



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

TC Report

Atlantic Sturgeon Management Board
August 9, 2012





Board Tasks

- In May 2012 the Board tasked the TC:
 1. Coordinate a meeting with NMFS Protected Resources staff to review the data and methodology used in the Atlantic sturgeon endangered and threatened listing determination.
 2. Advise the Board as to the appropriateness of the listing methodology and recommend methods to reduce bycatch
 3. Begin the initial phase in the development of petition to delist Atlantic Sturgeon





TC Meeting

- Sturgeon TC meeting held in July 2012
- NMFS staff invited
- Federal Service TC members/proxies recused themselves from any discussion regarding the action options





Data and Methodology

- ASMFC requested NMFS provide the TC with the data sources and methodology used in the status determination for each DPS.
- Prior to this workshop NMFS provided the TC with a list of references used in the listing determination.
- From what the TC could determine from the information provided, the majority of data that were available at the time of final ruling or the status review were most likely used.





Data and Methodology

- The TC could not comment on the appropriateness of the analyses used in the listing determination as NMFS did not provide adequate information.
- The TC inquired if it would be possible to again request additional information on methodology used in the extinction risk modeling and final ruling.





New Data

- The TC identified a significant amount of data that are now available which provides insight into sturgeon abundance, behavior, and life history.





Action Options

- **Delisting** – Original TC task
- **Downlisting** – Although this was not included in the initial direction from the Board the TC felt that downlisting might be supported in some instances and should be considered further
- **Legal Action** – briefly discussed





Delisting and Downlisting

- Scope of a potential petition
 1. Maintain the current DPS classification
 2. Propose reclassification of the DPS determination (river specific?)
 3. Approach the stock as a coastwide unit
- Any delisting or downlisting petition would have to go through the same steps as a listing petition and would take a similar amount of time (~2 years).





Considerations

- An Atlantic Sturgeon Recovery Team has not yet been coordinated by NMFS to develop an Atlantic Sturgeon Recovery Plan for each DPS.
 - These plans, when completed, would typically include targets for delisting or downlisting.
 - Even without a recovery plans in place, any petition to delist or downlist would still have to develop targets to support any status change request.
 - The most appropriate way to develop targets would be through a stock assessment.





Considerations

- Even for species without a recovery plan, NMFS should conduct a five year review of the species status.
 - However, “five year” reviews are not actually held to any mandated timeframe.





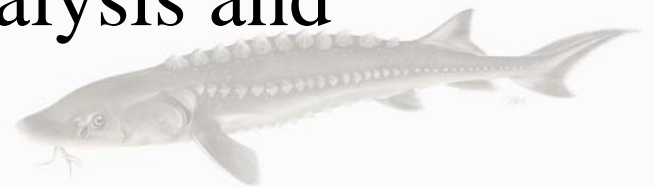
Considerations

	Downlist		Delist		SQ	
	positive	negative	positive	negative	positive	negative
Burden on states/ASMFC		X		X		
Specified Timeline Mandated	X		X			
Could be long process		X		X		
Public Perception	X	X	X	X	X	X
New Scientific Data can be considered	X		X			
Restrictive Regulations put in place after listing (e.g. monkfish fisheries) can be considered	X		X			
Better scientific understanding of stock	X		X		X	X
Would not have to focus on all DPSs	X		X			
Critical habitat designation	X	X	X	X	X	X
Loss Section 6 funding				X		
Industry data collection cooperation						X
Cost associated with pursuing		X		X	X	X
Still need to submit Section 10 apps / risk of litigation until applications processed		X		X		X
Uncertainty surrounding BiOps and ITS		X		X		X



Data needs

- New stock assessment
- Independent genetic study for re-evaluation of DPS, which should focus on YOY and age 1 fish (could be incorporated into assessment)
- Development of delisting criteria in advance of a NMFS Recovery Plan
- Bycatch analysis update (could be incorporated into assessment or formation of subcommittee)
- Information on NMFS listing analysis and methodology





Timeline

- In addition to the time to develop a petition to delist/downlist, it would also take an 2+years to go through the required petition process.
- If a stock assessment was prioritized, it would take, at a minimum one to two years to complete.
- Same people who could work on a delisting or downlisting petition or a stock assessment most likely developing the Section 10 permit applications for the states.
- States would still need to be covered by applicable Section 10 permits.





Recommendations

1. The TC recommends the Sturgeon Board initiate a benchmark stock assessment and peer review for Atlantic sturgeon, as well as other appropriate data analyses as necessary.
2. The results of the stock assessment and peer review should inform the determination on which petition type (downlisting or delisting) or other action may be appropriate to address any discrepancies or concerns with the listing.





Recommendations

3. The TC recommends the Board form a subcommittee to work on bycatch analysis, identify new data, and develop ways to improve analysis to reduce bycatch





NMFS 2008 Risk Matrix

		Overall risk score	DPS Recommendation
Penobscot	Gulf of Maine	3	Insufficient data
Kennebec		3	
Hudson	New York Bight	3	Threatened
Delaware		4	
York	Chesapeake Bay	3	Threatened
James		4	
Roanoke	Carolina	3	Threatened
Tar/Pamlico		3	
Neuse		3	
Cape fear		4	
Waccamaw		3	
Pee Dee		3	
Santee-Cooper		4	
ACE Basin		South Atlantic	
Savannah	3		
Ogeechee	3		
Altamaha	3		
Satilla	2		

- In this analysis, 14 separate threats were assessed on 18 different rivers.
- Scores can go from 1 to 5 (low to high risk).
- Only four scores of 4 (moderately high risk) were given (out of a possible 252).
- No scores of 5 were given.



Biological Opinions

- For an action that will result in the mortality of subadults and adults, the Biological Opinion will contain the following steps:
 1. Calculate the number of adults to be killed
 2. Calculate the number of subadults to be killed
 3. Assign the subadults and adults to the appropriate DPS using the approaches contained in Damon-Randall 2012 (white paper on mixed stock analysis)
 4. Convert subadults to adult equivalents
 5. Determine the number of adults plus adult equivalents likely to be lost and over what time period





Biological Opinions

- The Biological Opinion will for each DPS:
 1. Determine the percentage of total adults lost per year from each DPS
 2. Compare the percentage lost versus “some portion of a 3-5% range identified as the threshold level of anthropogenic mortality and recognize other human-caused sources of mortality.”





Bi-Op: Determining Jeopardy

1. Calculate the number of mortalities that equate to the threshold for each DPS (“some portion of a 3-5% range identified as the threshold level of anthropogenic mortality and recognize other human-caused sources of mortality.”)
2. Compare the balance to the projected take from the batched consultation.
 - If there is a positive number = “no jeopardy”
 - If it is negative, this is the amount that take needs to be reduced in order to avoid jeopardy.





Biological Opinions

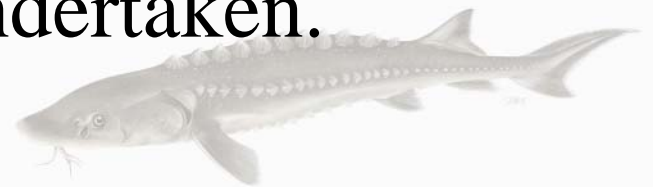
- NOAA Fisheries is still working on calculating population estimates for each DPS.
- A variety of methods are under consideration.





Biological Opinions

- The batched consultation will be made available for public review and comment in mid September. Posting on NOAA Fisheries website and will announce its availability for comments
- Most likely the comment period will run through the end of October.
- Extra-agency review of, and comment on, Biological Opinions is solely at the discretion of the agency and is not regularly undertaken.





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Section 10 Applications



Section 10 Applications

- Current Section 10 projects ongoing through NOAA Fisheries HQ:
 1. Georgia shad fishery – **Board provided comments**, NOAA Fisheries currently drafting BiOp
 2. North Carolina fishery bycatch ITP
 3. Virginia fishery bycatch ITP
 4. Virginia Institute of Marine Science ITP
- NY, NJ, CT projects in discussion with NERO
- South Carolina shad fishery ITP in development in discussion with SERO