



Atlantic States Marine Fisheries Commission

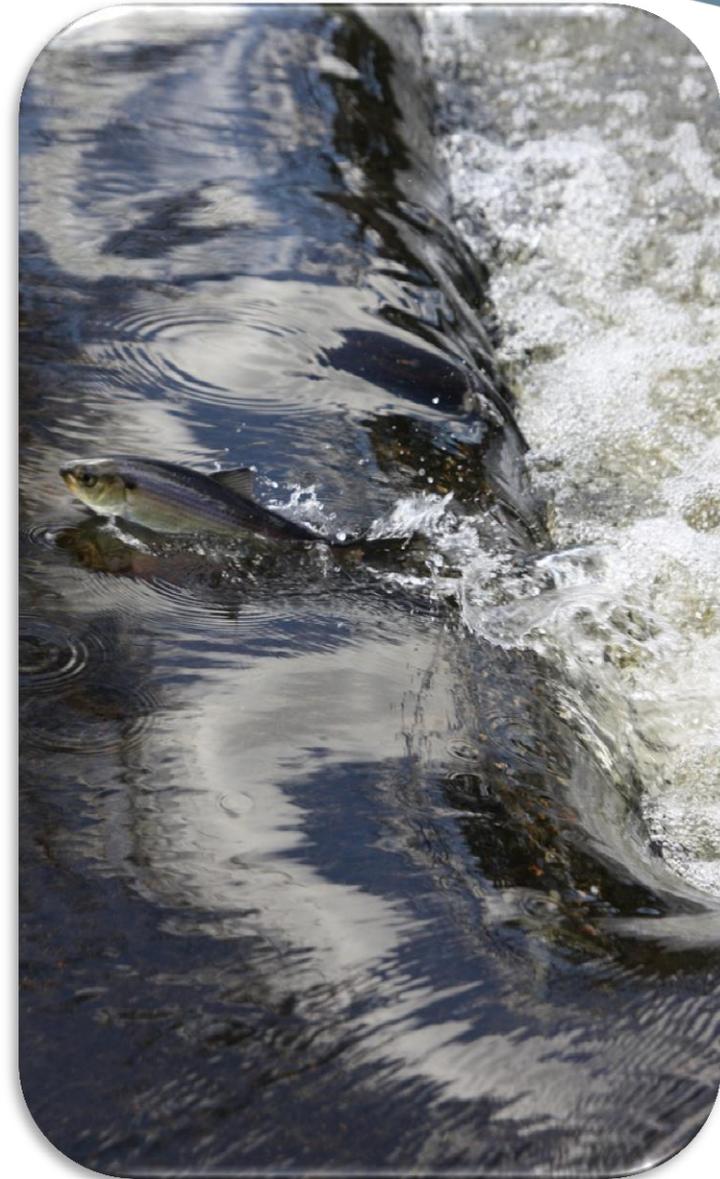
Jeff Kipp

ASMFC Fish Passage Work Group Coordinator

Presentation Overview



- **ASMFC Overview**
- **ASMFC Programs/Partnerships**
- **ASMFC Role in Licensing**
- **Supporting Documentation**



ASMFC Overview



- **Formed in 1942 – Interstate Compact**
- **15 Atlantic coast states, ME – FL**
- **0 – 3 miles from shore**
- **Deliberative forum for states**
- **Cooperative management of transboundary resources**
- **Standards est. by Atlantic Coastal Cooperative Management Act**



Atlantic Coastal Act (1993)



- **Provides current authority and funding**
 - **Authorizes \$10M to states and Commission**
- **Standards for fisheries management**
- **States implement regulations**
- **State compliance tied to conservation standards**
- **Work cooperatively with federal partners on shared resources**

Mission/Vision



Mission (1942 Compact)

To promote cooperative management of marine, shell and diadromous fisheries of the US Atlantic coast by the protection and enhancement of such fisheries, and by the avoidance of physical waste of the fisheries from any cause.

Vision (Strategic Plan)

*Sustainably Managing
Atlantic Coastal Fisheries*

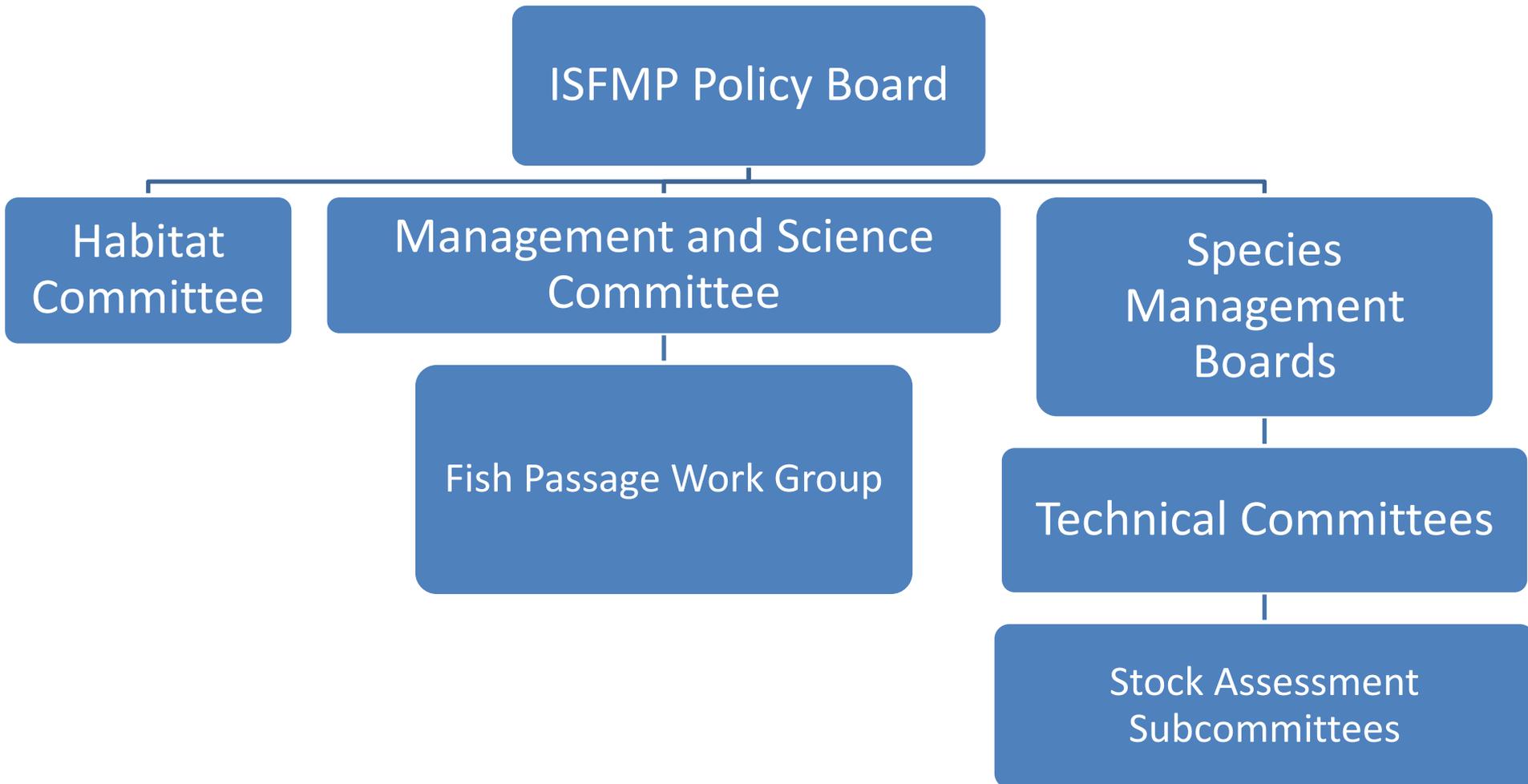


ASMFC Programs



- **Interstate Fisheries Management (ISFMP)**
 - Determine management strategies
- **Fisheries Science**
 - Technical support to ISFMP
 - Stock assessments
- **Habitat Conservation**
 - Improve conservation through partnerships, policy development and advocacy
- **Law Enforcement**
 - Recreational/commercial compliance

ISFMP Structure



Fisheries Management

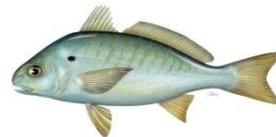
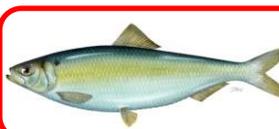
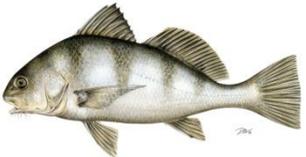
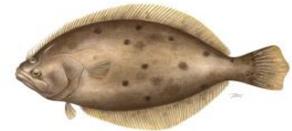
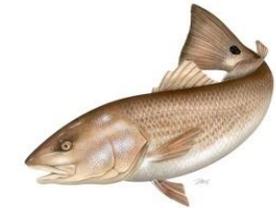
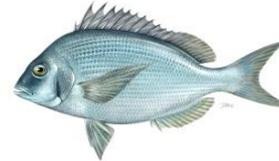
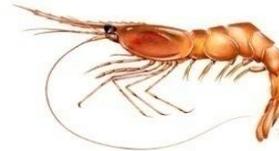


- **25 species/species groups**
- **Some managed solely by Commission**
 - **American eel, shad & river herring, Atlantic sturgeon, striped bass**
- **Others managed jointly/cooperatively with Regional Fishery Management Councils and NOAA Fisheries**
 - **Summer flounder, scup, black sea bass, Atlantic herring**

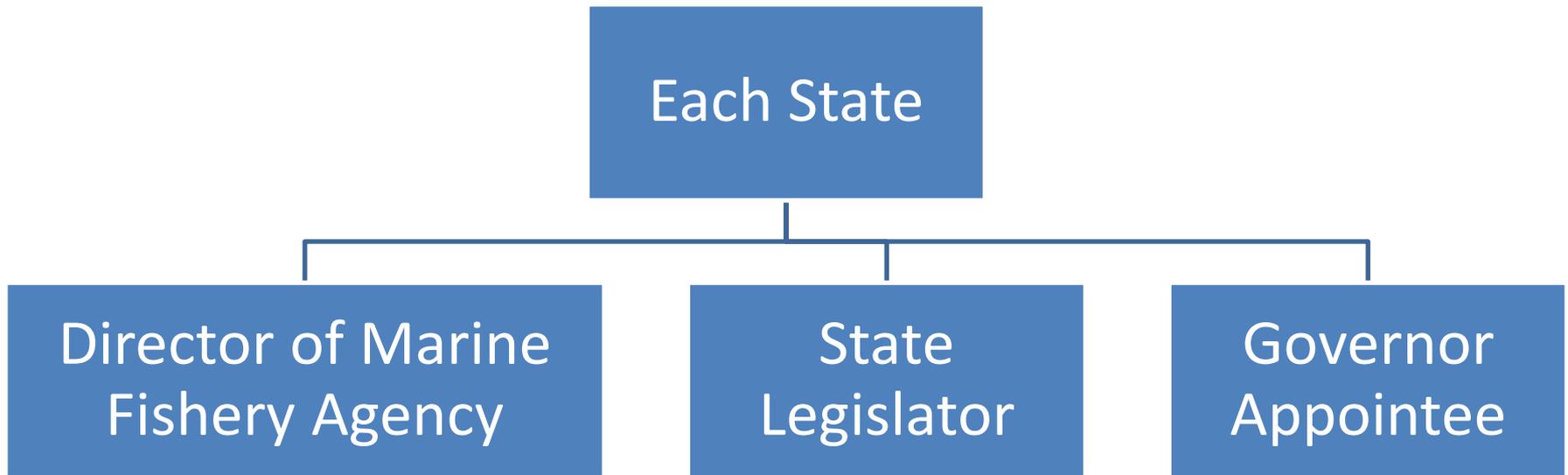
Fisheries Management



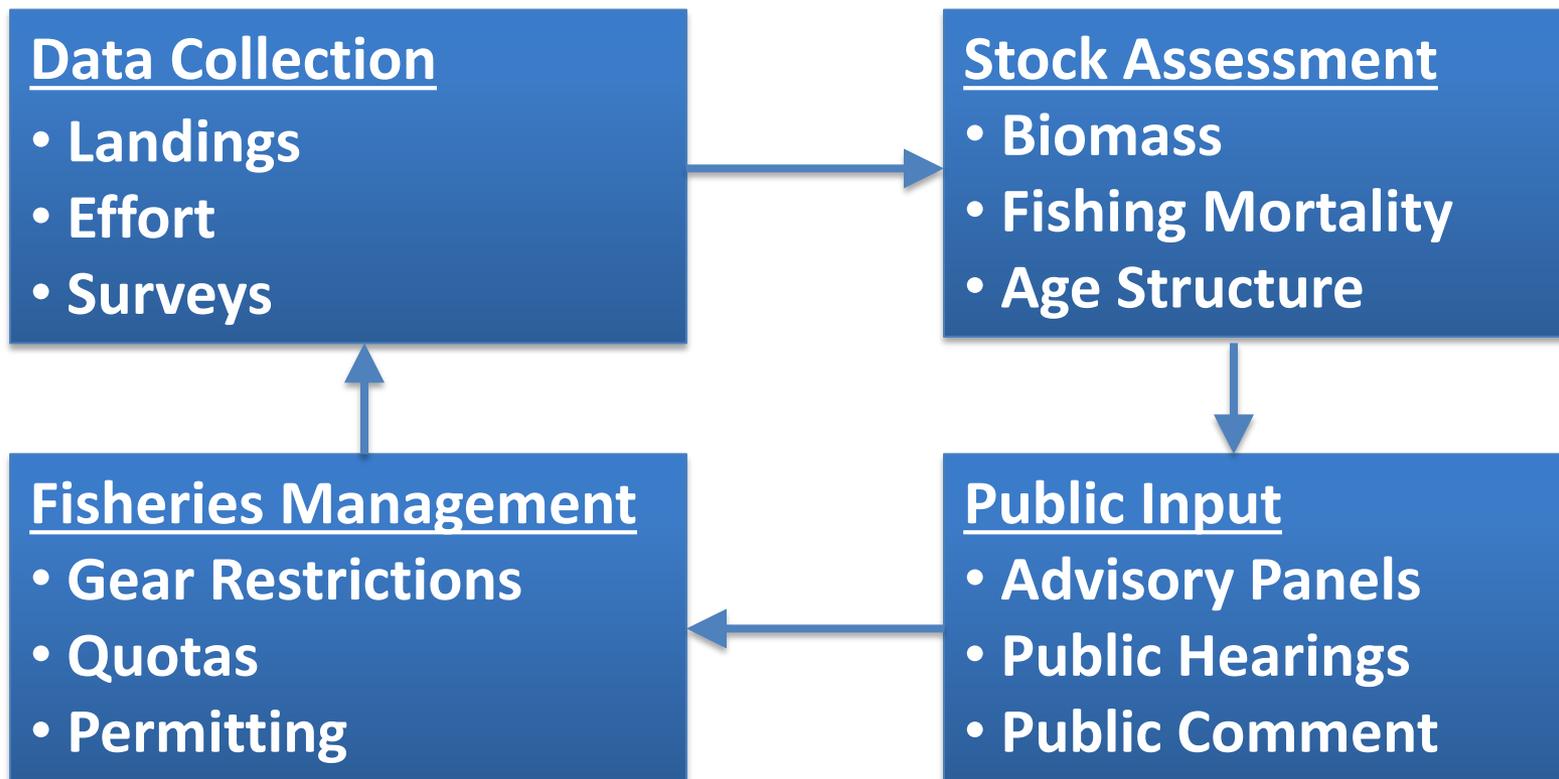
25 Species/Species Groups Under Management



1 State – 1 Vote Principle



ASMFC Fisheries Science & Management Process

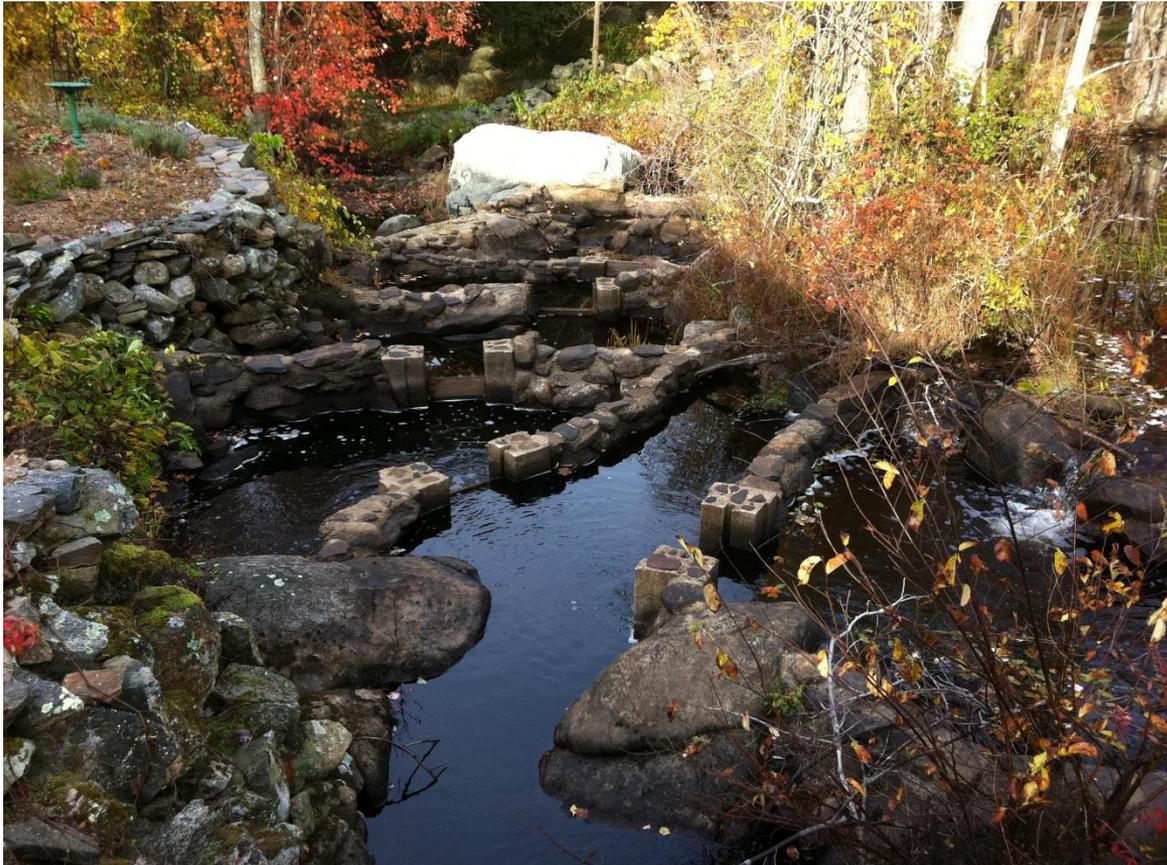


Habitat Conservation



Habitat Committee

Improve fisheries habitat conservation through partnerships, policy development, and education



Habitat Conservation



Fish Passage Work Group (FPWG)

- Established in 2009 to address concerns with barrier impacts on diadromous species
- State, federal, and NGO representation
- Annual meetings



Habitat Conservation



FPWG tasked by ISFMP Policy Board following initial workshop

- **Develop a policy on passage efficiency for diadromous fishes**
- **Prioritize fish passage projects**
- **Identify effective fish passage approaches**
- **Recommend targets for increasing fish passage in each state**
- **Initiate an East Coast Fish Passage Plan**
- **Develop guidance for navigating the FERC dam relicensing process**
- **Task diadromous species technical committees with evaluating positive and negative consequences of providing fish passage**



Atlantic Coastal Fish Habitat Partnership



- **Coastwide partnership of fish habitat resource managers and scientists from state, federal, and tribal entities, and NGOs**
- **Support projects that protect and maintain healthy aquatic systems and prevent further degradation**



ASMFC Role in FERC Licensing



- **No policy in place defining ASMFC participation in licensing process**
 - Case by case basis
- **ASMFC usually defers to state marine fisheries agencies to participate in the interest of ASMFC managed species**
- **ASMFC is a source of technical documentation that may qualify as comprehensive plans**
- **ASMFC may provide letters of support and technical support on request**

Technical Documentation



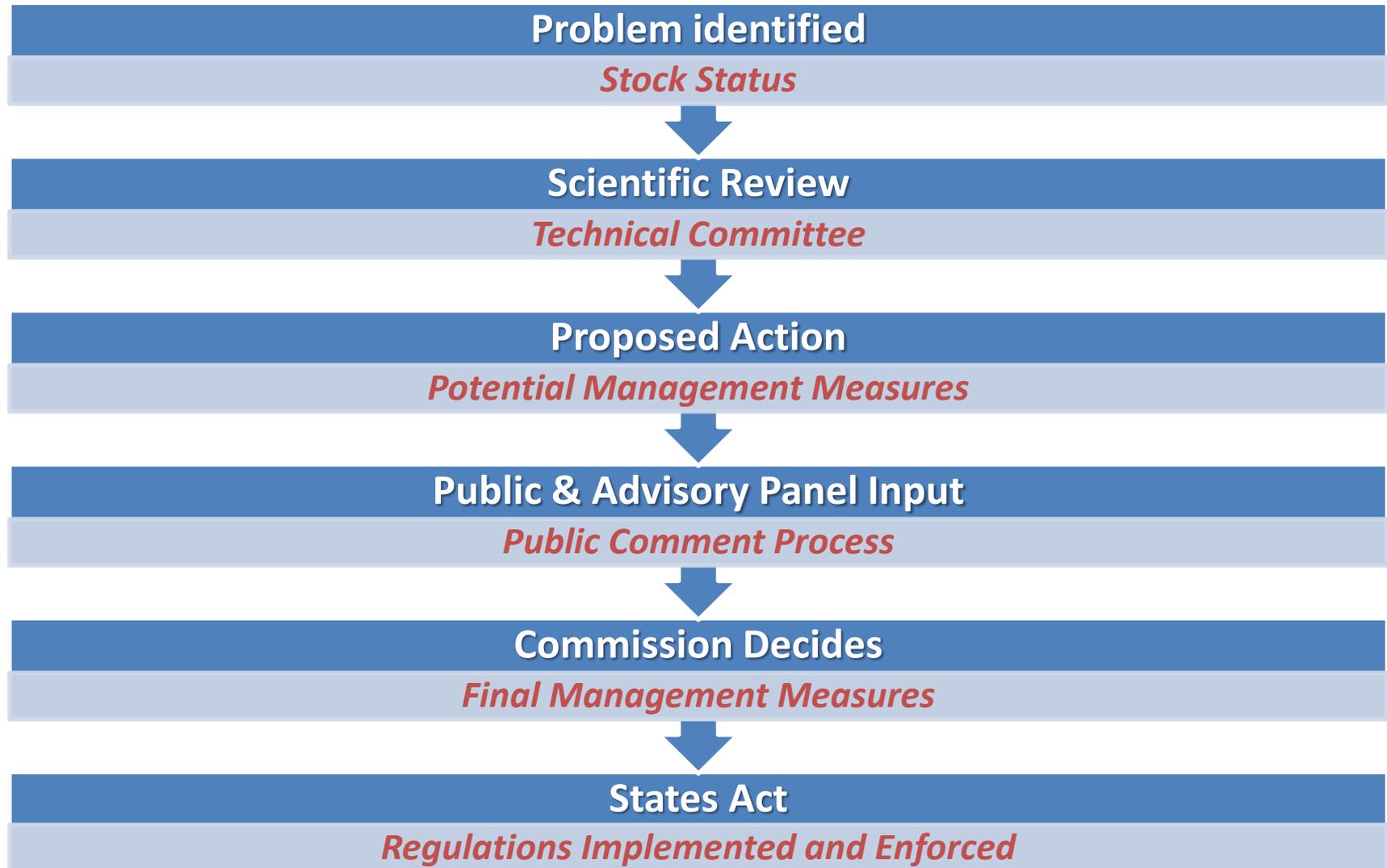
- **Fishery Management Plans (FMP)**
 - Amendments (change to existing FMP)
 - Addenda (addition to existing FMP)
 - Sustainable FMPs (special case for shad and river herring)
- **American Shad Habitat Plans**
- **Stock Assessments**
 - Benchmarks (consider new methods and data sources)
 - Updates (most recent data)
- **Habitat Management Series**
- **Habitat Fact Sheets**

FMP Components



- **Background Information**
 - Social, economic, and ecological benefits of implementation
 - Abundance and present condition
 - Habitat considerations
- **Goals and Objectives**
 - Stock rebuilding targets and schedules
- **Monitoring Program Specifications/Elements**
 - Habitat program
- **Management Program Implementation**
 - Habitat conservation and restoration
- **Compliance**
 - Monitoring requirements
- **Management and Research Needs**
 - Research and data needs

FMP Development



FMP/Amendment: 12 – 18 months

Addendum: 3 – 6 months

Current FMPs



- **Annual FMP reviews**
- **Striped bass**
 - Amendment 6 to Striped Bass FMP (2003) and addenda I-IV (2007-2014)
- **Atlantic sturgeon**
 - Amendment 1 to Atlantic Sturgeon FMP (1998) and addenda I-IV (2005-2012)
 - Addendum IV (2012) – Habitat Considerations
- **American shad**
 - Amendment 3 to Shad and River Herring FMP (2010)
 - State Sustainable Fishery Management Plans
- **River herring**
 - Amendment 2 to Shad and River Herring FMP (2009)
 - State Sustainable Fishery Management Plans
- **American eel**
 - Original American Eel FMP (1999) and addenda I-IV (2006-2014)
 - Addendum II (2008) – Recommendations for improving upstream and downstream passage
 - Addendum IV (2014) – Potential to tie increased passage to fishery participation

American Shad Habitat Plans



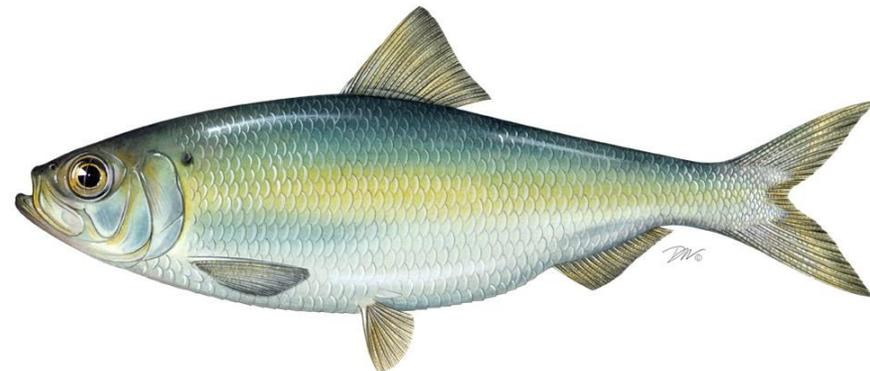
- **Comprehensive assessment of most pressing habitat threats to shad restoration by state/river system**
 - Fish passage
 - Climate change
 - Water quality (DO)
- **Address threats outside state marine fish agency**
 - State Inland Fish & Wildlife Agencies
 - FERC – dam relicensing
 - Corps of Engineers
- **Anticipate 5 year updates**



River Herring Efforts



- **Comprehensive Conservation Plan**
 - **ASMFC/NOAA Fisheries partnering on plan development with 80+ stakeholders**
 - **Plan to address needs throughout species entire range**
- **Habitat restoration priorities by sub-watershed**
 - **Joint effort by Atlantic Coastal Fish Habitat Partnership and The Nature Conservancy**



Stock Assessment Components



- **Life History**
- **Habitat Description**
- **Fishery-Dependent Data Sources**
- **Fishery-Independent Data Sources**
- **Assessment Methods and Results**
- **Stock Status**

Current Stock Assessments

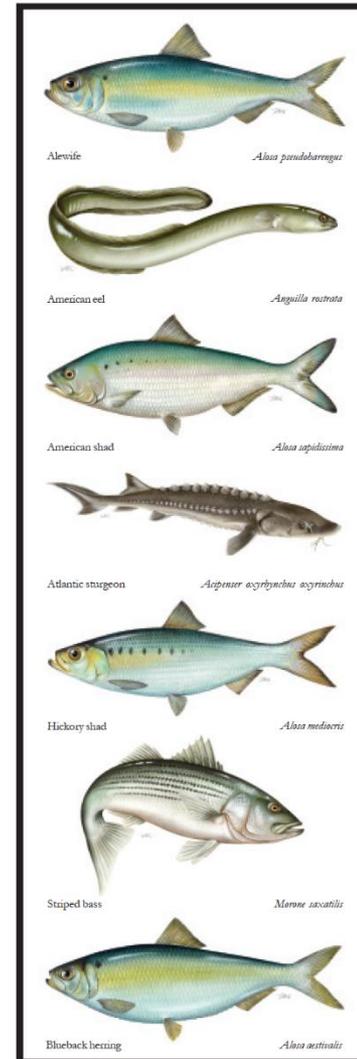


- **Striped Bass**
 - Last assessed in 2013
 - Frequent assessment updates
- **Atlantic Sturgeon**
 - Last assessed in 1998
 - New assessment anticipated in 2017
- **American Shad**
 - Last assessed in 2007
- **River Herring**
 - First coastwide assessment in 2012
- **American Eel**
 - First coastwide assessment in 2012

Habitat Management Series



Annual publications
developed by ASMFC
Habitat Committee
focusing on specific
habitat issues



Atlantic States Marine
Fisheries Commission

*Atlantic Coast Diadromous
Fish Habitat:
A Review of Utilization,
Threats, Recommendations
for Conservation, and
Research Needs*



Habitat Management Series #9
January 2009

*Working towards healthy, self-sustaining populations of all
Atlantic coast fish species or successful restoration well in
progress by the year 2015*

Habitat Fact Sheets



Concise, two-page descriptions of species habitat and Habitat Areas of Particular Concern (HAPC), threats to habitat, recommendations to improve habitat, and research needs

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| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">A M E R I C A N E E L</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Anguilla rostrata</p> | <p>Life History and Habitat Needs</p> <p>Geographic Range: American eel are found in fresh, brackish, and coastal waters from the southern tip of Greenland to northeastern South America.</p> <p>Movement/Migration: From the Sargasso Sea, planktonic larvae are carried to the eastern seaboard by surface currents. When approaching the edge of the continental shelf, the larvae metamorphose into miniature transparent eels, called glass eels. Glass eels enter estuaries by drifting on flood tides and holding position near the bottom of ebb tides, and by actively swimming along shore in estuaries above tidal influence. Movements are primarily nocturnal. While in estuaries glass eels eventually change into pigmented elvers, which are active mostly at night. Triggered by a temperature decrease to about 12-14°C, elvers migrate upstream in waves and become more active during the day. The rate of movement upstream is determined by the water discharge and possibly nightly tidal height. The next life stage is the yellow eel. Some yellow eels continue to migrate upstream, while others remain in brackish portions of rivers until they mature into adult or silver eels. Silver eels migrate downriver to marine waters. Downstream migration is characterized by spurts with long periods of no movement and peaks of intensive movement.</p> <p>Spawning: Spawning occurs in the Sargasso Sea, which is a large portion of the western Atlantic Ocean east of the Bahamas and south of Bermuda. Spawning occurs during the winter and the spring, from February to April, and possibly beyond. Spawning is thought to occur in the mid-upper water column and occurs on the side of the front in the Sargasso Sea that has warmer temperatures and more saline waters. Adults spawn once and die.</p> <p>Habitat Use: American eel habitats include the open ocean, large coastal tributaries, small freshwater streams, lakes, and ponds. American eel are also sometimes found in land locked lakes, particularly in the Northeastern U.S. Water temperature and salinity may be important to spawning adults. Substrate might be an important habitat parameter for elvers, as they may burrow during the day and in between movements upstream. Yellow eels can remain in estuaries, rivers or lakes for up to 20 years before they fully mature into silver eels. Silver eels are bottom/substrate oriented.</p> <p>Threats to Habitat</p> <ul style="list-style-type: none">• Blockage of stream access• Pollution• Nearshore habitat destruction• Oceanic changes <p>ASMFC Habitat Areas of Particular Concern</p> <p>As the eel's only spawning ground, the Sargasso Sea is essential to the survival of the species. The estuary and freshwater areas where eels grow and mature are highly sensitive to human impacts. Areas upstream of artificial impediments are very important to the life cycle of American eel.</p> | <p>Recommendations to Improve Habitat Quality</p> <ul style="list-style-type: none">• Identify, categorize, and prioritize important and historic American eel habitat and reestablish eel into historic habitats by mitigating the effects of various hazards to the upstream and downstream migration of American eel (e.g., by requiring fish (eel) passage facilities)• Restore habitat in areas where residential and commercial development is adjacent to American eel habitat. Ensure American eel habitat is identified and considered in river basin and wetland restoration plans.• Protect American eel habitat by obtaining land adjacent to critical migration corridors and staging areas and pursuing acquisition, deed restrictions, or conservation easements• Preserve Sargasso Sea habitat through appropriate partnerships including implementation of the South Atlantic Fishery Management Council's Fishery Management Plan for Pelagic Sargassum Habitat of the South Atlantic Region• Improve fish passage by improving access to upstream reaches of streams currently restricted by dams with no ladders and by investigating changes in turbine design• Monitor enhancement efforts and report on the amount of habitat opened through upstream passage projects and evaluate the passability of blockages for different size classes of eels• Establish windows of compatibility for activities known or suspected to adversely affect American eel life stages and their habitats (e.g. dredging, filling, aquatic construction, water diversions/withdrawal from important habitats and from rivers tributary to important habitats)• Limit the introduction of contaminants that are a threat to human or American eel health• Prohibit the use of any fishing gear or practice, which is documented by managers to have an unacceptable impact on American eel (e.g., habitat damage) within the affected important habitats <p>Habitat Research Needs</p> <ul style="list-style-type: none">• Identify migratory routes and guidance mechanisms of silver eels migrating to the ocean• Verify specific spawning locations in the Sargasso Sea• Research behaviors and movements of eel during their freshwater residency• Research the changes in ocean climate and environmental quality that might influence larval and adult eel migration, spawning, and survival• Document characteristics and distribution of eel habitat, and the value of that habitat with respect to growth and sex determination• Many research needs have been identified relating to upstream/downstream passage and impacts from contaminants <p>Additional Information</p> <p>American eel are currently managed under the Interstate Fishery Management Plan for American Eel, approved in 1999. Long-term FMP objectives include: encourage protection of eel spawning, nursery and growth habitats; and protect and enhance inland and coastal water quality to protect the health of the eel population and to reduce bioaccumulation of toxic substances. Additional information is contained in the ASMFC's Source Document for Diadromous Fish. Both documents can be found on the ASMFC website at www.asmfmc.org or by contacting the ASMFC Habitat Specialist at (202) 289-6400.</p> |

www.asmfmc.org



St. Croix Alewife Passage



Letter in support of
allowing alewife
unrestricted access to
their historic habitat
throughout the St. Croix
watershed

Atlantic States Marine Fisheries Commission

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John V. O'Shea
Executive Director

*Working towards healthy, self-sustaining populations for all Atlantic coast fish species, or successful restoration
well in progress, by the year 2015*

August 9, 2010

Philip T. Feir
Colonel, U. S. Army
U. S. Co-Chair
International St. Croix River Watershed Board
696 Virginia Road
Concord, Massachusetts 01742-2751

Bill Appleby
Director, MSC Operations-Atlantic
Canadian Co-Chair
International St. Croix River Watershed Board
45 Alderney Drive
Dartmouth, NS B2Y 2N6

Dear Colonel Feir and Director Appleby,

I am writing at the direction of the Atlantic States Marine Fisheries Commission's (ASMFC) Shad and River Herring Management Board which met last week and discussed the International Joint Commission's (IJC) proposed Adaptive Management Plan for St. Croix river alewife. ASMFC believes that the proposed plan should be modified to allow for unrestricted alewife access to their historic habitat throughout the St. Croix watershed. The IJC should allow free access to alewives in the St. Croix to gain greatest ecological and economic benefits for both the watershed and regional fisheries.

A rebuilt alewife population in the St. Croix will provide numerous benefits including directed commercial and recreational fishing opportunities. Alewife serve an important ecological role in both the freshwater and marine environments. Alewife are also an important forage base for rebuilding groundfish stocks in the Gulf of Maine. In addition, rebuilt river herring stocks can be used as a source of bait for the lobster industry in light of reduced quotas on Atlantic herring.

However, alewife populations have declined dramatically in recent years. In fact, between 1985 and 2007, commercial landings of river herring decreased by 93 percent from 13.6 million pounds to 883,500 pounds. In response to declining stocks within their own waters, four states – Massachusetts, Rhode Island, Connecticut, and North Carolina – have closed their river herring fisheries. In addition, ASMFC's Amendment 2 will close all state waters to alewife fishing by 1 January 2012 unless it can be proved that the fishery is sustainable.

Thank you for the opportunity to comment on this important issue.

Sincerely,

A handwritten signature in black ink that reads "John V. O'Shea".

John V. O'Shea

cc: Marine Resources Committee of the Maine State Legislature
Jaime Gieger, Ph.D, US Fish and Wildlife Service
Patricia Kurkul, National Marine Fisheries Service
ASMFC Shad and River Herring Management Board

CONNECTICUT, DELAWARE, FLORIDA, GEORGIA, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE,
NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, RHODE ISLAND, SOUTH CAROLINA, VIRGINIA

Resources



Atlantic States Marine Fisheries Commission

www.asmfc.org

- **All Documentation**
- **Contact Information**

Atlantic Coastal Fish Habitat Partnership

www.atlanticfishhabitat.org

Technical Expert Working Group for River Herring

<http://www.greateratlantic.fisheries.noaa.gov/protected/riverherring/tewg/index.html>



Questions?