



City of Keene  
*New Hampshire*

**MUNICIPAL SERVICES,  
FACILITIES AND INFRASTRUCTURE  
COMMITTEE  
AGENDA  
Council Chambers B  
November 9, 2016  
6:00 PM**

Janis O. Manwaring  
Randy L. Filiault  
Robert J. O'Conner  
Stephen L. Hooper  
Gary P. Lamoureux

- 
1. Discussion - Airport Forest Management Plan - Airport Director
  2. Discussion - Periodic Report - Bicycle Pedestrian Path Advisory Committee
  3. Discussion - Castle Street/Harper Acres Improvements - City Engineer and Keene Housing Authority
  4. Discussion - Driveway Code Review – Planning Department
  5. Impact of Area Drought on Keene's Water Supply - Public Works Department

**MORE TIME ITEMS:**

- A. Safety Concern – Intersection of West Street and Bradford Road
- B. Request for No Parking – South Side of Spring Street
- C. Request for Two Hour Parking Limit – 50 Washington Street
- D. Roxbury Street Crosswalk – Public Works Department
- E. Speeding on Jordan Road – Request for Speed Humps
- F. Reconstruction of the City Roadways and the Addition of Sidewalk Construction to Reconstruction Projects - Council Policy

Non Public Session  
Adjournment



City of Keene, N.H.  
*Transmittal Form*

November 9, 2016

**TO:** Municipal Services, Facilities and Infrastructure Committee

**FROM:** Donna Hanscom, Assistant Public Works Director/Laboratory Manager

**THROUGH:** Kurt D. Blomquist P.E., Public Works/ Emergency Mgmnt Director, Medard Kopczynski, City Manager

**ITEM:** 5.

**SUBJECT:** Impact of Area Drought on Keene's Water Supply - Public Works Department

---

**RECOMMENDATION:**

The Municipal Services, Facilities, and Infrastructure Committee recommends the City Council declare a Stage 1 Water Conservation Alert and request that persons connected to the City water distribution system reduce water use by ten percent through water conservation measures.

**BACKGROUND:**

Between late August and October 23, 2016, the Keene area had been categorized by the United States Drought Monitor as being "abnormally dry". That status was changed to "moderate drought" on October 24, 2016.

The City's surface water supply is at approximately 60% of full capacity with about 350 million gallons of available water, and the two wellfields are showing the effect of the dry conditions through lower water levels in monitoring wells. The current daily demand for water is approximately 1.8 million gallons a day, a significant reduction from the high of 2.9 million gallons on August 1 of this year. Conscious of the dry conditions, staff has satisfied the demand by balancing the use of the three supplies since late August. Although the surface water volume can be observed and measured, the available groundwater volume is less obvious.

To evaluate the results of the current pumping practices and water levels and make recommendations for future water use, staff contracted with Aries Engineering to update the City's groundwater model. Aries' preliminary recommendations include increasing the volume withdrawn from the Court Street wellfield because it has not been used much over the past few years and shows a good recharge response to rainfall, and to reduce the volume pumped from the more frequently used West Street well to allow it to recharge. Aries also recommends the City reduce its use of surface water to preserve that volume through the winter in case of lower precipitation through the winter and spring.

Because of the uncertainty over how long the drought will continue, it is recommended the City Council declare a Stage 1 Water Conservation Alert as described in Section 98-74.1 of the City Code to reduce the demand on the City's water resources and allow them to recharge and refill. Through the Alert, the City will request that its water users repair leaking fixtures and implement a 10% reduction in their water use through general, voluntary conservation measures. Understanding that most outdoor watering is done for the season, the Public Works Department will offer indoor water conservation measures through its public outreach programs.