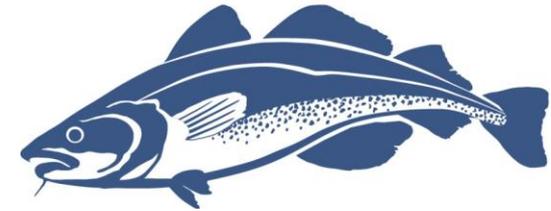


# Stream Channel Maintenance for Diadromous Fish Runs



Growing concerns on both impacts to migratory habitat in era of closed harvest *and* conflicts with other aquatic life

**History:** Common practice led by Towns throughout 20<sup>th</sup> century and likely well before. DMF becomes active in 1930s as state laws are enacted to address impacts of herring run privatization

**Stream Maintenance Plans:** First prepared for the Essex River in 2007 in response to beaver issues. Nine plans drafted for Towns with 7 now approved by Conservation Commissions

# Stream Channel Maintenance for Diadromous Fish Runs

***DMF Protocols:*** prepared in 2016 following concerns expressed by Trout Unlimited and DFW over practices that could be adverse to brook trout in coastal rivers

***Approach:*** provide guidance and technical assistance to help Towns maintain their own herring runs. Include specific language to avoid excessive plant and wood removal, to protect brook trout habitat and rainbow smelt spawning habitat

# Stream Channel Maintenance Protocols for Diadromous Fish Passage - 2016

**Objective.** Protocols were prepared to clarify DMF's goals for stream channel maintenance as a necessary natural resource management practice and assist municipalities in fulfilling the mutual interest of providing safe and efficient passage for sea-run fish.

***Simple Message:*** (1) Don't overcut and remove little to none of the riparian bank and canopy; (2) In many systems, doing no maintenance will lead to impassable channels

# Maintenance Activities

1. Debris Jams
2. Channel altering vegetation
3. Pond outlets
4. In-stream weirs
5. Sediment accumulation
6. Beaver dams
7. Barrier beach breaching

# Town River, Bridgewater



# Pilgrim Lake, Orleans



# Water Willow



Furnace Brook, Taunton



Jones River, Kingston



Herring Brook, Pembroke



Bass River, Yarmouth

# Pond Outlets

**Gull Pond, Wellfleet**



**Seymour Pond, Harwich**



# In-stream Weir Adjustments

## Natural Weirs



Island Creek, Duxbury

## Not-so-Natural Weirs



Shute Brook, Saugus

# Sediment Accumulation



Nemasket River, Middleborough



Mashpee River, Mashpee

# Other Obstructions

## Channel Diversions



Mattapoissett River, Mattapoissett

## Phragmites



Centerville River, Barnstable

# Tough Management Issues

## Beaver Dams



Parker River, Newbury

## Barrier Beach Management



James Pond, West Tisbury

# Case-by-case decisions



# Mashpee River



# Leave it alone



Mattapoissett River, Mattapoissett



Westport River, Westport

# Recommended Actions

- Encourage Herring Wardens to develop their own plans
- DMF can provide assistance with river-specific plans
- Connect with DFW on trout habitat