



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

# Department of Environmental Protection

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April 27, 2022

Daniel McKiernan, Director  
Massachusetts Division of Marine Fisheries  
251 Causeway Street  
Suite 400  
Boston, MA 02114

Dear Director McKiernan,

I am pleased to announce that MassDEP has recently adopted (and attached) a new policy to help the Massachusetts Division of Marine Fisheries (DMF) improve fish runs and protect marine fisheries. The **Wetlands Program Policy: Diadromous Fisheries Stream Management** responds to concerns raised by DMF regarding the need for performance standards to prevent impediments to fish migration, maintain stream flows within fish runs, and preserve spawning or nursery habitats.

The policy incorporates the 2016 DMF Stream Maintenance Protocols and provides further guidance for conservation commissions when reviewing stream maintenance projects to improve fish runs. The policy provides standards of review commensurate with the level of activity proposed in stream channels. The policy encourages minor stream maintenance efforts to protect marine fisheries, including elimination of obstructions to improve surface flows, reduction of debris jams, and promotion the natural scour function of streams to reduce invasive plant growth.

Special thanks to Brad Chase of your staff for his assistance in the development of this policy. I anticipate that this policy will provide the necessary guidance for conservation commissions to help expedite DMF's effort to improve fish runs in the 46 coastal communities, and approximately 150 diadromous fish runs, in the Commonwealth.

Sincerely,

Lisa Rhodes  
Wetlands Program Chief

## **Wetlands Program Policy: Diadromous Fisheries Stream Management**

**Effective Date:** April 25, 2022

**Wetlands Program Policy 22-01** (BWR/WP 22-1)

**Program Applicability:** All Boston and Regional BWR Programs, Municipal Conservation Commissions, and Division of Marine Fisheries Diadromous Fisheries Program.

**Supersedes Policy:** None

**Approved by:** Stephanie Moura, Director - Wetlands and Waterways Division

**Purpose:** This policy sets forth the Department's standards for stream maintenance associated with Massachusetts Division of Marine Fisheries (DMF) sponsored diadromous fisheries.

### **Statutory and Regulatory Background**

**MGL c. 131, s. 40:** Wetlands Protection Act ("Act") and 310 CMR 10.00.

**M.G.L Chapter 130 §19** Marine Fish and Fisheries

### **Diadromous Fisheries Management**

MassDEP supports the maintenance of anadromous/catadromous (diadromous) fish runs which are significant to the protection of marine fisheries, an interest protected under the Wetlands Protection Act (M.G.L Chapter 131 §40). The DMF is authorized pursuant to M.G.L Chapter 130 §19 to maintain passageways for diadromous fish in the Commonwealth of Massachusetts. DMF routinely provides related guidance to property owners and municipalities on the proper methods for maintenance of stream channels to allow safe and efficient fish passage.

### **Standards of Review**

Banks of or Lands that underlie a diadromous fish run are significant to the protection of marine fisheries (310 CMR 10.35). Any project on such banks or land shall not have an adverse effect on the fish run by:

- 1) impeding or obstructing the migration of fish,
- 2) changing the volume or rate of flow of water within the fish run, or
- 3) impairing the capacity of such banks or land in providing spawning or nursery habitats necessary to sustain the various life stages of the fish.

Historically, stream channel maintenance was typically conducted by municipal herring wardens and had been limited to hand cutting vegetation and debris removal that offered enough relief from channel obstructions to allow fish passage. More recently, incentives and municipal funding for herring wardens have diminished, contributing to a loss of continuity and familiarity with stream maintenance practices. This loss of consistent stream maintenance has led to the obstruction of passageways in some rivers caused by native and invasive vegetation overgrowth, sedimentation, and jams caused by debris and tree falls.

DMF has developed standards for stream channel maintenance to provide safe and efficient passage for diadromous fish. In general, these standards recommend Fall (October to mid-December) and Winter (February to mid-March) inspections of stream channels. Streams that are prone to debris accumulation should be inspected on a more frequent basis. Significant obstructions or impediments to the fish run can be removed during the spring diadromous migratory period following consultation with DMF.

MassDEP has determined that certain stream maintenance activities are beneficial to the protection of marine fisheries. This Policy sets forth the different levels of review, deemed necessary by MassDEP, for the stream maintenance activities, depending on the scale of the project:

1. Two types of stream channel maintenance projects should be considered to have negligible wetland impacts.
  - A. First are projects that include work done by hand, or by means of hand tools (e.g., saws/clippers). Such projects include the removal of debris, tree fall jams, or other vegetative obstructions to fish migration to improve stream flow and to enhance spawning or nursery habitats. Any dead wood that is part of a debris jam should be placed where the water meets the bank to provide bank structure and habitat. Stream channel maintenance measures are limited to Banks of or Land under streams that underly an Anadromous/Catadromous Fish Run.
  - B. Second are projects that involve maintenance of existing fishway structures. This maintenance would include fixing boards in weirs, patching and pointing repairs of concrete fish channels, or other minor repairs to fish ladders. These activities would likely result in no impacts to the wetland resource areas.

Provided the projects outlined in paragraphs A & B comply with the Stream Maintenance Criteria listed in this Policy, the activities should be considered as having negligible impacts and may proceed without additional review under the WPA.

2. Stream channel maintenance work to improve fish runs that involves replacement of existing small wood or aluminum fish ladders, repair of concrete fish ladders, or other activities designed to improve stream flow and fish passage, and do not require substrate excavation, should be reviewed under a Request for Determination of Applicability. In general, MassDEP supports these maintenance projects because they contribute to the protection of fisheries without foreseeable alterations to wetland resources. The MassDEP presumes these activities will further the goals of this

policy provided the conservation commission agrees that the activity constitutes work to an existing structure identified in DMF's published survey of diadromous fish passages and the project otherwise complies with the Stream Maintenance Criteria listed in this Policy.

3. MassDEP recommends that a Restoration Notice of Intent be filed for stream channel projects involving new construction, reconstruction, and/or replacement of fish ladders (other than existing wood ladders), in-stream dredging, or other activities involving the use of heavy equipment.

### **Stream Maintenance Criteria:**

MassDEP supports diadromous fisheries stream channel maintenance provided the following criteria are met:

- The work is undertaken by DMF, DMF is a cooperating agency for the work, or the work is directly supervised by DMF.
- Work is undertaken pursuant to a DMF-approved Stream Management Plan.
- Written notice to the conservation commission is provided 30 days prior to the work and DMF addresses reasonable requests related to the project.
- The work is subject to time-of-year restrictions of April 1 to May 31 for river herring runs and March 1 to May 31 for locations with brook trout or rainbow smelt present unless otherwise allowed in a specific DMF-approved fisheries management plan for a particular watercourse or to remove a significant obstruction to fish passage following DMF approval.
- The project is designed to maintain stream flow sufficient to sustain diadromous fish passage and promote stream heterogeneity (e.g., stream riffles) and channel morphology.
- Live vegetation removal is limited to mid-channel rooted vegetation or snag debris that threatens to reduce water flow or impede fish passage, or that has the potential to reduce water flow or impede fish passage with further growth and debris accumulation. Root masses in the stream channel can be considered for removal if their continued growth could threaten fish passage or encourage channel braiding.
- In-channel maintenance is limited to the removal of trash, debris and tree falls that can directly impede and block fish passage.
- Any realignment of displaced stones at existing weirs provides backwater shallow channels to assist fish passage.
- All stream maintenance is conducted by hand (i.e., saws and clippers).
- Cutting of riparian vegetation and stream canopy is minimized to preserve overhanging branches which shade the stream channel, moderate stream water temperatures, and inhibit algal growth.

- Stream bank growth is preserved, or minimally disturbed, except in rare cases such as the uprooted trunks of large caliper trees that can destabilize and erode banks leading to diversions from main stem flow.
- Mowing of stream banks is prohibited.
- Removal of dead vegetation debris is limited to that which impedes fish, impinges fish, or encourages additional accumulation of stream obstructions. Logs or stumps within stream banks may enhance river habitat and should be altered only as necessary to provide fish passage. Strategic bank and near-bank placement of woody debris instead of removal should be considered in all stream maintenance plans.



Stephanie Moura  
Director  
Wetlands and Waterways Division