

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

March 16, 2006  
Town Hall Meeting Room  
Main Street, Chatham, Massachusetts - 4:00 pm

**PRESENT:**

CAC: Fred Jensen, David MacAdam, Burt Segall, Scott Tappan, John Randall, Herb Bernard and John Payson

CAC members not present: Chuck Pollard, Phil Christophe, Didi Lovett, Bob DePatie

TAG: Bob Duncanson, Bill Redfield

Others Present: Nate Weeks (Stearns & Wheler), Chuck Bartlett, Jean Young, Al Haven, Tim Wood

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

John Payson distributed copies of an email dated June 11, 2004 addressed to Robert Duncanson from Brian Howes, Brian Dudley, Brian DuPont, and Tom Cambareri, the subject of which was: MEP Chatham N. Loading Summary

**Item 1: Minutes**

Minutes of the January 18, 2006 meeting were approved unanimously with the following corrections:

The words "Stage Harbor" were replaced by "Pleasant Bay" on Page 7, paragraph 4.  
In Paragraph 5, page 7, it was noted that Burt Segall asked about the "operation and maintenance" of hydrogen sulfide control efforts/systems.

**Item 2: Discussion of the TAG's recommendation to sewer the Stage Harbor watershed.**

Fred Jensen noted that the Board of Selectmen (BOS) has voted to support this recommendation. Bob Duncanson spoke to clarify the situation, stating that the full extent of the sewerage is still to be determined as there may be areas within the Stage Harbor watershed (i.e., Stage Island) where sewers are not appropriate. The point of Stearns & Wheler's previous presentation was that sewerage is the only viable wastewater option to meet the TMDLs in the Stage Harbor system, so we are proceeding to refine and plan based on that concept.

Burt Segall asked if 100% removal of nitrogen was the goal. Bob Duncan responded that the removal goal for the system as a whole is between 90 and 100%. The goal is to remove 100% of wastewater generated nitrogen in that area, recognizing that there are other sources of nitrogen (atmospheric and natural) that cannot be controlled.

David MacAdam asked about the size of the Stage Harbor watershed as shown on the map. Bob Duncanson explained that the engineers will look at the watershed in terms of street layout, noting that watershed boundaries do not always follow street layouts, thus some areas outside of the Stage Harbor watershed boundary may be included in the sewerage effort there. He also

noted that property owners outside of the watershed can request connection if the sewer passes their property.

Bob Duncanson also explained that the town may decide to sewer areas even if it is not necessary to achieve the TMDLs. Examples include:

- To avoid “bunkering” of septic systems to meet Title 5 requirements, as at Little Beach.
- As a “fairness” issue to make sewer available to everybody.

These are policy decisions which will be made as planning progresses.

John Payson asked about the definition of the Stage Harbor Watershed. Bob Duncanson explained that the exact boundaries of a sewer expansion area(s) have not yet been defined. More detail will be provided as work progresses. This is a multi-year design project. The BOS voted to proceed with sewer expansion planning as sewerage represented the only viable option available in the Stage Harbor watershed area to meet wastewater removal goals.

John Payson asked if homeowners would be required to connect to the sewer. Bob Duncanson said that they would be required to connect by order of the Board of Health. This is necessary to ensure that the wastewater/nitrogen removal goals are met.

There was brief discussion about seasonal properties that currently generate very little discharge. John Payson suggested that checkerboarding should be used for these properties. Bob Duncanson explained that existing properties are contributing to the current excessive nitrogen load, and there is no way to predict future the level of use of a particular property.

Bill Redfield addressed the question of checkerboarding, stating that it had been used in Provincetown for political reasons and was now proving to be a problem as many homes that had not connected, now want to connect but cannot as the system may not be able to accommodate additional flows.

Burt Segall asked about the decision-making process, stating that the comprehensive plan based on the state’s TMDLs is needed. He added that there seems to be an assumption that we are sewerage the entire town while other options remain.

Bob Duncanson explained that the evaluation of sewerage the whole town was undertaken as part of the Town Manager’s evaluation of the worst case financial scenario which sought to determine if the town could afford total sewerage over thirty years. Despite the conclusion that this could be done without significant effect on the tax rate, no decisions has been made to sewer the entire community. We are studying each watershed to determine which approach is best in each.

Nate Weeks of Stearns & Wheler suggested that we consider the term “Adaptive Management” which allows us to plan based on current information, but also allows for change as information changes and the study progresses. We hope to make the best judgments possible looking at the worst case scenarios and adjust them as needed. We must create flexible plans to allow the town to meet demands in the future.

David MacAdam asked about the completion of the comprehensive plan which was included in the committee’s motion/vote last August. Bob Duncanson stated that it has always been our

intent to complete the plan as expeditiously as possible. This has been complicated by the delays in receipt of several reports associated with the MEP. Sterns & Wheeler is preparing planning information on a section-by-section basis and this information will be incorporated in the final plan. We need to differentiate between the plan and its implementation. We cannot set an implementation schedule yet as we need to complete the studies on each area and combine them into the comprehensive plan.

Bill Redfield stated that the original study was divided into 5 phases. We are now in the 400 phase which is looking at alternatives in each area. The CAC is looking at alternatives, providing input and asking questions, and then the plan will be finalized. In the Stage Harbor watershed, the nitrogen removal needs were so high (90+ %) that sewerage is the only viable alternative. In other watersheds this may not be the case.

David MacAdam asked about the use of "average annual water" data in planning and design for sewerage in the Stage Harbor Area. He stated that he is not satisfied that blanket sewerage is necessary and expressed concern that we don't have water data to make necessary determinations. Bob Duncanson agreed that it is difficult to plan because of seasonal fluctuations but noted that we are now essentially addressing the "current" problem. Future uses cannot be predicted; it is likely that uses will be increased in the future. We need to design for the highest day of the year, not the lowest. As planners and engineers we must look at future possibilities (build out) and plan for potential uses. We can't predict the future, so we make assumptions and these are based on sound data review.

David MacAdam questioned the waste of money if we over-build. Bill Redfield explained that there is a small cost differential in pipe sizes (2% or less) so using larger pipes for the collection system is not a significant cost concern.

Nate Weeks responded to several statements, noting that we design to low points (flows) as well as high points (flows). This is important to protect against sulfide build-up problems. He again noted the importance of Adaptive Management in the planning process. He added that treatment plants are generally designed and built in phases to manage future uncertainties.

John Randall cited the traffic situation on the Oakland-San Francisco bridge as an example of planning for future needs. He stated that the cheapest way is often to do it the right way the first time.

Burt Segall asked about the determination of population by using water data. Bob Duncanson said that water use data was used to determine the mass load of nitrogen per parcel rather than the number of people.

Fred Jensen asked if the CAC feels that the study team is working appropriately despite the lack of all important data and information. He noted that costs are escalating, so continuing to work without all of the data and model re-runs could result in cost savings. He asked if the CAC would like to support the BOS vote in concept.

David MacAdam made the following motion:

*"That the CAC endorse the TAG's effort to plan to sewer the Stage Harbor watershed area."*

The motion was seconded by Scott Tappan.

John Payson expressed his view that we have inadequate data to proceed and asked about model re-runs and four-quarter water data as mentioned in the memorandum he had distributed at the beginning of the meeting.

Bob Duncanson said that a contract had been signed with SMAST, and that the work was underway, to update the south-side estuaries models and conduct the hydrodynamic evaluations.

John Payson offered an amendment to the main motion: To add the phrase

*“Subject to the provision of new fourth-quarter water data.”*

The amendment was seconded by David MacAdam.

John Payson cited an earlier DEP memorandum which encouraged the town not to begin planning prior to the completion of the CWMP. David MacAdam suggested that there was some confusion between the words “planning” and “design.” He noted that considering escalating costs, this (early planning) is a way to move forward prior to receipt of all data and model re-runs.

Bob Duncanson stated that if the data change significantly following new modeling, the TAG will adjust accordingly. Recommendations and alternatives can be changed and adjusted as data dictates. This is all part of the planning process. It is the town’s intent to complete the plan as soon as possible. The CAC has previously insisted that we move ahead while continuing to complete the plan. We are working on parallel tracks to complete the CWMP and begin design efforts in areas where there is sufficient information to proceed. He added that the design engineering details are out of the purview of the CAC.

Burt Segall expressed agreement but questioned the impact of CAC support given the Selectmen has already voted. Bob Duncanson agreed that the passage of the main motion doesn’t change anything, but provides support for the ongoing work.

There was a vote on the Payson amendment which was defeated by a vote of 6 to 1.

There was a vote on the main motion which was passed by a vote of 6 to 1.

**Item 3: Discussion of the Town’s proposal to request funding at the May 2006 Town Meeting to begin the detailed engineering design to expand Chatham’s sewage treatment plant.**

Scott Tappan made the following motion, seconded by John Randall:

*“That the CAC endorse the Town’s proposal to request funding at the May 2006 Town Meeting to begin the detailed engineering design to expand Chatham’s sewage treatment plant.”*

There was discussion of the treatment capacity. Bob Duncanson explained that the May 06 proposal is for phase 1 (1.2 million gals/day annual average) of a total plant capacity of 1.8 mgd annual average if the whole town were to be sewerred. Bob Duncanson explained that the plant will be designed so that the additional capacity can be added if/when needed.

The motion passed by a vote of 6 to 1.

#### OTHER BUSINESS

Due to the length of discussion of Item 2, it was decided other items would be tabled until a future meeting.

Fred Jensen reminded the CAC that there is a meeting with the Board of Selectmen on April 4 at 4 pm at which time Stearns & Wheler will present the evaluation of wastewater and nitrogen management strategies for the Cackle Cove area. He encouraged members to attend.

It was noted that the BOS had voted to place, and support, an article before the May town meeting seeking approval to petition the state legislature to allow Chatham to impose a 1% real estate transfer tax be imposed as an additional means to pay for wastewater improvements. If approved by the legislature a further town meeting vote will be required to enact.

It was suggested that the CAC should hear Stearns & Wheler's Cackle Cove presentation prior to the meeting of the Board of Selectmen. A meeting was planned for Thursday, March 30 at 4:00 pm.

Fred Jensen advised the CAC that Selectmen Sean Summers was appointed as the town liaison to the Cape Cod Wastewater Collaborative.

#### ADJOURNMENT

The meeting was adjourned at 6:10 pm.

Recorder: Marie Williams