

Basin-wide Flood Analysis and Mitigation Strategy Studies

Tar Pamlico River Basin
Neuse River Basin
Lumber River Basin



Purpose / Partners

The primary purpose / objectives of this project is to:

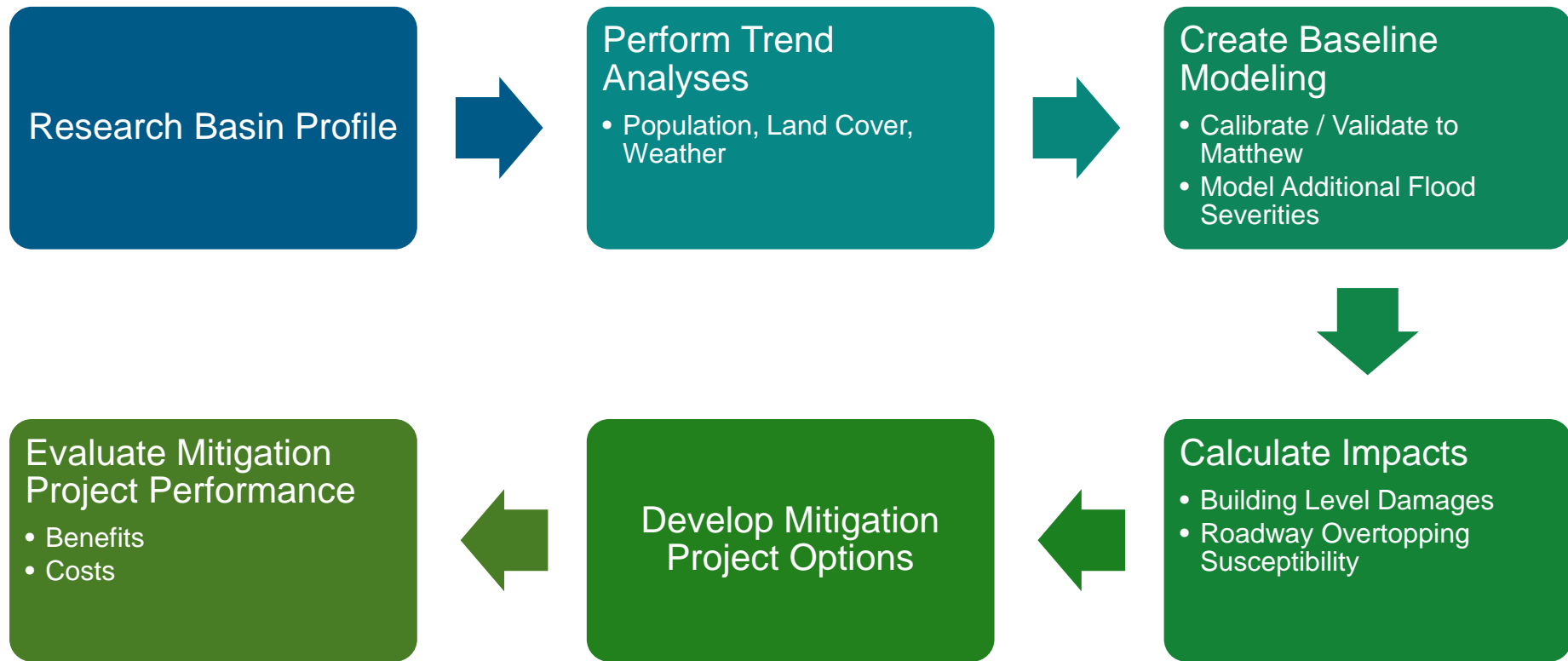
- Research primary causes and magnitude of flooding
- Calculate the impacts of flood frequencies on: Built Environment; Living Environment; and Economy
- Identify and Assess Mitigation Strategies
- Assess short and long term benefits to costs of Mitigation Strategies
- Provide Potential Solutions

Partners

The Study / project utilizes the following partners to widely communicate results and gain valuable input and feedback:

- NC DPS – Emergency Management
- NC Department of Transportation
- Impacted County Governments and Municipalities
- Army Corps of Engineers
- NC Department of Commerce
- NC Department of Agriculture and Consumer Services
- Engaged Stakeholders and Non-Profits
- Informed: Congressional and Legislative Representatives

Methods Used in Each Study



Mitigation Options Master List

1. New Detention Structure(s)

2. Existing Detention
Retrofit/Enhancement

3. Offline Storage

4. Channel Modifications

1. Diversion

2. Dredging

3. Lining

5. New Embankment Structures

6. Existing Levee

Repair/Enhancement

7. Roadway Elevation / Clear
Spanning

8. Large Scale Wet Flood Proofing

9. Community
Buyouts/Elevation/Relocation

10. Land Use / Impervious Restrictions

11. River Corridor Greenspace
Implementation



NCEM Risk Management Contractors have completed

1. Research primary causes and magnitude of flooding
2. Calculate the impacts on the built/living environments, and on the economy.
3. Identify and assess possible strategies
4. Assess short and long term benefits / costs of each mitigation strategy

Advisory Committee Meetings

- Advisory Meetings held in late March and early April for all basins
- Overview and Draft findings were presented to stakeholders
- Feedback provided



Final Meetings and Study Report: Week of April 25th

Detention Structures

- Considered 18 Sites
- Based on a more thorough site review and potential duplication of benefits, 11 sites were selected that were feasible to model
 - 4 Wet
 - 7 Dry
- Based on initial modeling results, proceeded with a Benefit/Cost analysis of 4 Sites

