects” from CWMTF
  - Partnering on land acquisitions
- There are also a number of other potential programmatic synergies:
  - Working together to address the surplus issue
  - Partnering on functional mitigation and out-of-the-box mitigation projects
  - Integrating EEP’s watershed planning process with CWMTF’s application and selection process



# Summary of Findings (8 of 8)



- Lack of integration between the state's various water resources planning processes:
  - EEP's watershed planning
  - DWQ's basin-wide planning
  - No clear list of priority projects from these planning efforts
  - No linking of these plans/priorities into the CWMTF application process
- EEP and CWMTF using two different site stewardship approaches

# Key Recommendations (1 of 7)



- There are limited benefits to merging EEP and CWMTF:
  - Different organizational focuses: voluntary grants program vs. compensatory mitigation
  - CWMTF is a grantor agency; EEP is a delivery organization
  - Significant risk in terms of achieving stakeholder buy-in and cultural change

# Key Recommendations (2 of 7)



- While the organizations should remain independent, programmatic synergies between EEP and CWMTF should be aggressively pursued
- The EEP should be formally linked into all state land acquisitions to ensure mitigation \$\$ have first chance to fund potential acquisition opportunities

# Key Recommendations (3 of 7)



- NCDOT and NCDENR should work with the U.S. Army Corps of Engineers to negotiate changes to the MOA to provide added flexibility:
  - Ability to utilize applicable, surplus credits within the same river basin rather than constructing additional mitigation
  - Clear statement of direction that mitigation ratios will be reduced in situations where mitigation is in the ground and functional at the time of impact

# Key Recommendations (4 of 7)



- Immediate implementation of a surplus action plan:
  - Confirmation of identified surplus in various cataloguing units
  - Review of HQP and other sites to determine if all uplands are required
  - Action strategy for each property including sale of the property if that is most appropriate
  - Partnership between EEP and CWMTF for selected projects – possible target of 20% of CWMTF funds for this purpose



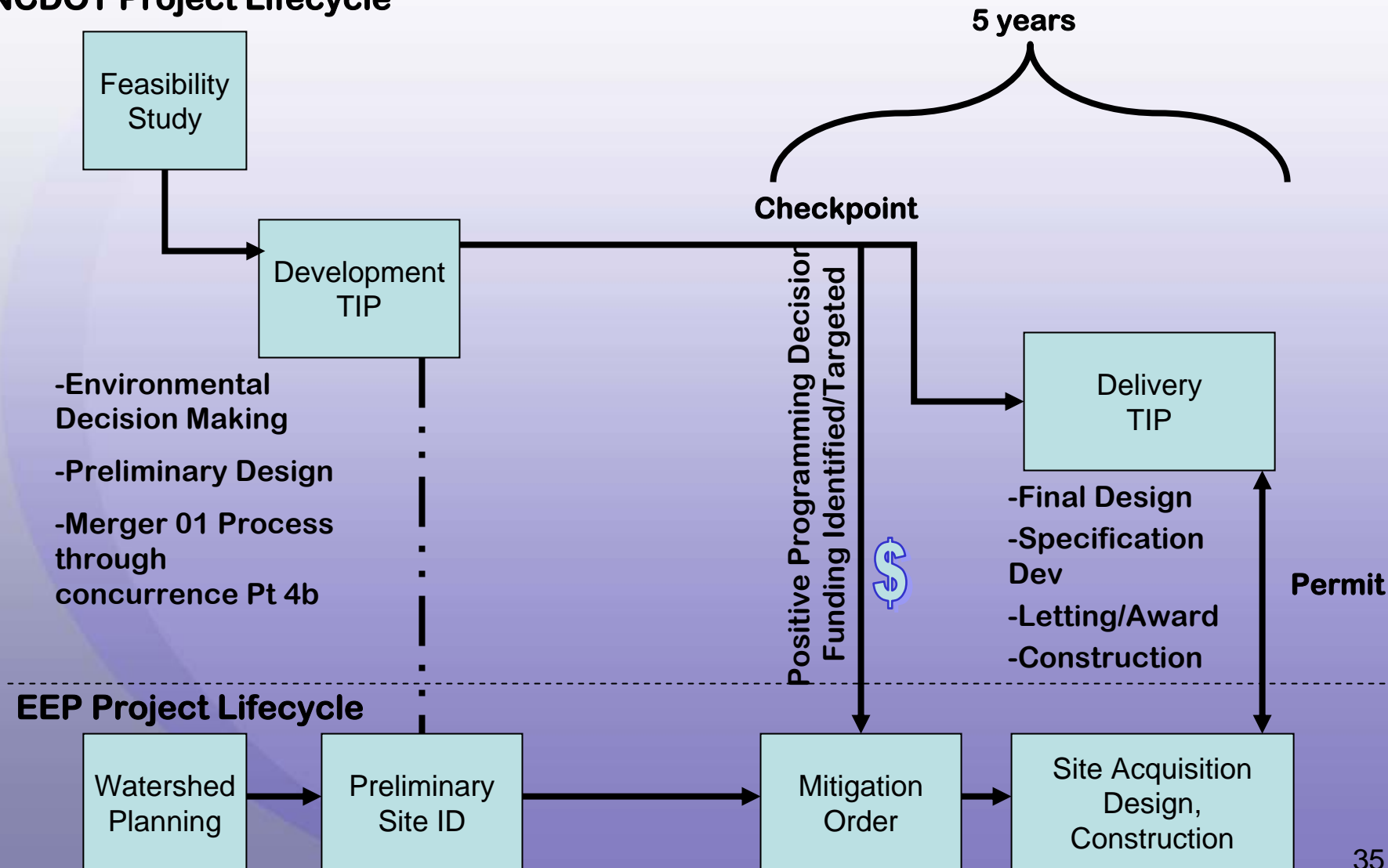
# Key Recommendations (5 of 7)



- Move from an advanced mitigation model to a just-in-time mitigation model:
  - NCDOT should implement a two-phased TIP with a development TIP and a delivery TIP
  - Mitigation would be ordered at time a project is programmed into the delivery TIP
  - NCDOT would pay EEP on a per-credit fee basis when mitigation is ordered

# Just-in-time Mitigation

## NCDOT Project Lifecycle



# Key Recommendations (6 of 7)



- EEP and CWMTF should partner on pilot projects for functional mitigation and out-of-the-box mitigation
- EEP should initiate a three-year mitigation banking pilot in multiple watersheds
- NCDENR should work with EEP and CWMTF to establish a single stewardship approach for both organizations

# Key Recommendations (7 of 7)



- NCDENR should improve the integration and overall value proposition of its various water resource planning processes by:
  - Improving integration of the EEP's watershed planning with DWQ's basin-wide planning process
  - Strengthening the end products resulting from the watershed planning process to define specific priority projects
  - Linking CWMTF's grant application/selection process more closely to the basin wide and watershed plans and the identified priority projects

# Implementation Plan

- A number of elements are time sensitive:
  - Changes to the MOA
  - Surplus action plan
- Others will require staged-transition plans:
  - Shift to just-in-time mitigation
- Effective implementation will require:
  - Senior executive engagement
  - On-going coordination between EEP, CWMTF, NCDENR management and NCDOT



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# Recap

- Merger of EEP and CWMTF not recommended; instead aggressively pursue programmatic synergies
- NCDOT and NCDENR must renegotiate EEP MOA to increase flexibility
- NCDOT and EEP must work together to manage surplus issues
- NCDOT and EEP should transition from advanced mitigation to just-in-time mitigation including two-phased TIP
- Implementation will require senior executive engagement from NCDOT and NCDENR

# Questions and Discussion

Q&A

# Dye Management Group, Inc.



**DYE MANAGEMENT GROUP, INC.**

business improvement • information technology • policy & planning

**Robert Cooney**

Office: 919-518-2080

Cellular: 919-605-1590

Fax: 919-845-2542

[RCooney@dyemanagement.com](mailto:RCooney@dyemanagement.com)