

COMPREHENSIVE WASTEWATER MANAGEMENT  
**CITIZENS ADVISORY COMMITTEE (CAC)**

December 15, 2005  
Town Hall Meeting Room  
Main Street, Chatham, Massachusetts - 4:00 pm

**PRESENT:**

CAC: Fred Jensen, David MacAdam, Chuck Pollard, Burt Segall, Scott Tappan, Bob DePatie, Phil Christophe, John Payson, and John Randall

CAC members not present: Herb Bernard, Didi Lovett

TAG: Bob Duncanson, Bill Redfield, Judy Giorgio

Others Present: Chuck Bartlett, Paul Kelley, Jennifer Petit, Andy Machado

The meeting was called to order at 4:00 pm.

**Item 1: Minutes**

Minutes of the November 17 meeting were approved unanimously with one correction: The word “sewer” was added to the last line of Item 4 on page 4.

**Item 2: Presentation by Stearns & Wheler on alternative methods for calculating sewer betterment charges.**

Nate Weeks of Stearns & Wheler gave a power-point presentation entitled “Collection System Technology and Betterment Considerations” (attached).

Slides included the following information:

**COLLECTION SYSTEMS**

- Map of the Town indicating conceptual area which could be used for phasing the sewerage project. This map had been presented earlier as part of the preliminary fiscal analysis prepared by the Town Manager’s office and presented to the Board of Selectmen in October.
- There are three basic types of collection systems:
  - Gravity collection system with lift stations.
  - Pressure collection with grinder pumps.
  - Gravity collection system with grinder pumps and lift stations.
- In each of these three systems, the town owns and maintains the pipes and lift stations within the road right of way; the property owner owns and maintains the pipes, and grinder pump if needed, not within the road right of way.
- As the project proceeds, easements may need to be obtained for some gravity lines that do not flow along existing roadways.
- Lift stations are generally located on town property (some may need to be purchased for this purpose or easements obtained).
- The Town will need to approve the type of grinder pumps used.

## BETTERMENT ALTERNATIVES

- Methods used to determine betterments can include:
  - A Fixed Uniform Rate method based on (1) road frontage or (2) sewer line length or (3) property area.
  - A Uniform Rate method based on a defined “sewer unit”. A sewer unit is generally a single-family residential unit. The number of bedrooms or size of the structure is generally not included in the formula.
- Non-residential units are determined based on Title 5 design flow compared to a standard of 330 gallons per day.
- The total capital cost of the collection would be divided by the total number of “units” to be included in each sewer expansion contract.
- Capital costs can be spread over a 20-year period with interest or can be paid when billed to the property without interest.
- Betterments would be based on future build-out conditions rather than current development.
- Betterments on undeveloped property can be deferred until the property is developed. This is allowed by Massachusetts General Law.
- The Board of Selectmen will need to make the appropriate policy decisions regarding the percent of the collection system capital costs to be paid through betterments, the percentage must be adopted by Town Meeting.

Burt Segall asked about the time considerations regarding sewer development as related to fiscal planning, i.e., what portion of the project will be done in the next ten years, in a longer time frame, or never? These questions should impact on how betterments are charged. Bob Duncanson explained that these policy issues have not yet been addressed. It will take time to assess the impact of various scenarios on the town’s fiscal planning.

The goal of the comprehensive wastewater management plan is to develop the most environmentally sound, fiscally responsible method to achieve the required results.

The question of property-owner equity was raised. The introduction/availability of sewer increases the value of a property, thus it may be desirable (equitable) to sewer the entire town rather than only sections where sewerage is necessary to achieve the environmental benefits. We do not yet know how much of the town will need to be seweraged to meet the TMDL requirements.

This discussion is the beginning of a dialogue which will ultimately see the community making the important policy decisions regarding wastewater management.

In response to questions regarding future planning and a “base case” scenario, Bob Duncanson explained that the CWMP will present a series of options which will be presented to the CAC and TAG for their recommendations. We have started this process by looking at a “worst case” scenario of sewerage the entire town in an attempt to determine maximum costs. There will be options for community discussion and decision making as the plan continues to develop.

John Randall asked if those properties not to be connected to the sewer would be charged betterments. Bob Duncanson explained that there would be no betterment to those properties not adjacent to sewer lines, but that they will pay a portion of the cost of development of the wastewater treatment facility through the tax rate. Everyone will benefit from improved water

quality, so everyone will contribute in some way to the expense of the wastewater management facility.

There was discussion of costs involved in connecting to the sewer. Depending on the distance involved, it is estimated that the expected connection costs will average between \$2,000 and \$3,000 per property.

Nate Weeks estimated that grinder pumps and associated tank installation can cost between \$5,000 and \$10,000. Grinder pumps have a life span of eight to ten years; require little maintenance and can be replaced for less than \$1,000.

Lift stations are generally underground but differ depending on size and location. Standard designs are used to facilitate maintenance.

John Payson expressed concern about properties being required to connect to the sewer when they are currently used only seasonally. Bob Duncanson explained that the planning must consider future uses; changes in demographics and seasonality must be considered in planning for future wastewater treatment demands.

Chuck Pollard asked about expected costs of betterments. Nate Weeks explained that the earlier fiscal analysis indicated that the average would be \$30,000 for the full share with \$15,000 being the figure if 50% of the cost is added to the tax rate. He indicated that similar figures have been seen in other towns.

There was brief discussion of the depth of sewer lines and the use of grinder pumps. Minimum depth is usually 4 feet and maximum practical depth is 20 feet.

David MacAdam asked if the potential raising of sea level as a result of global warming was being included in planning. Bob Duncanson explained that normal design/planning horizon is 20 years, but we do expect the sewers to last indefinitely if properly installed and maintained. Nate Weeks added that sites of lift stations will be carefully determined to avoid situations such as that seen in the Gulf Coast following Hurricane Katrina. It was estimated that five to seven percent of the town is in a flood zone. Bill Redfield noted that gravity sewer must be protected from flooding/inundation during storms. He noted that the lift station at Mill Pond is located in a flood plain but is sealed to prevent water intrusion.

The Board of Selectmen will need to look at various scenarios to determine how each will impact property owners. They will need to look at financial analyses and consider fairness and affordability issues.

**Item 3: Discussion of water use by a property as a basis for assessing fees to pay for a portion of the cost of wastewater management solutions.**

Phil Christophe had provided information about water use as a means of raising revenues for wastewater management. This was included in the meeting packets. In discussion it was asked that the TAG provide input on this subject to help clarify what can be done to use water fees as a partial means of supplementing the cost of wastewater management, including specific language from the state statutes that would pertain to this subject.

Fred Jensen summarized the questions: What actions would have to be taken by the town and what government approvals would be required in order for Chatham to derive a portion of the funds (i.e., \$1.0 million per year) needed to pay for the annual operating costs of wastewater management solutions from an assessment based on the water usage of each property in Chatham.

This will be discussed at a future meeting.

**Item 4: Updates on work in progress**

Bob Duncanson provided the following updates:

- A. Cockle Cove Creek salt marsh study – DEP expects to receive this report by December 31, 2005. It may be released to the town at the same time although DEP has not finalized this.
- B. Pleasant Bay Study by MEP – This report should be delivered to DEP by January 17, 2006. Following an expected 30-day DEP review period, it should be available to the town in mid February.
- C. Septic tank nitrogen loading issue – The revised per capita nitrogen-loading figure is now 4.6 per person. Brian Dudley will be asked to attend the CAC's January meeting to make a presentation on this subject. Stearns & Wheler will also be consulted about the validity of this figure.
- D. Re-runs of MEP's water quality model for Chatham – Bob Duncanson has not yet received any response from Brian Howes. He indicated that he has asked them for timelines but has not received a response. He will be asking for the schedule again.
- E. RFP for analysis of Lover's Lake and Stillwater Pond – The RFP is in a final-draft stage and should be issued soon.

John Payson asked about the town running its own data. Bob Duncanson responded that the state has responsibility for developing the data and any changes to the TMDLs is the state's responsibility. By having state-generated data, we are getting greater consistency with neighboring communities as we will all be using the same set of numbers.

**Item 5: Discussion of Chatham's participation in the New County Collaborative**

All Cape Cod Towns will be invited to join the collaborative. Despite earlier criticism and recognition of flaws in the collaborative, David MacAdam made the following motion:

*That the CAC recommend to the Board of Selectmen that Chatham participate in the Cape Cod Wastewater Collaborative.*

The motion was seconded by Scott Tappan and passed unanimously.

**Item 6: New Business**

Regarding Ex-officio committee members, Bill Redfield informed the Committee that Al Haven will be representing the Water and Sewer Advisory Committee. Chuck Bartlett is the Ex-officio member representing the Friends of Chatham Waterways.

**Item 7: Proposed Next Meeting Date**

Because there was a conflict for use of the meeting room on January 19, Bob Duncanson agreed to check for other available dates and/or locations and notify the Committee.

The meeting was adjourned at 5:45 p.m.

Recorder: Marie Williams