Chatham

COMPREHENSIVE WASTEWATER MANAGEMENT PLANNING STUDY

June 1999

Chatham's ***Comprehensive Wastewater Management Planning Study*** *(the Study) is comprised of three phases:*

1. *Identifying the Town's existing and future wastewater treatment and disposal needs and associated environmental risks,*
2. *Identifying and screening alternative solutions to meet these needs,*
3. *Providing a detailed cost/benefit evaluation of the feasible alternatives, and presenting a recommended plan for cost-effective and environmentally sound solutions that will be accepted and implemented by the Town's residents.*

The *Phase 1 Draft Needs Assessment Report* is now available for public review and comment. Copies are available at the library, Water and Sewer Department, Town Clerk's office, and on the Eldredge Library web page at `www.capecod.net\epl\ChathamGov.html`. Town officials want your input because the choices you make at home and work impact the quality of the town's natural resources. Estimating growth and its implications, meeting future demand for drinking water, and setting a target level for nitrogen discharges into Town embayments are key issues. Preserving Chatham's character and protecting the health of the community's natural resources, on which the local economy depends, are important goals of the *Comprehensive Wastewater Management Planning Study*.

WHY IS THE STUDY SO IMPORTANT and WHY NOW?

Operating under an Administrative Consent Order with the Massachusetts Department of Environmental Protection, the Town of Chatham is conducting a *Comprehensive Wastewater Management Planning Study* (the Study) that will recommend methods for treating and disposing of wastewater generated by residents and businesses in town for the next 20 years.

The recommendations of the Study will be critical to the protection of the Town's natural resources which support fishing, shellfishing and tourism industries that are vital to the local economy.

The importance of protecting public and environmental health cannot be overstated. Without an effective wastewater treatment management plan, public drinking water supplies and freshwater ponds and coastal embayments are at risk. Nitrogen, commonly associated with sewage, degrades water quality and is a major culprit in the negative impacts that are becoming increasingly apparent in Chatham.

The first phase of the Study has been completed and the *Draft Needs Assessment Report* is available for public review and comment. The Town, in conjunction with the Cape Cod Commission (CCC) and the Massachusetts Environmental Protection Act Unit (MEPA), will hold a public hearing in August to gather input and comments.

PHASE 1 -- NEEDS ASSESSMENT *A SUMMARY*

As part of the Administrative Consent Order (ACO) with the Massachusetts Department of Environmental Protection (DEP), the Town of Chatham has prepared a *Draft Needs Assessment Report* that identifies its existing and future wastewater treatment and disposal needs for the next 20 years. A comprehensive plan for dealing with wastewater must be submitted to DEP by April 2000. This phase of the Study provides background information on the status of wastewater flows and loads (1) as they currently exist and (2) as they are estimated to be in the year 2020.

The Study concludes that:

♦ Nitrogen discharges into the groundwater system from on-site septic systems and other sources are impacting water quality in several of the Town's coastal embayments. Title 5 septic systems provide a minimal level of nitrogen removal.

♦ The study calculates values for **nitrogen loading** (how much nitrogen is entering the watersheds) and **critical nitrogen loading** (how much nitrogen an embayment can assimilate before exceeding the safe level) for Chatham's coastal embayments (Pleasant Bay System, Stage Harbor System, South Coast Embayments of Taylor Pond/Mill Creek and Sulfur Springs/Bucks Creek).

♦ Four embayments exceed surface water standards for nitrogen under existing conditions: Muddy Creek, Taylor Pond, Little Mill Pond and Sulfur Springs. These will continue to exceed standards under future conditions and are considered Wastewater Areas of Concern.

♦ Two additional embayments will exceed surface water standards under projected future conditions and are also considered Wastewater Areas of Concern. These are Mill Creek and Ryder Cove.

♦ Industrially Zoned Areas (Enterprise Drive and Commerce Park Industrial Areas), the west end of Eliphamets Lane, and properties on Tom's Neck along Morris Island Road and Little Beach Road are also Wastewater Arèas of Concern and will be further evaluated.

♦ The Chatham Water Pollution Control Facility (wastewater treatment plant) performs well and its average effluent total nitrogen concentration in 1997 was 5.6 parts per million (ppm), compared to the typical nitrogen concentration of 35 ppm from a typical Title 5 system. The Study will include an investigation of new effluent discharges or facilities that could permit the Town to treat additional wastewater flows from areas that should be connected to the sewerage system.

♦ Existing peak drinking water demand is met with the Town wells currently on-line, but future water demand cannot be met with existing capacity and emergency reserve. The Town is developing and permitting two additional wells. Three other potential sites have been identified.

♦ Upgraded Title 5 systems, which remove greater levels of nitrogen, will be evaluated as part of the Study.

♦ Under the **No Action Alternative** the Water Pollution Control Facility would be limited to 150,000 gallons per day as directed by the ACO. Any substandard on-site systems would be upgraded to meet the standards of Title 5 and the local Board of Health regulations. Because these regulations do not adequately address nitrogen loading, excessive nitrogen discharges within the embayment watersheds would continue, and would negatively impact the fishing, shellfishing and tourism industries that depend on a clean and healthy environment.

HOW CAN I BE INVOLVED?

• The Draft Needs Assessment Report is available for public review/comment at the library, Water and Sewer Department, Town Clerk's office, and on the Eldredge Library web page at
`www.capecod.net\epl\ChathamGov.html`

• The Town – together with the Cape Cod Commission and MEPA – will hold a public hearing to gather comments and suggestions in August. CAC members and Town officials encourage residents to review the documents, provide input and attend the meeting.

• For further information about the project, contact Bill Redfield, Manager of the Water and Sewer Department, at (508) 945-5150. The MEPA public meeting notices will be distributed to local newspapers. To have your name included on the project mailing list, call the Water and Sewer Department at the number listed above and leave your name and address.