# **Creating Best Management Practices - Breakout Session**

At the first annual River Herring Network Meeting on October 19, 2011 at the Bourne Veterans Memorial Community Center in Buzzards Bay, MA, 40 herring wardens, natural resource officers, herring count coordinators and volunteers, and state and town natural resource agents, participated in a breakout session. Participants were asked to think about what information they would want to pass on to the next herring warden, or think about what information they wish the previous warden had told them. The goal was to generate ideas that could eventually be organized into an outline for a "Best Management Practices" document. Six general topics were written on flip charts, and participants spent 6-8 minutes at each chart brainstorming within a group. The notes below are the results of this breakout session.

# Results

## **Topic: Issues with Harvest (12 ideas)**

- Enforcement
- Guidelines for volunteers re: poaching
- Monitoring
- Nothing to harvest!
- Minimum number of fish into spawning area before any harvest
- Record keeping/sharing information
  - a. Permits Issued
  - b. Fish caught and sold
  - c. Price policy
- Commercial vs. recreational
- Poaching
- Education and outreach expectations of harvest
- More sustainable regionally before opening to harvest
- By catch data from sea herring fishery (and possible sub-regional effects)
- Economic analysis of various users

#### **Topic: Maintenance and Monitoring (19 ideas)**

- Actual list of annual maintenance with (2)
- Money
- Who is in charge of doing maintenance (2)
- Cut enough to allow water flow, but leave trees for cover and habitat (2)
- Implement counting program
  - a. Coordination between counters and wardens
  - b. Beaver management and otter management
- Relationship between wardens and run abutters
- Stormwater maintenance
- Invasive vegetation management
- Coordination between local managers and state fisheries managers

- Stone and brush dams built by poachers and kids (daily checks?)
- Culvert obstruction checks
- Water quality monitoring for habitat suitability
- Monitoring fish passage efficiency of fish ladder
- Monitor climate change effects on temperature, water level, and other seasonal features
- Adaptive management (dam/ladder board removal or reinstallation)
- Information flow between state, federal, NGO, local RE: changes or planned changes to run
- Getting enough volunteers for statistically sound count density
- Temperature monitoring at all runs

#### **Topic: Permitting (10 ideas)**

- Restoration/construction <<>> WPA, DMF, Ch. 91, ACOE, MEPA, Conservation Commissions
- What needs permitting and what doesn't? Permitting threshold? (2)
- What are HWs allowed to do with and without permits? (ex. Adjust water levels?)
- Effect of exempted activities on runs
- Streamline the process, i.e. try not to discourage restoration efforts (3)
- Basic guidelines/guidebook for which permits are needed and when (2)
- Contradictions with the Wetlands Protection Act
- It is too expensive! (2)
- More communication regionally
- Expand duration of DMF permit for fish passage projects

#### **Topic: Restrictions to Passage (16 ideas)**

- Awareness of culverts (and predators around) (3)
- Timing and validity of dam board removal (2)
- Poor communication with those who have water rights (i.e. cranberry growers) (2)
- Consider restrictions to eel passage (3)
- Vegetation control (3)
- Forgetting about downstream passage in late summer/fall (2)
- ID common "choke points" (2)
- Run is restriction! (2)
- Look for obstructions just prior to run (Is the concept of wood removal accurate?)
- Scheduling of construction projects avoid interference
- Annual general cleaning (2)
- Beaver management
- Stormwater/sediment accumulations
- Annual report from wardens, including subjective thoughts
- Air behind flashboards
- Water temperature; discharges that could influence migratory patterns

#### **Topic: Historical Information (13 ideas)**

• Number and length of runs? (2)

- Activity history: which runs were more active, and which have become less active over time (2)
- When did significant physical changes occur in these runs? (2)
  - a. Construction fish ladders
  - b. Cleaning/maintenance
  - c. Major obstructions
- What construction has occurred that limited productivity of run? e.g. effects of changes in salinity (2)
- Cause and effect of past management actions 2)
- Keeping records and photographs of all activities for future follow-up/management (2)
- Historical introduction of fish
- Units of measurement: Define. E.g. what is a barrel?
- When did channelization or water withdrawals occur?
- Dam ownership and abandonment
- Writing and sharing anecdotal data
- Personal interactions with river/pond locals
- Documenting observations

## **Topic: Water Withdrawals (20 ideas)**

- Cranberry harvest, irrigation, frost; Other agriculture, including perimeter ditching (3)
- Pond Levels (3)
- Are ladders positively/negatively affecting water flow and levels?
- Dam diversions
- How much water is drawn out yearly?
- Landscape watering
- Cooling water intakes
- Measurements of pond levels
- Salinity count in ponds
- Data from municipal water supply utilities (2)
- Flashboards in dams
- Minimum instream flows (especially summer)
- Changes in base flow (relative to development and use)
- Screening fish from withdrawal (2)
- Timing of release of winter flood water
- Timing conflicts with water use (spring frost protection; fall harvest floods)
- Water use permits
- Inter-basin transfers
- Operational plan for municipal and ecological water use (seasonal releases, fish ladder depths)
- Encourage summer conservation