3225 MAIN STREET • P.O. BOX 226
BARNSTABLE, MASSACHUSETTS 02630

(508) 362-3828 • Fax (508) 362-3136 • www.capecodcommission.org

CAPE COD COMMISSION

Minutes
DRI Hearing
Harwich Comprehensive Wastewater Management Plan (CCC No. 13004)
July 28, 2016
Harwich Town Hall, Griffin Room
732 Main Street, Harwich, MA 02645

Subcommittee Members Present: Richard Roy (Chair), Leonard Short, Michael Skelley, John McCormack, Jr., Jacqueline Etsten, Elizabeth Taylor, Kevin Grunwald (Alternate)

Commission Staff Present: Patty Daley (Deputy Director), Jonathon Idman (Chief Regulatory Officer), Jeffrey Ribeiro (Regulatory Officer), Michele White (Regulatory Officer), Tom Cambareri (Watersheds/Water Resources Program Manager)

Minutes Summary

A Cape Cod Commission Subcommittee (Subcommittee) held a Development of Regional Impact (DRI) hearing to review the proposed comprehensive wastewater management plan (CWMP) for the Town of Harwich. The Town of Harwich presented a description, Commission staff discussed a draft written decision, and the Subcommittee heard public comments on the CWMP.

Minutes

Richard Roy called the meeting to order at 5:00pm. Jonathon Idman read the public hearing notice. The Subcommittee members introduced themselves.

Michael Skelley made a motion to approve meeting minutes from the Joint Review Massachusetts Environmental Policy Act (MEPA)/Commission public hearing at which the Subcommittee considered the Single Environmental Impact Report (SEIR) for the proposed Harwich CWMP, held on April 28, 2016. John McCormack seconded. The motion passed unanimously.

Mr. Roy called for a presentation on the project by the applicant's representative, David Young, P.E., of CDM Smith, who has been working with the Town of Harwich since 2007 to create this CWMP. Mr. Young presented an outline of the presentation and an overview of components of the CWMP, using a Power Point presentation. He showed land use development maps of the town for 1951 and 1999, depicting development in town during that time period and an over 400% population increase. Mr. Young listed the watersheds of the town, and gave a brief description of examples of existing water conditions of those watersheds. Mr. Young stated some problems with water quality, such as high amounts of nutrients, and showed a sequence of aerial photographs depicting eel grass beds declining along the southern coast of Harwich. More than eighty percent of nitrogen loading to water resources from controllable sources is from wastewater, mostly individual Title 5 septic systems, 8% is attributed to fertilizers, and 7% due to stormwater runoff.

The town reviewed analyses of drinking water supplies from 14 municipal wells used for the public water supply. Mr. Young stated that the water quality of those wells is excellent relative to nitrates, but some wells in the Pleasant Bay watershed have shown an increase in nitrate levels above background levels, though still well within safe and desirable drinking water levels.

The town looked at build-out potential when considering nitrogen loading and drinking water protection, particularly in the East Harwich village center. Most of the public comments provided on the draft CWMP during the MEPA process were regarding the build-out 'flow allowance' that was included in the CWMP for wastewater planning purposes in East Harwich. The draft CWMP assumed an additional 250 residential units and 500,000 square feet (SF) of additional commercial space in East Harwich under build-out conditions. Flow allowance was calculated in the first instance using a Massachusetts Estuaries Project (MEP) watershed report wastewater flow recommendation of 35 gallons per day (gpd) per 1,000 square feet of commercial building area. Those amounts of wastewater flow were factored with anticipated additional amounts of residential and commercial build-out for a designed wastewater flow allowance of 55,000 gpd in East Harwich.

Public comments received on the flow allowance calculations questioned the number of residential units and amount of commercial space assumed, and the amount of wastewater flow allocated to each. For the Single EIR, the town worked with the Planning Department and Planning Board to refine and arrive at the anticipated build-out assumptions for the final CWMP, decrease the amount of residential units and the square footage of commercial space, and increase the amount of wastewater flow allocated to commercial space as evidenced in other commercial areas within the town. This revised analysis resulted in an approximately similar flow allowance of 55,000 gpd for East Harwich.

The town also looked at studies performed for freshwater ponds, evaluated areas where treatment has occurred, and recommended collecting additional data. Based on the information collected, recommendations have been made to sewer higher density areas around some ponds to reduce phosphorus inputs.

Mr. Young outlined the wastewater needs of the town to meet the project goals. Overall, the CWMP addresses the wastewater needs of Harwich based on nitrogen removal requirements by watershed under build-out conditions; water supply protection; Smart Growth; Title 5, and freshwater pond protection.

The CWMP is an eight (8) phase plan to be implemented over 40 years and includes inlet widening at Muddy Creek; a study of natural nitrogen attenuation of the Cold Brook Bogs; an Inter-Municipal Agreement (IMA) for wastewater treatment with Chatham; additional sewer infrastructure for collection, treatment, and recharge; and a possible Permeable Reactive Barrier at one recharge site. Non-structural components of the plan include stormwater best management practices, fertilizer education, open space acquisition, zoning review, fresh water pond restoration, and continuation of the shellfish seeding program.

Mr. Young provided an update on Phase 1 initiatives. In 2016, the inlet to Muddy Creek was widened from approximately 6-feet to 24-feet to increase flushing of the creek by Pleasant Bay. This project was implemented under a MEPA Environmental Impact Report Phase I Waiver granted by the Secretary of the Executive Office of Energy and Environmental Affairs during the MEPA review process.

Another component of Phase 1 of the CWMP was to study the potential for nitrogen reduction by natural attenuation at the Cold Brook Bogs. The MEP study for the Saquatucket Harbor watershed showed natural nitrogen attenuation at 35%, where most open water ponds can get 50-55% natural nitrogen attenuation. The town is working with the Harwich Conservation Trust (HCT), which owns the land, to try to combine HCT's habitat restoration efforts with the Town's goal of maximizing nitrogen attenuation in this area.

Discussions are ongoing with the Chatham Wastewater Treatment Plant to negotiate an IMA for 300,000 gpd of capacity of wastewater treatment and disposal. In the future a new treatment facility and effluent site may be constructed near the town landfill. A Permeable Reactive Barrier may be incorporated into the recharge area of that project.

The towns of Harwich, Dennis and Yarmouth are currently evaluating construction of one centralized treatment plant, the "Community Partnership" option, instead of building the in-town treatment plant, which will save on capital and operation and maintenance costs.

Also, the town has for many years done shellfish seeding in the Herring River, Allen's Harbor, Round Cove/Pleasant Bay, and Wychmere Harbor watersheds. A larger program for increased nitrogen removal is being considered.

The Board of Selectmen, acting as the Wastewater Management Agency for the town, has submitted watershed reports to the Commission for the Pleasant Bay Watershed, Herring River Watershed, and the Allen, Wychmere and Saquatucket Watersheds.

Mr. Young outlined next steps for the process. The town will complete DRI review with the Commission, and finalize the IMA agreement with Chatham. A Wastewater Implementation Committee is working on public outreach, project implementation and water monitoring.

Harwich, Dennis and Yarmouth will continue to evaluate the Community Partnership options for a centralized wastewater treatment plant. Potential Spring 2017 Town Meeting Articles may include warrant articles to approve the Chatham IMA, land use controls, and funding for costs attendant to early phases of the CWMP. Mr. Young concluded his presentation and asked for questions.

Mr. Roy called for a presentation by Mr. Idman, who introduced Commission staff present at the hearing, and presented the draft DRI Decision for consideration by the Subcommittee. Mr. Idman stated that the proposed final CWMP is substantially similar to the draft CWMP, which was presented to the Subcommittee at the Joint Review Hearing during the MEPA process. Mr. Idman outlined the MEPA process for the Harwich CWMP review. Commission staff's analysis of the CWMP has not changed since the issuance of the MEPA Certificate on the SEIR, and the Plan has not changed, therefore a draft DRI Decision was compiled for consideration by the Subcommittee.

Mr. Idman discussed the proposed draft Decision through the proposed conditions of the Decision. The CWMP presents high level wastewater planning and the conditions provide for more specific staff review during implementation of the Plan. Three main concepts raised in the conditions are a process for obtaining Certificates of Compliance, the 'Adaptive Management' process, and the Cape Cod Area Wide Water Quality Management Clean Water Act Section 208 Plan Update ("208 Plan") certification process. This type of Decision is different from a more typical DRI Decision.

Certificates of Compliance are usually issued by the Commission to show satisfaction with specific, contemplated aspects of a project, but there are not specific plans yet developed with this Plan. The Commission needs a way to review specific projects for consistency with the Regional Policy Plan as plans are developed for them, and this is suggested through the Certificate of Compliance process. As a condition, the town will provide project plans to the Commission for review, whereby Commission staff will provide impact analysis review of specific projects the Town intends to advance. For example, when the town is ready to go forward with a specific project at the Cold Brook Bogs, Commission staff will review that plan relative to the interests of the Cape Cod Commission Act and RPP.

Adaptive management planning is important to a long term plan, and allows for project modification or alteration based on implementation outcomes. One example are the town's discussions with Yarmouth, which are new from the SEIR. Adaptive management allows for the Plan to change over time based on circumstance. The draft decision requires that prior to the implementation of Phase 2, the town develop an Adaptive Management Plan based on the framework presented in the SEIR, to be updated at certain intervals to be determined by the town and Commission staff.

Section 208 Plan consistency is an important consideration. The high level concept plan is consistent with the 208 Plan, and many elements of the 208 Plan are incorporated into the CWMP. The draft decision requires that as the project moves forward under adaptive management, that at certain milestones such as the start of Phase 4, the Commission should

review the Plan to ensure that it is proceeding consistent with the 208 Plan. Phase 1 has been completed, Phases 2 and 3 pertain to the IMA and sewering within the Pleasant Bay watershed area, and Phase 4 introduces a new treatment facility.

The draft decision establishes that the effective period of the Decision is the overall 40-year implementation time, which is allowed under the Cape Cod Commission Act for water quality improvement projects, so long as the Plan meets the conditions of the Decision, including 208 Plan consistency. Modifications to the project can be accommodated through adaptive management, but changes that are so different from the final CWMP may require a modification of the DRI Decision.

Mr. Idman noted that the Commission did receive a comment letter from The Association to Preserve Cape Cod (APCC), which included a report from the U.S. Geological Survey (USGS) relative to sea level rise and potential impacts to groundwater lenses.

Mr. Idman concluded that staff recommends the Subcommittee vote to recommend the draft CWMP to the full Commission for approval of the CWMP, consistent with the Subcommittee's discussion to follow. Mr. Idman concluded his presentation and asked for questions.

Mr. Roy asked for comments or questions from the Subcommittee.

Elizabeth Taylor asked if the Harwich Board of Health has plans to address septic system use relative to sea level rise, and if the Planning Board is working on establishing fertilizer regulations. Mr. Young stated that the Board of Health recognizes considerations have to be made regarding septic systems, sewering, and depth to groundwater. The town would like the CWMP to be approved before changes to town regulations will be made.

Ms. Taylor asked if there are further protections of freshwater ponds. Mr. Young said there is the potential for further setbacks and sewering. The town will also engage in fertilizer education and outreach.

Ms. Taylor asked if there are plans for "growth neutral", or zoning changes. Mr. Young said that the town may allow for additional flow in commercial areas, but stay with Title 5 flows in residential areas where allowable, or through open space acquisitions. The town recognizes future considerations must be made regarding flow neutrality.

Mr. Idman stated growth management will be a consideration in determining future 208 Plan consistency. Flow neutral bylaws are required to get State Revolving Fund funding. This Decision should be the beginning of the discussion for future 208 Plan consistency certification. Unless towns have adopted fertilizer bylaws through the Commission's Fertilizer Management District of Critical Planning Concern (DCPC), or had grandfathered bylaws, the ability to adopt such regulations has ended, and the state regulates fertilizer usage. He also noted that the Town has some pond buffer protections in place within the designated Six Ponds DCPC approved more than a decade ago. The town adopted implementing regulations for the DCPC into its zoning by-law.

Leonard Short asked about acquisition of the Cold Brook Bogs. Mr. Young stated that the town is performing a study of the feasibility of the project, and that the Harwich Conservation Trust owns the land.

Jacqueline Etsten stated that the potential for the addition of accessory dwelling units should be considered in the build-out analysis. Mr. Idman stated that the Title 5 regulations in a residential area are based on the number of bedrooms, which would limit the number of bedrooms allowed, including accessory dwelling units, and that this was figured into the baseline build-out analysis. Mr. Young concurred and stated that the size of the parcel would also limit what is allowed to be built.

Michael Skelley stated that the townspeople must buy-in to the Plan for implementation to occur, and the Commission should work with the town to educate residents about the Plan.

Mr. Short stated that the town of Orleans has been working on a wastewater management plan for 20 years, which is still not finalized. The public must be educated about these efforts to vote for them to implementation.

John McCormack stated that the town of Yarmouth must work through its Plan as well, which failed to get Town Meeting funding several years ago.

Mr. Roy stated that the public has been getting an education over the last several years through the planning process for the 208 Plan update, and there is more public understanding today than five years ago. The Adaptive Management Planning process is a good strategy which may save towns money once Phases are implemented and evaluated.

Mr. Roy called for comments from Federal, State, or Local Officials.

Michele White called Charlene Greenhalgh, Assistant Town Administrator and Interim Town Planner for the Town of Harwich. Ms. Greenhalgh read a letter to the Commission on behalf of the Board of Selectmen dated July 25, 2016, stating support for the project. Ms. Greenhalgh then read a letter to the Commission on behalf of the Town Administrator dated July 29, 2016, stating support for the project.

Mr. Roy called for public comments.

Ms. White called Don Keeran, Assistant Director of APCC. Mr. Keeran referenced a letter dated July 26, 2016, submitted by APCC to the Commission. Mr. Keeran stated support for the draft DRI Decision Land Use section regarding flow neutrality and stated that this issue should be should be strengthened and resolved as the process moves forward. Mr. Keeran also stated the need to identify parcels for open space acquisition to assist in managing growth associated with sewering, and information on the cost of sewering existing development vs. the cost to sewer under the CWMP build-out assumptions. Mr. Keeran referenced a recent USGS report looking at the Monomoy and Sagamore groundwater lenses relative to sea level rise and the potential for impacts to groundwater and the water table, and thus existing individual septic systems. Mr. Keeran encouraged the town to incorporate that study into the Plan.

Following Mr. Keeran, Mr. Roy asked if anyone who did not sign up would like to speak.

Mr. Roy asked for any additional Subcommittee comments or questions.

Mr. Skelley made a motion to recommend the draft written DRI Decision to the full Commission for adoption, and to approve the Harwich CWMP subject to the conditions set out in the DRI Decision. Mr. McCormack seconded. The motion was passed by a unanimous vote.

Mr. McCormack made a motion to continue the hearing to the Cape Cod Commission Hearing on Thursday, August 18, 2016, at 3:00PM, in the Assembly of Delegates Chamber at the Barnstable District Courthouse, located at 3195 Main Street, Barnstable, 02630. Mr. Skelly seconded. The motion passed by a unanimous vote.

Mr. Skelly made a motion to adjourn. Mr. McCormack seconded. The motion was passed by a unanimous vote and the hearing was adjourned at 6:10pm.

Respectfully submitted,

Richard E. Roy

Richard Roy, Chair, Harwich CWMP Subcommittee

8/18/16

Date