Science, Service, Stewardship



Listing of the Atlantic Sturgeon Under the Endangered Species Act (and What Does it Mean For Fisheries?)

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NOAA FISHERIES SERVICE



Timeline and Steps of Listing Process

Pre-Petition - July 27, 2007 - Status Review Completed

<u>Step 1</u>: Receive Petition to List Species

 October 6, 2009 - Petitioned by the Natural Resources Defense Council to list Atlantic sturgeon under the ESA and designate critical habitat

Step 2: Conduct "90-Day Finding" Analysis

• January 6, 2010 - Positive 90-day finding published in *Federal Register* indicating petitioned action may be warranted



Timeline and Steps of Listing Process

Step 3: Status Review (completed)

Step 4: 12-Month Determination

 October 6, 2010 - Proposed rules published indicating listing may be warranted

Step 5: Final Listing Determination

• February 6, 2012 - Final rules published making official listing determination (77 FR 5880 and 77 FR 5914)

<u>Step 6</u>: Listing Effective - April 6, 2012



Five Factors Considered When Determining Listing

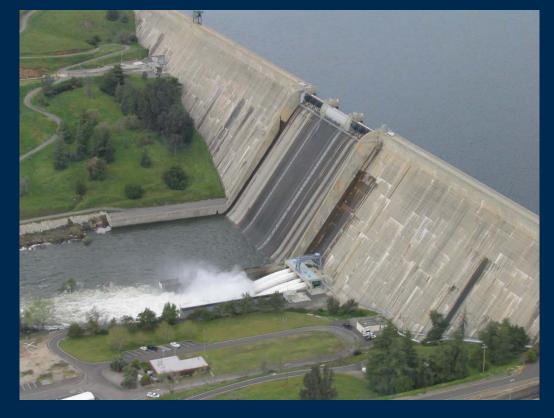
- Destruction, modification, or curtailment of habitat/range
- Overutilization from commercial, recreational, scientific or educational purposes
- Disease or predation
- Other natural or manmade factors
- Inadequacy of existing regulatory mechanisms



Destruction, Modification, or Curtailment of Habitat or Range

Primary stressors include:

- Poor water quality
- Dredging
- Dams/barriers prevent access to important spawning habitat
- Water availability (in the South) due to allocation for municipal, industrial, and agricultural uses, as well as drought and climate change



Conclusion: Stressors under this factor represent a substantial risk to the long-term survival of the species.

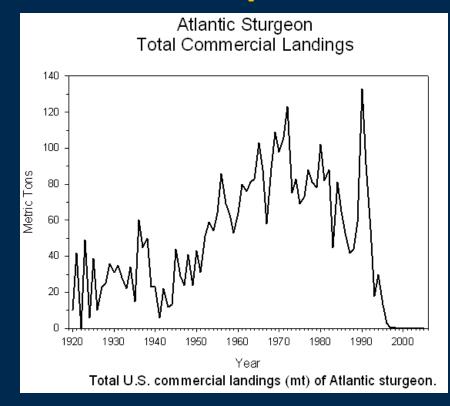


Overutilization for Commercial, Recreational, Scientific or Educational Purposes

Atlantic States Marine Fisheries Commission implements a coastwide moratorium on directed fishing in 1998

NOAA Fisheries Service implements a moratorium in federal waters in 1999

Fisheries bycatch remains a significant source of mortality – sink gillnet fisheries (e.g., monkfish, dogfish)



Conclusion: Current impacts from bycatch represent a substantial risk to the long-term survival of the species.



Other Natural or Manmade Factors Affecting the Species



Vessel strikes significant source of mortality in particular rivers (e.g., Delaware, James)

Photo Credit: Delaware Division of Fish and Wildlife



Conclusion: Vessel strikes currently represent a substantial risk to the long-term survival of the species



Inadequacy of Existing Regulatory Mechanisms



Threats from directed fishing have been address via interstate and federal fisheries bans on landing Atlantic sturgeon

However, primary threats from bycatch, vessel strikes, dams, water quality/quantity issues, dredging, climate change impacts are not being adequately addressed via existing regulations

Conclusion: Current impacts in this area represent a substantial risk to the long-term survival of the species.

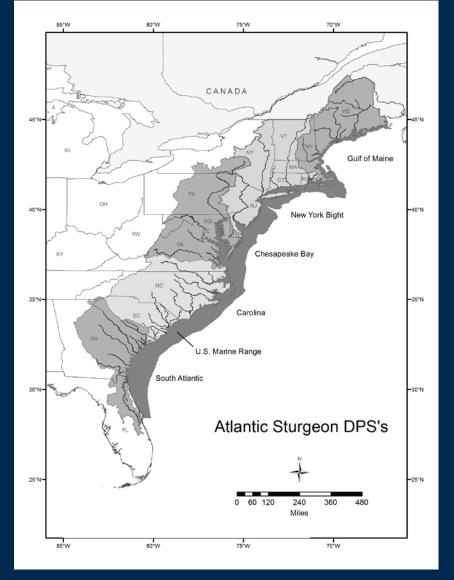
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Listing Determinations

Listings Became Effective April 6, 2012

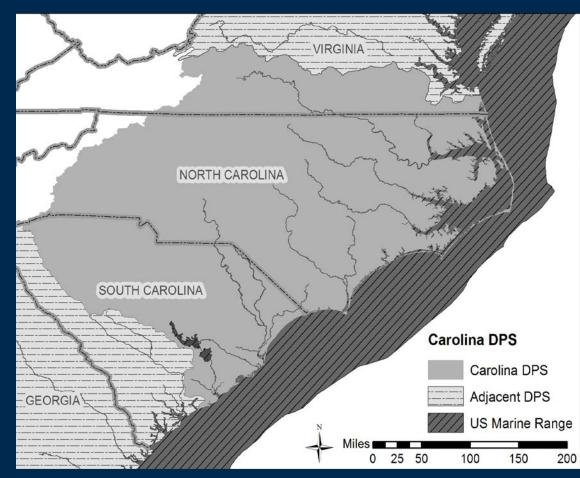
5 Distinct Population Segments (DPS): Threatened = Gulf of Maine Endangered = New York Bight, Chesapeake Bay, Carolina, South Atlantic

In "marine range" (i.e. offshore) all DPSs mingle with each other





Carolina DPS



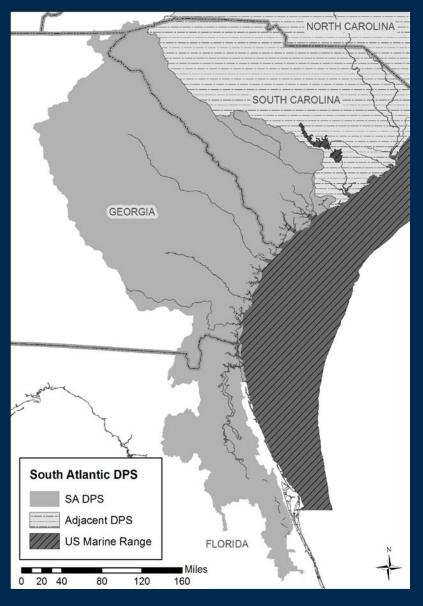
The Carolina DPS includes all Atlantic sturgeon that lay eggs or hatch in the rivers and tributaries of southern Virginia, Albemarle Sound, and the other coastal areas of North Carolina, and South Carolina to Charleston Harbor



South Atlantic DPS

The South Atlantic DPS includes all Atlantic sturgeon that lay eggs or hatch in the rivers and tributaries of the Ashepoo, Combahee, and Edisto Rivers (ACE) Basin

Boundaries extend along the South Carolina, Georgia, and Florida coastal areas to the St. Johns River, Florida





Status of Carolina and South Atlantic DPSs

Current populations in the DPSs are estimated to be 96-99% below their historical abundance

Spawning occurs in 11 rivers in the Southeast, but spawning no longer occurs in 5 to 9 rivers

All four listing factor impacting animals of these DPSs

Conclusion: Both DPSs are in danger of extinction



What Does Listings Mean for Fisheries?

Listing means that "taking" an Atlantic sturgeon is now a violation of the ESA. Under the ESA, "taking" means harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting, or to attempting to engage in any such conduct [ESA §3(19)]

The ESA provides ways that "take" can be authorized



How "Take" Can Be Authorized Under the Endangered Species Act

Section 7 – Applies to all federal actions (including fisheries management)

Section 10(a)(1)(A) – Applies to scientific research and enhancement

Section 10(a)(1)(B) – Applies to non-federal entities and incidental take (includes state fisheries)



Federal Fisheries That May Affect Atlantic Sturgeon and That Will Require Consultation

Shrimp Fisheries – consultation completed

Coastal Migratory and Pelagic Resources -

Others?



Potential Outcomes of Any Biological Opinion..

Reasonable and Prudent Alternative(s)

Incidental Take Statement, authorizing take and specifying reasonable and prudent measures and terms and conditions



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