



**Subject: Notice Regarding Public Safety Hazards at "Low Head" Dams
That are Not Subject to State Regulation**

Dear Dam Owner:

You are receiving this notice as you are the last known owner of the subject dam. If you have conveyed the property containing this dam, please contact our office at dam.safety@mass.gov or 617-620-8583 to provide contact information for the current owner. Please be sure to include the National ID No. in your communication.

The Department of Conservation and Recreation (DCR) Office of Dam Safety (ODS) is contacting you to share information regarding hazardous flow conditions that have the potential to develop at "low head" dams, also known as "roll" dams. Although your dam is not currently regulated by ODS, the office believes it is important to provide you with information on low head dams.

According to the American Society of Civil Engineers (ASCE), "A **low head dam** is a manufactured structure, built in a river or stream channel, extending fully across the banks. A low-head dam is designed and built such that water flows continuously over the crest from bank to bank. If water levels rise downstream, a submerged hydraulic jump can form that produces an upstream directed current that traps any recreationist who might go over the dam."

Information on the hazard posed by the submerged hydraulic jump flow condition, also known as a "hydraulic roller," has been compiled by the Association of Dam Safety Officials (ASDSO) and is available on the following web page, <https://www.damsafety.org/public-safety-hazards#Hydraulic%20Roller>.

With support from the Federal Emergency Management Agency (FEMA), the Public Broadcasting Service (PBS) has produced a video, "Over, Under, Gone: The Killer in our Rivers," which demonstrates the hazardous flow conditions that can exist at low head dams. The video is available at the following web page, <https://www.pbs.org/video/over-under-gone-killer-our-rivers/>.

ODS recommends that you take the following steps:

1. Review information available from ASDSO and other sources pertaining to the potential hazards posed by low head dams;
2. Consult an engineer with experience in dam safety inspections and engineering to evaluate your dam to assess the possibility of hydraulic roller conditions developing at the dam; and
3. Evaluate the need for additional safety measures at the dam such as signage, booms, and buoys on the upstream approach to the dam and downstream from the dam as may be necessary to inform and limit exposure of the public to potential water-based safety hazards.

You are reminded that it is the obligation of the dam owner to contact and notify all applicable local, state, and federal permitting agencies prior to conducting any work at a dam including manipulation of water levels.



Thank you for your attention to this important informative notice.

Sincerely,

A handwritten signature in black ink, reading "William C. Salomaa". The signature is written in a cursive style with a large, stylized initial "W".

William C. Salomaa, Director
Office of Dam Safety