



February 21, 2018

**Andrew Gottlieb**  
*Executive Director*

Secretary Matthew A. Beaton  
Executive Office of Energy and Environmental Affairs  
Attention: MEPA Office  
100 Cambridge Street, Suite 900  
Boston, MA 02114

**BOARD OF DIRECTORS**

**Margo L. Fenn**  
*President*

RE: Eastham Water System SEIR, EEA # 15274

**Charles Sumner**  
*Vice President*

Dear Secretary Beaton:

**Robert Summersgill**  
*Treasurer*

The Association to Preserve Cape Cod (APCC), the Cape's leading nonprofit environmental advocacy and education organization, offers the following comments regarding the Eastham Water System Supplemental Environmental Impact Report (SEIR).

**Maureen O'Shea**  
*Clerk*

**Elliott Carr**

APCC has provided comments on the previous MEPA filings for this project and once again we reiterate our strong support of the town of Eastham's efforts to provide a safe and reliable public water supply to its citizens. APCC believes this project has significant benefits, and we believe the SEIR has satisfactorily addressed most issue areas. The one major outstanding environmental issue related to this project concerns potential impacts to state-listed eastern spadefoot toad habitat in the proposed District H wellfield site.

**Robert Ciolek**

**Michael Corrigan**

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**Thomas Huettner**

**Pat Hughes**

**Cheryl Lubin**

**Blue Magruder**

**Eliza McClennen**

**Donald Palladino**

**Kris Ramsay**

Among the possible impacts to spadefoot toad habitat being looked at is the potential for drawdown from the District H wells altering water levels in at least one of the vernal pools (VP-E11) in the District H area. In the analysis of potential spadefoot toad habitat impacts from the District H wellsites, the SEIR states that modeling was done on possible drawdown of vernal pools in the immediate vicinity. The modeling for the vernal pool identified as VP-E11 indicated that declines in groundwater level caused by District H pumping will result in an average drop in the pool water levels of 2.5 inches when the well labeled as TPW-3B is pumped consistently under build-out conditions for a town-wide water system. Testing determined that long-term pumping will have less of an effect on two other vernal pools in the area.

The SEIR states that the town and the Massachusetts Division of Fish and Wildlife, Natural Heritage and Endangered Species Program (NHESP) are in the process of developing a Conservation and Management Plan (CMP) to protect spadefoot toad habitat. According to the SEIR, the CMP will include:

- Designation of a protected area in the District H wellfield site for spadefoot toad habitat.
- An alternatives analysis on District H wellfield operations and how the two supply wells can be managed to minimize groundwater drawdown impacts on one of the

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vernal pools (VP-E11) identified within the spadefoot toad habitat in District H.

- A vernal pool monitoring program occurring in conjunction with a plan for phasing water withdrawal rates over time as the monitoring data is collected.
- Development of a habitat management plan for areas to be improved and maintained as high quality spadefoot toad habitat.

In general, APCC supports the CMP monitoring plan as described in the SEIR, which includes multi-year monitoring of water levels in selected vernal pools and groundwater elevations to assess what, if any, effect withdrawals from District H wells will have on spadefoot toad habitat. As described in the SEIR, the District H wellfield withdrawal rates will be lower in the initial years as groundwater drawdown rates are measured and its effects on spadefoot toad habitat/vernal pools are monitored. If it is determined that withdrawals levels have no impact, the levels will be gradually increased to planned operating levels while monitoring and evaluation by NHESP continues.

While the habitat monitoring plan appears sufficiently prudent in its phased approach to gauge the potential impacts of the withdrawal levels from the wellfield, it is unclear in the SEIR what the proposed response will be if the monitoring does in fact show that withdrawals are affecting habitat. APCC would like to see a description of a contingency plan if the monitoring and evaluation reveals habitat impacts. Will it require withdrawals to be maintained at lower levels from the District H well? If so, will lower withdrawal levels be sufficient to meet municipal water demands? To ensure that there is appropriate interagency coordination on this matter, APCC recommends that the CMP monitoring plan be included in the DEP water management permit with a provision that should NHESP determine that pumping restrictions are necessary, DEP amend the permit accordingly to reflect NHESP's determination.

With respect to VP-E11—which, as mentioned above, was identified in modeling as likely to experience up to a 2.5-inch water level decrease due to drawdown from the proposed well—the “2017 Wildlife Habitat Survey Report: Eastern Spadefoot Toad (*Scaphiopus holbrookii*)” conducted by Eco Terra Design & Consulting states on page 14 of the report that for the eastern portion of that vernal pool (VP-E11e), “Water depths were very shallow at less than or equal to one foot, and an abundance of *Ambystoma* egg masses were observed in this finger of the pool. This portion of the pool appears to be strongly ephemeral in its hydrology.”

An estimated 2.5-inch drop in water level in a pool documented as being one foot deep is more than a 20 percent reduction in pool depth. This appears to be a significant impact on this portion of the pool, which according to the habitat survey, contained “an abundance” of spotted salamander eggs. APCC would like to see greater clarification on whether the anticipated drawdown impacts to VP-E11 will affect this shallow eastern finger of the vernal pool. If it does, APCC would also like clarification on whether the provisions of the CMP allow this impact to occur.

APCC thanks the Secretary for this opportunity to provide comments.

Sincerely,



Andrew Gottlieb  
Executive Director