Water Resources Commission Decision
13 December 2001

Town of Rockport
Long Beach Sewering

Request for Determination of Insignificance
Under the Interbasin Transfer Act
MGL Chapter 21 Sections 8B - 8D

Introduction

On September 18, 2001, the Massachusetts Water Resources Commission (WRC) received a request for determination of insignificance under the Interbasin Transfer Act (M.G.L. Chapter 21 §§ 8B-8D) from the Town of Rockport. This request was discussed at the November 8, 2001 WRC meeting. **At its December 13, 2001 meeting, the WRC voted unanimously, with one abstention, that the Rockport Long Beach sewering project is insignificant under the Interbasin Transfer Act.**

REASONS FOR THE WRC DECISION

Rockport is proposing to sewer the Long Beach section of town to the Gloucester Wastewater Collection system. The Interbasin Transfer Act is triggered by this proposal because wastewater will cross both a town and basin line. An estimated maximum of 0.035 million gallons per day (35,000 gallons per day) of wastewater will be transferred from the North Coastal basin to the Massachusetts Coastal basin.

Rockport is located in the North Coastal Basin and obtains all of its water supply from this basin. The Long Beach area is a barrier beach adjacent to the Gloucester town line (Figure 1). There are approximately 150 houses in the area, all summer seasonal residences owned by the Town of Rockport and leased to individuals. The lease agreements permit occupation in these residences only from April 15th to October 15th. Any new development in this area must be approved by voters at Town Meeting. Gloucester is also located in the North Coastal basin, but discharges its wastewater to the Massachusetts Coastal basin.

Due to failing septic systems, Rockport is under a DEP Administrative Consent Order (ACO) to address wastewater discharge in the Long Beach area. The town has investigated alternatives to this project, including on-site treatment and transporting the wastewater to the existing Rockport Wastewater Treatment Plant, which also discharges to the Massachusetts Coastal basin.

According to the ENF filed for this project in January 2001, on-site treatment was found to be cost-prohibitive and infeasible due to site constraints and environmental impacts; transporting the wastewater to the existing Rockport Wastewater Treatment Plant was found to be cost prohibitive due to the distance of the plant from this area. DEP has reviewed Rockport's alternatives analyses and concurs with this conclusion. DEP has stated that the proposed project is an important component of the ACO.

Proposed Transfer

The Long Beach area is served by town water supply from Cape Pond, a reservoir located in town, in the North Coastal basin. Wastewater is currently discharged through on-site septic systems. These systems are failing and causing pollution of groundwater, coastal waters, commercial fishing areas, and beaches in the area. As part of the ACO entered into with DEP, Rockport will provide sanitary sewers to this area.

As stated above, the transfer of wastewater will only occur from April 15th to October 15th. The intermunicipal agreement with Gloucester restricts service to this time period and to those residences existing at the time of the agreement. An estimated maximum of 0.035 million gallons per day of wastewater will be transferred for discharge to the Massachusetts Coastal basin via the Gloucester wastewater treatment plant.

Analysis of the Proposed Transfer

The Long Beach area is a narrow strip of land along the coast, located in the southeast section of Rockport. The site has a land area of less than 0.1 square mile (four acres). The Atlantic Ocean is southeast of the site and a tidal creek, Saratoga Creek, is located to the northeast and northwest (Figure 1). The project area is classified under the 1982 Massachusetts Barrier Beach Inventory Project as Barrier Beach Management Unit RP-4. This section of town is in the 100 year flood plain. All the homes in the area are summer seasonal residences built under lease agreement with the Town of Rockport.

Executive Order 181: Barrier Beaches, although not directly related to the Interbasin Transfer review of this project, does not apply in this situation. The EO directs, among other things, that state and federal money shall not be used to encourage growth and development in hazard prone areas. This project will be funded through betterments. No state or federal funds will be used to facilitate this project. This project is not designed to facilitate additional growth. As stated previously, sewer service is restricted only to those residences existing at the time of the agreement. Any new development in this area must be approved by voters at Town Meeting.

EO 181 also prohibits development in the velocity zones or primary dune areas. Any work related to this project will be conducted in an existing roadway, out of the velocity zone, as designated on the National Flood Insurance Program Flood Insurance Rate Map and will not disturb any primary dune areas.

The Rockport area is primarily bedrock with some thin layers of till, however the Long Beach section has a small amount of undifferentiated deposits ranging from stratified drift to swamp material. There are limited groundwater resources in Rockport due to the lack of stratified drift overlying the bedrock. Most groundwater is found in fractured portions of the bedrock. Therefore, most of the streams in Rockport are intermittent. Ground water in deposits in the Long Beach area flows primarily towards the ocean. A small amount of ground water may flow towards Saratoga Creek, however streamflow characteristics are primarily dependent on up-gradient runoff (which does not include the Long Beach area), precipitation and tidal fluctuations.

Criteria for determining insignificance in the IBT regulations with respect to hydrological impacts focus on impacts to streamflow. Criteria for streamflow impacts include: less than 5% of the instantaneous flow can be withdrawn (transferred) and the 95% exceedance flow and the 7Q10 flow will not be diminished. Because the Long Beach area is dominated by ground water flow towards the ocean and because the only surface water feature is a tidal creek which does not receive significant recharge from this area, the standard streamflow criteria have not been applied in evaluating this proposal.

An inflow/outflow analysis of this area indicates that 31,500 to 34,776 gallons per day will be sewered from this area. However, this water was imported from water supply sources outside the subbasin in which the Long Beach area is located. Therefore there is no net loss of water to the area over pre-development conditions.

Based on the lack of streamflow impacts by this project and the net water quality improvement with the replacement of individual substandard septic systems, the proposed sewering is insignificant from a hydrological standpoint.

Synopsis of Criteria for Insignificance

Criterion	Rockport's Application
(a) Is not over 1 mgd	Meets
(b) Is less than 1 mgd on an annualized basis and is temporary, of short duration and for a purpose other than water supply use	Not Applicable
(c) Additional flow is less than 5% of the instantaneous flow	Not Applicable
(d) The 95% exceedance flow will not be diminished	Not Applicable
(e) Special resource values will not be adversely affected	Meets
(f) The Commission shall consider the cumulative impacts of all past, authorized or proposed transfers on streamflows in the donor basin	Meets

A description of how the application addressed these criteria is found in Attachment 1.

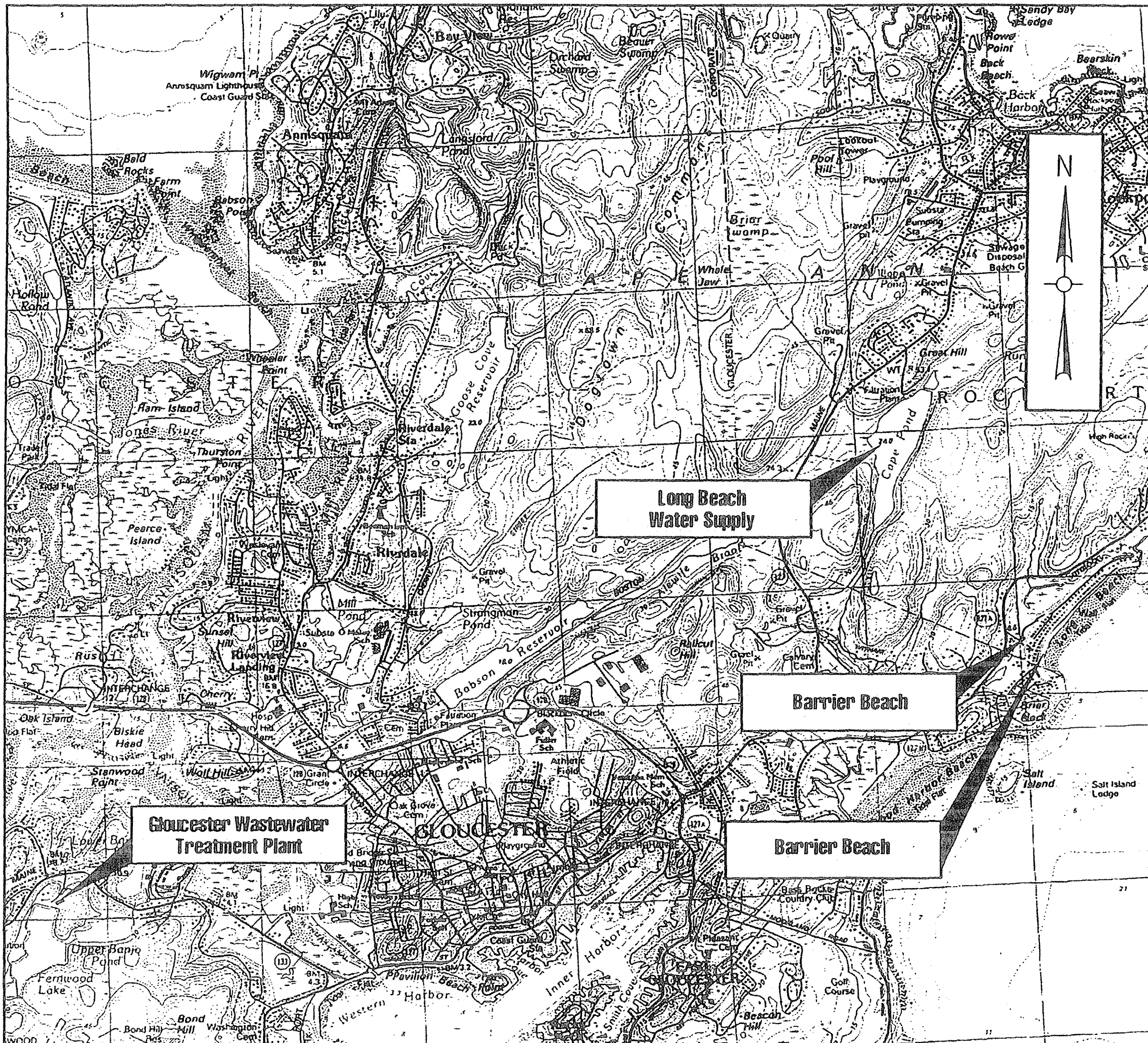
WRC Decision

The WRC finds that Rockport's proposal to sewer the Long Beach area, as described in the Town's request to the Commission is insignificant under the Interbasin Transfer Act.

The WRC supports the Board of Selectmen's policy to require that any new development in this area must be approved by voters at Town Meeting and that any repairs or renovations to existing structures conform with the Town's Long Beach Regulations (August 1995). The Commission recommends that the Town not allow any growth or development on the barrier beach and that the Town make efforts to provide information on water conservation to the summer residents of Long Beach.

Attachment 2
Request for Determination of Insignificance
Town of Rockport
Long Beach Sewering Project

Criterion	Proposal Meets	Explanation
(a) Is not over 1 mgd	Yes	The maximum of wastewater to be generated by this project is 0.035 million gallons per day.
(b) Is less than 1mgd on an annualized basis and is temporary, of short duration and for a purpose other than water supply use	Not Applicable	Proposal is long-term for wastewater purposes.
(c) Additional flow is less than 5% of the instantaneous flow	Not Applicable	The only surface water feature is a tidal creek which does not receive significant recharge from this area.
(d) The 95% exceedance flow will not be diminished	Not Applicable	The only surface water feature is a tidal creek which does not receive significant recharge from this area.
(e) Special resource values will not be adversely affected	Yes	Although the project occurs in a barrier beach, all work related to this project will be conducted in an existing roadway and will not disturb any primary dunes. There are no ACECs, designated scenic rivers, rare or endangered species, or Article 97 areas in the project area.
(f) The Commission shall consider the cumulative impacts of all past, authorized or proposed transfers on streamflows in the donor basin	Yes	The small amount of wastewater generated by this project does not cause concern with respect to cumulative transfers out of basin.



NOTE: Drinking water from Cape pond enters the Long Beach area on the Northwestern end of the barrier beach. Sewers will be installed along the roadway on the barrier beach. Sewage will discharge to the Gloucester wastewater collection system and be treated at the Gloucester wastewater treatment plant.

FIGURE 1

LOCUS MAP

ROCKPORT, MASSACHUSETTS, LONGBEACH TO GLOUCESTER WASTEWATER COLLECTION SYSTEM

SOURCE: USGS 7.5 x 15 MINUTE SERIES, ROCKPORT MASS QUAD, 1991

0 ½ 1 MILE

Zip Maps 7/Locus Maps/Gloucester 9.01

Weston & Sampson