Section 208 Area-Wide Water Quality Management Plan Update

Affordability, Financing, & Resources
105 Watersheds
57 Major Coastal Embayments

57 Embayments
Nitrogen Removal Required

Percent Nitrogen Removal

- 0%
- 1% - 45%
- 46% - 70%
- 71% - 90%
- 91% - 100%
- NO DATA
A Regional Issue

- Watershed Embayments within a Town Boundary
- Watershed Embayments that cross Town Boundaries
The 208 Plan: What is It?

- Clean Water Act Section 208
- Much more known/done now
- Focus on 21st Century Problems
  - **Nitrogen**: Saline waters
  - **Phosphorus**: Fresh Waters
  - Growth & Title 5 Limitations
- Directed to update the existing plan by the Commonwealth
- The Commonwealth has provided $3 million to complete the plan
Doing Nothing is the Most Expensive Option

Cape Cod Future with No Action

- Increasing amounts of algae in our water bodies
- Decreasing water quality
- Decreasing attractiveness to visitors
- Environmental degradation continues
- Loss of fish
- Loss of eelgrass
- Loss of shellfish
- Smell from decaying algae
- Fewer jobs
- Declining property values
- Economy impacted, decreasing tourism, reduced fisheries.
Approach to the 208 Plan Update

- Update to 1978 Plan
- Watershed-Based
- Stakeholder Engagement – Cape-Wide & Watershed-Based
- Maximize Benefits of Previous Town Planning
- Support and expedite targeted watershed solutions under existing plans
- No Optimal Solution. Diverse Technologies
- Adaptive – Technology Development, Pilot Projects, Progress Monitoring
- Coordination with MassDEP and U.S. EPA
Financial Affordability

- Seek efficiencies in technology, scale, and joint action
- Identify least cost options to address impacts
- Seek regulatory flexibility for innovative and shared solutions
- Identify a range of financing options
- Seek State and Federal funding covering 50% of capital costs
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Demographics and Infrastructure Use
What is your favorite time of year on the Cape?

A. Summer
B. Fall
C. Winter
D. Spring
Are you a Cape Cod:

A. Year-Round Resident
B. Part-time resident
C. Frequent visitor
D. Occasional visitor
E. Worker who lives off Cape
Are you a Cape Cod:

A. Home owner
B. Business owner
C. Home owner & business owner
D. Renter
E. Lodger in a local hotel, motel or campground
F. Worker who lives off Cape
If you are a year-round or part-time resident on Cape Cod, how long have you lived here?

A. 0-1 years  
B. 2-5 years  
C. 6-10 years  
D. 11-15 years  
E. 16-20 years  
F. More than 20 years  
G. I’m not a resident
Which of the following do you utilize?

A. A town sewerage system
B. A private development’s sewerage system
C. A title 5 septic system
D. An on-site system that is not a title 5 system
E. I don’t know
If you utilize an on-site septic system, how often do you pump this system?

A. Once a year
B. Every 1-3 years
C. Every 4-6 years
D. Every 7+ years
E. I have never pumped my system
F. I don’t know
G. I do not utilize an on-site system
If you utilize an on-site septic system, how old is that system?

A. 0-5 years
B. 5-10 years
C. 10-15 years
D. 15-20 years
E. 20-25 years
F. Older than 25 years
G. I don’t know
H. I do not utilize an on-site system
If you utilize an on-site septic system, at some point that system will need to be replaced. How much do you expect it will cost to replace this system (in today’s dollars)?

A. Less than $1,000
B. Between $1,000 and $2,500
C. Between $2,500 and $5,000
D. Between $5,000 and $10,000
E. Between $10,000 and $15,000
F. More than $15,000
G. I don’t know
Posters

- Why are we here tonight?
- What is the role of the Cape Cod Commission?
- How do we compare with the rest of the Commonwealth?
- This is difficult
- Ways to minimize the overall cost of the solutions
- A 50/50 approach
Panel Discussion

- Several financial, technical and policy decisions will impact the final cost of the improvements, including:
  - Maximizing “natural” nitrogen attenuation systems
  - The use of on-site systems versus centralized collection, treatment and disposal systems
  - Town-based approach versus a Cape-wide, watershed-based approach
  - Directing future development to non-nitrogen sensitive areas of Cape Cod

- What questions do you have?

- What are your thoughts on affordability?

- Do you have any ideas about other tools or approaches that could be considered to make this more affordable?
Assume there are 4 potential solutions, of varying scopes and scales, that can be implemented to meet the water quality standards in your community.

The 4 solutions are:

- An onsite solution
- A neighborhood scale solution
- A centralized sewer solution
- A solution that utilizes natural systems (ex. constructed wetlands)

One of these solutions is less expensive than the others, but we aren’t going to provide you with cost information.
If the on-site solution was **not** the least expensive solution, but very important to you, how much more would you be willing to pay for it?

A. A little bit more  
B. A moderate amount more  
C. A lot more  
D. I would not be willing to pay more
If the neighborhood scale solution was not the least expensive solution, but very important to you, how much more would you be willing to pay for it?

A. A little bit more
B. A moderate amount more
C. A lot more
D. I would not be willing to pay more
If the centralized sewer solution was **not** the least expensive solution, but very important to you, how much more would you be willing to pay for it?

A. A little bit more
B. A moderate amount more
C. A lot more
D. I would not be willing to pay more
If the solution that used natural systems was not the least expensive solution, but very important to you, how much more would you be willing to pay for it?

A. A little bit more
B. A moderate amount more
C. A lot more
D. I would not be willing to pay more
Thank You

For more information or to join a stakeholder group please visit:

http://watersheds.capecodcommission.org