Proposed Adaptive Management Plan

Presented by the Great Bay Municipal Coalition

Dover, Exeter, Newmarket, Portsmouth, and Rochester

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Areas of Agreement

- Nitrogen levels in the estuary have increased
- Eelgrass has declined in the estuary
- Oyster resources in the estuary are decimated
- It is necessary to lower the nitrogen load to the estuary
- It is now time to begin nitrogen reduction efforts
Key Plan Components

- Efficient use of scarce resources
- Addresses point and non point sources
- Monitor progress and adapt
Adaptive Management

- Process which blends
  - Scientific research
  - Monitoring
  - Practical Management activities
- Learn By Doing
Adaptive Management Proposal

- WWTP's contributing to Great Bay
  - 8 mg/l N seasonal permit limits for 10 yrs
  - Operational within 5 yrs or sooner
  - Assess WQ improvements during permit
- Invest in WQ and Habitat monitoring
- Invest in Bio-extraction and habitat restoration projects
  - Oyster restoration and aquaculture
  - Eelgrass restoration
Adaptive Management Proposal

- Stormwater improvements
  - Adopt consistent stormwater regulations
  - Adopt watershed wide use of BMP's
  - Partner with UNH to develop effective BMP's
- Septic system contribution
  - Develop and implement a strategy- NHDES
- Fertilizer use controls
  - NH Legislature enabling legislation
  - Work with manufacturer's to reformulate product
Adaptive Management Proposal

- Stream and wetland buffers
  - Protection
  - re-establishment
- Watershed Nutrient trading program
- NHDES
- Perform literature search on macroalgae and nitrogen in the estuarine environment