



# United States Department of the Interior

U. S. GEOLOGICAL SURVEY  
10 Bearfoot Road  
Northborough, MA 01532

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## **DRAFT Plan for Nashoba Brook Beaver Dam Removal**

### **Short-term plan**

#### **1. Permission**

- a. Obtain written permission from the Acton Conservation Commission to trap beaver and remove a beaver dam on the Nashoba Brook Conservation property in the reach downstream of the USGS gaging station (01097300).
- b. Obtain a 10-day Emergency Beaver Permit from the Acton Board of Health.

#### **2. Trapping**

- a. Request permission to temporarily chain lock a canoe on the east side of the brook in the reach opposite the beaver house.
- b. Obtain permission from the Acton Conservation Commission to begin trapping of beaver during the period before the Acton BOH grants the emergency permit. This trapping would be done during the Massachusetts Open Trapping Season for Beaver (Nov. 1 - April 15, 2010). The trapping would involve use of live traps (box traps and Bailey Hancock traps). Trapping would be done using in the reach near the beaver house, near the beaver dam, and in the reach downstream of the dam. Once set, traps will be checked daily as per MDFW regulations. Trapping activities will be done as discretely as possible.
- c. Once the Emergency Beaver Permit from the Acton Board of Health is received additional beaver trapping will be done during the 10-day window of the permit by use of conibear traps. Once set, traps will be checked daily as per MDFW regulations. Trapping activities will be done as discretely as possible.

#### **3. Dam removal**

- a. Discuss conditions and obtain an Emergency Certification from the Acton Conservation Commission for removal of a beaver dam.
- b. Remove the beaver dam. This would most likely be done during the 2<sup>nd</sup> week of the 10-day permit.
- c. Obtain permission to cut up the 2 downed trees in the vicinity of the dam. Vegetable –based bar oil will be used in chain saws when working over water.

## **Long-term plan**

### **1. Gage location**

The USGS has not had many beaver-backwater issues with the Nashoba gage since moving the gage upstream to its current location in 1998. The previous location of the gage (about at the location of the current dam) had frequent issues from beaver dams in the large meadow downstream. The gage cannot be moved any further upstream because the channel splits near the millpond, just upstream of the current location.

### **2. Beaver deceiver**

At the request of the Acton Conservation Commission, the USGS is willing to try installation of a beaver deceiver pipe at the location of the current dam in an effort to discourage future dams from being built at that location. A beaver deceiver cannot be installed in the standard way - through a beaver dam - because the presence of the dam would still cause backwater at the gage for moderate and high flows. The dam needs to be removed. However the USGS is willing to install a beaver deceiver pipe at the riffle that is the current location of the dam to try to discourage future beaver dams from being built. The installation work would need to be done during low flows in the summer. Installation of a beaver deceiver would require some assistance from the Conservation Commission for maintenance to prevent the beaver deceiver pipe from clogging.

### **3. Educational material.**

The USGS will install a display on the side of the Nashoba Brook gagehouse and post educational material discussing the importance of the USGS streamflow gaging network and explaining how the Nashoba Brook streamflow gage operates.

### **4. Future beaver-dam removals**

- a. Hopefully the planned dam-removal and beaver trapping will minimize beaver dam-building in this area for the immediate future. If the dam is rebuilt in the next few weeks, there are established steps that USGS would follow for applying to the MDFW and BOH for additional permits. (See attached flow chart).
- b. Beaver are ubiquitous in Massachusetts, so there is always a possibility that these issues will recur. Hopefully we will have established good communications between USGS and Acton Town Boards as well as a precedent for dealing with these issues so that we can take care of them promptly in the future. Please contact the USGS if you notice building of beaver-dams in the area downstream of the Nashoba Brook gage.

# Massachusetts Beaver Law Flow Chart

