



**Town of Provincetown  
Meeting of the  
BOARD OF HEALTH**

**Thursday, September 20, 2018**

**Judge Welsh Hearing Room, Provincetown Town Hall,  
260 Commercial Street, Provincetown, MA**

---

**Board Members Present:** Mark Phillips, Chair; Steve Katsurinis, Vice Chair;  
Dr. Elise Cozzi; Dr. Janet Whelan; Kalliope Chute and Betty Williams, Alternate

**Board Members Absent:** Irv Morgan, Alternate

**Other attendees:** Morgan Clark, Health Department Director, and Laura Marin, Health Agent

**Recording Secretary:** Linda Fiorella

**Call to Order:** Mark Philips called the meeting to order at 6:00 p.m.

**I. Presentation by Jennifer Cooper, PhD: The effects of climate change conditions on water quality functions of septic systems in the northeastern United States.**

Mr. Phillips introduced the presentation and Dr. Cooper.

Dr. Cooper's presentation began with statistics about the percentage of people with septic systems and the increase to the coastal populations often in areas where it is hard to have sewer systems. She described the treatment of microorganisms, nitrogen and other byproducts of human waste, the effects of climate change on septic systems in general, and compared traditional septic systems with advanced systems, including potential improvements currently in development. The discussion included Dr. Cooper's research and that of others in the field including George Heufelder who has been invited to speak at a future talk. Dr. Cooper touched on issues of septic system compliance, various effects of climate change such as increased precipitation and rising water tables, and the need for further study.

**II. Public Comments**

There were no public comments.

**Adjournment:**

There being no further business, the meeting ended at 7:30 pm.

Respectfully submitted,

Linda Fiorella

**Approved by \_\_\_\_\_ on \_\_\_\_\_, 2018**

Board of Health

September 20, 2018

Page 1