



CAPE COD
COMMISSION

CAPE COD

Regional Wastewater Management Plan Goals, Strategies, & Measures

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Table of Contents

- GUIDING PRINCIPLES.....1
- GOAL: IMPROVE WATER QUALITY2
- GOAL: BUILD SUITABLE INFRASTRUCTURE.....4
- GOAL: AFFORDABILITY.....6
- GOAL: GROWTH MANAGEMENT7





Guiding Principles

The Cape Cod Regional Wastewater Management Plan (CCRWMP) is a science-based nutrient management program based on watershed-scale nutrient management goals to restore and protect the Cape's water quality and thereby meet state, regional and federal regulations. The guiding principles of the CCRWMP are to:

- Develop and implement watershed-based plans.
- Utilize existing wastewater infrastructure.
- Sewer as few areas as necessary.
- Build appropriate infrastructure, taking advantage of natural attenuation and other alternative strategies and recognizing the potential impacts of climate change.
- Manage growth such that additional growth occurs only where planned.
- Share the costs as equitably as possible to ensure affordability.

The four overarching goals, the strategies to achieve the goals and the measures by which success can be measured are overviewed in the following tables.



Goal: Improve Water Quality

STRATEGIES FOR MEETING THIS GOAL:

1. Base nutrient management on science

- The water quality goals in the RWMP are the state and federal standards and minimum performance standards of the Cape Cod Regional Policy Plan for drinking water, freshwater ponds, and coastal waters. Coastal nutrient TMDLs determined by the science-based MEP model and adopted by the Massachusetts Department of Environmental Protection and US Environmental Protection Agency provide the basis for coastal water quality restoration

2. Develop Comprehensive Wastewater Management Plans (CWMPs) that:

- are town-wide and based on watersheds,
- demonstrate how wastewater management planning and land use planning will be fully integrated, and,
- demonstrate how TMDLs for watersheds will be met at the time of the CWMP implementation and at buildout (buildout denotes anticipated future development according to the towns' zoning bylaws).

3. Incorporate Cape Cod Commission guidance for CWMPs and Targeted Watershed Management Plans (TWMPs) to support coordinated inter-municipal planning efforts



Goal: Improve Water Quality (Cont.)

MEASURES OF PROGRESS TOWARD THIS GOAL:

1. Completed MEP technical reports and government-approved TMDLs in each watershed and town
2. Completed CWMPs and TWMPs for each watershed and town
3. Prioritization of infrastructure implementation required to meet water quality goals
4. Creation of Inter Municipal Agreements (IMAs) and Memoranda of Understanding (MOUs) for shared watersheds through which towns with jurisdiction over lands within shared watersheds to nitrogen-sensitive coastal embayments assume 100% of responsibility for nitrogen removal required to meet TMDLs
5. Implementation of adaptive management plans that document how changing conditions will be addressed to ensure water quality restoration



Goal: Build Suitable Infrastructure

STRATEGIES FOR MEETING THIS GOAL:

1. Build watershed-based infrastructure that reduces costs and limits unplanned growth
2. Identify appropriate densities and technologies for each neighborhood to be served by infrastructure
3. Identify green infrastructure techniques, such as inlet widening and constructed wetlands, and consider climate change
4. Conduct long-term benefit analysis and produce an adaptive management plan
5. Partner with towns pursuing alternative assessments and pilot projects relative to their CWMPs



Goal: Build Suitable Infrastructure (Cont.)

MEASURES OF PROGRESS TOWARD THIS GOAL:

1. Town IMAs, Joint Services Agreements, Management Districts and other legally enforceable agreements adopted for shared infrastructure
2. Wastewater collection and treatment technology that is appropriate for development density and TMDL removal requirements
3. Wastewater collection and treatment that is based on watershed lines and not town lines, where appropriate
4. Expansion of existing public and private infrastructure, where appropriate
5. Use of non-structural alternatives and enhanced natural systems in areas where development density makes collection impractical or where it can be appropriately used to supplement traditional infrastructure
6. System phasing and technology that is flexible enough to meet future needs
7. System design that prioritizes nitrogen reduction in highly nitrogen-sensitive receiving waters
8. CWMPs with approved monitoring and adaptive management plans that are advanced or maintained



Goal: Affordability

STRATEGIES FOR MEETING THIS GOAL:

1. Utilize and/or expand existing wastewater infrastructure to reduce costs
2. Promote town plans for shared infrastructure in shared watersheds to reduce costs
3. Maximize Clean Water State Revolving Fund (SRF) and other funding
4. Promote equitable financing options for wastewater infrastructure
5. Establish the amount that Cape residents can reasonably be expected to contribute to the solution and seek federal and state funding, long-term lending strategies, and other financial strategies to cover any gap
6. Promote the use of Cape Cod-based innovation, management, and infrastructure sources

MEASURES OF PROGRESS TOWARD THIS GOAL:

1. Existing public and private systems that are maximized or expanded
2. “Host” and “Customer” communities that realize a financial benefit through shared treatment of proximate, high-density neighborhoods
3. Communities using shared infrastructure reduce or eliminate the need for new infrastructure
4. Status of towns applying for and obtaining zero-percent interest State Revolving Fund (SRF) loans, other SRF loans, and other loans and grants
 - Cape taxpayers pay for appropriate infrastructure constructed at an appropriate scale
 - Economically vulnerable residents are not priced out of their homes



Goal: Growth Management

STRATEGIES FOR MEETING THIS GOAL:

1. Towns adopt growth management strategies that limit growth to what is allowed under existing Title 5 regulations, except in areas specifically designated for growth to sustain economic development and vitality
2. A case study assessment of the application of “flow neutral” regulations required under the Environmental Bond Bill for zero-percent interest infrastructure loans from the State Revolving Fund
3. Towns identify appropriate wastewater infrastructure to service Economic Centers, Village Centers, and Industrial Service and Trade Areas (ISTAs), as designated in the maps that support the Cape Cod Regional Policy Plan

MEASURES OF PROGRESS TOWARD THIS GOAL:

1. Towns adopting flow neutral regulations
2. Towns adopting other growth management controls
3. Towns adopting Economic Centers, Village Centers, and ISTAs
4. Wastewater infrastructure supporting identified growth areas
5. Areas identified for growth in Economic Centers, Village Centers, and ISTAs with planned wastewater disposal capacity
6. Areas outside of identified growth areas with growth controls
7. G.L. Chapter 83 “checkerboarding” provisions (collection system limits) adopted, where appropriate

