



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

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Commissioner

December 11, 2020

Vincent Roy
Sudbury Water District
P.O. Box 111
Sudbury, MA 01776

RE: City/Town: Sudbury
PWS Name: Sudbury Water District
PWS-ID No.: 3288000
Program: Source Protection
Action: Evaluation of Threat to Public Water
Supply Due to Beaver

Dear Mr. Roy:

Please find attached an evaluation of the threat to the Sudbury Water District's public water supply Wells Nos. 3A, 8A, and 10 due to the presence of beaver. If you have any questions regarding this letter, please contact James Persky at (978) 694-3227.

Sincerely,

Sincerely,

James H. Persky
Environmental Analyst
Drinking Water Program

Amy Lachance
Drinking Water Section Chief
Northeast Regional Office

cc: DWP/Boston Office (no attachment)
Kathy Romero, MassDEP, Drinking Water, Boston
Michael Abell, MassDEP, Wetlands, Wilmington
William Murphy, Sudbury Health Department, 275 Old Lancaster Road, Sudbury, MA 01776
Lori Capone, Sudbury Conservation Office, 275 Old Lancaster Road, Sudbury, MA 01776
Patricia Huckery, MassWildlife, Northeast District, 85 Fitchburg Road, Ayer, MA 01432
Jan Sullivan, DPH Environmental Toxicology Program, 250 Washington St., 7th Floor, Boston, MA 02108

File Name: Y:\DWP Archive\NERO\Sudbury-3288000-Source Protection-2020-12-11

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.
TTY# MassRelay Service 1-800-439-2370
MassDEP Website: www.mass.gov/dep

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The Massachusetts Department of Environmental Protection (MassDEP), Northeast Regional Office, is in receipt of your December 1, 2020 request for a “Determination of Threat to Public Water Supplies Due to Beaver and Muskrat”. In your request, you state that beaver activity is causing a threat to one the Sudbury Water District’s public water supply wells, particularly Well No. 3A.



Hop Brook Wells with 400-foot Zone I protective radius

The District has three wells along Hop Brook: Wells Nos. 3A, 8A, and 10. A beaver dam has been built up downstream from the wells at a spot where there is a natural bedrock lip in the streambed. Your request states that the dam has caused the water level to increase about 3 feet. The usually narrow brook has overtopped its channel and widened. Although Well No. 3A is the well that is farthest upstream, about 2,800 feet from the dam, it is the closest well to Hop Brook and therefore the most affected. The District is concerned that the spreading of the brook may lead to water quality problems that require expensive treatment solutions, such as *Giardia lamblia*.

The District seeks to trap the beavers, and has filed a Notice of Intent with the Sudbury Conservation Commission to lower the current water level at the dam by one foot. The District seeks to work with the Commission in the spring to incrementally remove the remainder of the dam in a manner that will be protective of wildlife, and to restore the brook to its original level.

An inspection was conducted at this location on December 10, 2020 by James Persky of the MassDEP Drinking Water Program with representatives of the Sudbury Water District in order to determine if beaver activity was posing a “threat to a public water supply” in accordance with the provisions of M.G.L. Chapter 139, section 80A. The water level beside Well No. 3A was stated to be “at least 18 inches higher than normal.”

A mound was observed in the brook north of Well No. 10 that appeared to be a small beaver lodge. A cache of long sticks was present a few feet upstream from the mound. A trapper contracted by the District had identified five muskrat dens, and some of these were observed near the dam during the inspection. The area just upstream from the dam, which District staff said is usually a small pool, is now more of a pond. The dam includes some storm debris, including a fallen tree. Recently chewed saplings were observed near the southwestern end of the dam.



Apparent beaver lodge



Dam along Hop Brook



Recently chewed saplings

In accordance with its authority under 321 CMR 2.08(9), MassDEP herein determines that the beaver activity at the Hop Brook Wells poses a threat to your public water supply and the public health, and MassDEP concurs with your application to eliminate the threat. MassDEP supports your proposed method for the elimination of this threat to the Sudbury public water supply. Removal of beaver must be done in accordance with the Massachusetts Department of Fish and Game, Division of Fisheries and Wildlife, regulations and policies, in addition to pursuing the appropriate measures with the local Board of Health, and with the Conservation Commission. The Sudbury Water District must have the permission of the land owners to conduct beaver mitigation activities on their properties. Any proposals for the removal or breaching of dams, or other actions that will lower water levels must receive the approval of the local Conservation Commission.

The District must notify this office in writing by **January 25, 2021** as to the actions taken in response to this threat and whether the threat was successfully eliminated. This notification may be done via electronic mail.