

NJ Division of Fish and Wildlife  
Endangered and Nongame Species Program

## **Species Status Review of Marine Mammals**

Final Report  
Including review by the  
NJ Endangered and Nongame Species Advisory Committee  
Conducted on 21 January 2009

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## Executive Summary

- Project manager and compiler for the marine mammal status review was Jeanette Bowers-Altman, Principal Zoologist, ENSP; she was not a reviewer on the panel.
- Thirty-six marine mammal species were reviewed during the Delphi process. Species were chosen based on the official nongame list, 2006 NJ Marine Mammal and Sea Turtle Conservation Workshop list, and additional literature and web sources such as OBIS-Seamap's distribution maps.
- Thirteen panelists agreed to participate in the review process. One reviewer was unable to complete all four rounds due to health issues. Reviewers included experts from the NJ Division of Fish and Wildlife and other state agencies, federal agencies, academia, and nonprofit organizations.
- Species reviewed included 15 whales, 15 dolphins, one porpoise, four pinnipeds, and the West Indian manatee.
- Panelists were provided information on each species under review, including NOAA stock assessments, recovery plans, distribution maps and reports from NY and Canada. Information was provided to each reviewer via a CD. Additional materials provided by panelists were distributed via email at the beginning of each round.
- Consensus was achieved on 25 out of 36 species (Table 1).
  - 3 species were ranked Endangered (fin, humpack, northern right whales)
  - 2 species was ranked Special Concern (bottlenose dolphin, harbor porpoise)
  - 2 species were ranked Secure/Stable (gray seal, harbor seal)
  - 2 species were ranked Undetermined (striped dolphin, short-finned pilot whale)
  - 16 species were ranked Not Applicable because they either no longer occur in NJ or are considered non-native.
  - 11 species remained unresolved after four rounds and fall into three general groups:

Group 1 – globally vulnerable to extinction but are neither documented nor suspected within NJ waters (blue, sei and sperm whales). These 3 species are listed in NJ due to federal status and presence in the North Atlantic. Only sick, dying or dead individuals have been documented within NJ waters.

Group 2 – globally secure, neither documented nor suspected to occur within NJ waters (Atlantic spotted dolphin, Atlantic white-sided dolphin, common Minke whale, long-finned pilot whale, and Risso's dolphin). Only sick, dying or dead individuals have been documented within NJ waters.

Group 3 – globally secure, NJ waters represent the latitudinal or inshore extreme of the species' range (harp seal, hooded seal, and short-beaked common dolphin).

- These results were reviewed by ENSP biologists and presented to the Endangered and Nongame Species Advisory Committee on November 19, 2008 and January 21, 2009. The Committee made recommendations for adoption of the statuses reached by consensus of the Delphi Panel as presented, with following changes (Appendix 4):
  - The species listed in Group 1 (Blue, Sei and Sperm whales) are to be removed from the list of NJ species
  - The species listed in Group 2 (Atlantic white-sided dolphin, Common Minke whale, Long-finned pilot whale and Risso's dolphin) are to be removed from the list of NJ species
  - For species listed in Group 3, Harp and Hooded seal are indigenous to NJ waters and their populations are Stable, and the Short-beaked common dolphin population is Undetermined.

**TABLE 1. Delphi species status review final results (4 rounds): Marine Mammals**

SCIENTIFIC NAME	PRIMARY COMMON NAME	CURRENT NJ STATUS	CONSENSUS ROUND #	CONSENSUS STATUS	CONFIDENCE LEVEL
<b>CONSENSUS STATUS = ENDANGERED</b>					
<i>Eubalaena glacialis</i>	North Atlantic right whale	Endangered	1	ENDANGERED	7.5
<i>Balaenoptera physalus</i>	Fin whale	Endangered	2	ENDANGERED	6.9
<i>Megaptera novaeangliae</i>	Humpback whale	Endangered	2	ENDANGERED	7.1
<b>CONSENSUS STATUS = SPECIAL CONCERN</b>					
<i>Tursiops truncatus</i>	Bottlenose dolphin	None	2	SPECIAL CONCERN	6.7
<i>Phocoena phocoena</i>	Harbor porpoise	None	3	SPECIAL CONCERN	6.6
<b>CONSENSUS STATUS = SECURE/STABLE</b>					
<i>Halichoerus grypus</i>	Gray seal	None	1	SECURE/STABLE	7.1
<i>Phoca vitulina</i>	Harbor seal	None	2	SECURE/STABLE	6.9
<b>CONSENSUS STATUS – UNDETERMINED</b>					
<i>Stenella coeruleoalba</i>	Striped dolphin	None	1	UNDETERMINED	5.8
<i>Globicephala macrorhynchus</i>	Short-finned pilot whale	None	4	UNDETERMINED	6.2
<b>CONSENSUS STATUS – NOT APPLICABLE</b>					
<i>Orcinus orca</i>	Killer whale	None	1	NOT APPLICABLE	6.9
<i>Peponocephala electra</i>	Melon-headed whale	None	1	NOT APPLICABLE	6.4
<i>Stenella clymene</i>	Clymene dolphin	None	1	NOT APPLICABLE	6.5
<i>Stenella attenuata</i>	Pantropical spotted dolphin	None	1	NOT APPLICABLE	6.0
<i>Stenella longirostris</i>	Spinner dolphin	None	1	NOT APPLICABLE	6.5
<i>Trichechus manatus</i>	West Indian manatee	None	1	NOT APPLICABLE	7.4
<i>Delphinapterus leucas</i>	Beluga whale	None	2	NOT APPLICABLE	6.7
<i>Mesoplodon densirostris</i>	Blainsville’s beaked whale	None	2	NOT APPLICABLE	7.4
<i>Ziphius cavirostris</i>	Cuvier’s beaked whale	None	2	NOT APPLICABLE	7.0
<i>Hyperodon ampullatus</i>	Northern bottlenose whale	None	2	NOT APPLICABLE	6.6
<i>Feresa attenuata</i>	Pygmy killer whale	None	2	NOT APPLICABLE	6.6
<i>Mesoplodon europaeus</i>	Gervais’ beaked whale	None	3	NOT APPLICABLE	7.4
<i>Mesoplodon mirus</i>	True’s beaked whale	None	3	NOT APPLICABLE	7.4
<i>Lagenorhynchus albirostris</i>	White-beaked dolphin	None	3	NOT APPLICABLE	7.0

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SCIENTIFIC NAME	PRIMARY COMMON NAME	CURRENT NJ STATUS	CONSENSUS ROUND #	CONSENSUS STATUS	CONFIDENCE LEVEL
<b>CONSENSUS STATUS – NOT APPLICABLE (cont.)</b>					
<i>Kogia simus</i>	Dwarf sperm whale	None	4	NOT APPLICABLE	6.3
<i>Kogia breviceps</i>	Pygmy sperm whale	None	4	NOT APPLICABLE	6.6
<b>NO CONSENSUS REACHED</b>					
<i>Balaenoptera musculus</i>	Blue whale	Endangered	NO CONSENSUS		
<i>Balaenoptera acutorostrata</i>	Common Minke whale	None	NO CONSENSUS		
<i>Globicephala melaena</i>	Long-finned pilot whale	None	NO CONSENSUS		
<i>Balaenoptera borealis</i>	Sei whale	Endangered	NO CONSENSUS		
<i>Physeter macrocephalus</i>	Sperm whale	Endangered	NO CONSENSUS		
<i>Stenella frontalis</i>	Atlantic spotted dolphin	None	NO CONSENSUS		
<i>Lagenorhynchus acutus</i>	Atlantic white-sided dolphin	None	NO CONSENSUS		
<i>Grampus griseus</i>	Risso's dolphin	None	NO CONSENSUS		
<i>Delphinus delphis</i>	Short beaked common dolphin	None	NO CONSENSUS		
<i>Pagophilus groenlandicus</i>	Harp seal	None	NO CONSENSUS		
<i>Cystophora cristata</i>	Hooded seal	None	NO CONSENSUS		

**TABLE 2: Round 1 and Final (round 4) results: summary**

Consensus Status	Round 1 Findings		Final Results (Round 4)			
	Species Count	% of reviewed spp.	% of consensus spp.	Species Count	% of reviewed spp.	% of consensus spp.
Endangered	1	3%	11%	3	8%	12%
Threatened	0	0%	0%	0	0%	0%
Special Concern	0	0%	0%	2	6%	8%
Stable Secure	1	3%	11%	2	6%	8%
Undetermined	1	3%	11%	2	6%	8%
Not Applicable	6	17%	67%	16	44%	64%
<b>Consensus Spp.</b>	9	25%		25	69%	
<b>Non-consensus Spp.</b>	27	75%		11	31%	

APPENDIX I: LIST OF SPECIES REVIEWED WITH GLOBAL AND NJ BIOTICS RANK, FEDERAL, STATE, IUCN AND CITES STATUS.

SCIENTIFIC NAME	COMMON NAME	GLOBAL RANK	STATE RANK	FEDERAL STATUS	STATE STATUS	IUCN	CITES
<i>Balaenoptera acutorostrata</i>	Minke whale	G5	SNR	Not ranked	Not ranked	Near threatened	Appendix I
<i>Balaenoptera borealis</i>	Sei whale	G3	S1	Endangered	Endangered	Endangered	Appendix I
<i>Balaenoptera musculus</i>	Blue whale	G3G4	S1	Endangered	Endangered	Endangered	Appendix I
<i>Balaenoptera physalus</i>	Fin whale	G3G4	S1	Endangered	Endangered	Endangered	Appendix I
<i>Cystophora cristata</i>	Hooded seal	G4	SU	Not ranked	Not ranked	Least concern	N/A
<i>Delphinapterus leucas</i>	Beluga whale	G4	SNR	Not ranked	Not ranked	Vulnerable	Appendix II
<i>Delphinus delphis</i>	Short-beaked common dolphin	G5	SNR	Not ranked	Not ranked	Least concern	Appendix II
<i>Eubalaena glacialis</i>	North Atlantic right whale	G1	S1	Endangered	Endangered	Endangered	Appendix I
<i>Feresa attenuata</i>	Pygmy killer whale	G4	Not ranked	Not ranked	Not ranked	Data deficient	Appendix II
<i>Globicephala macrorhynchus</i>	Short-finned pilot whale	G5	SNR	Not ranked	Not ranked	Conserv.depend.	Appendix II
<i>Globicephala melaena</i>	Long-finned pilot whale	G5	SNR	Not ranked	Not ranked	Least concern	Appendix II
<i>Grampus griseus</i>	Risso's dolphin	G5	SNR	Not ranked	Not ranked	Data deficient	Appendix II
<i>Halichoerus grypus</i>	Gray seal	G4	S4	Not ranked	Not ranked	Least concern	N/A
<i>Hyperoodon ampullatus</i>	Northern bottlenose whale	G4	Not ranked	Not ranked	Not ranked	Data deficient	Appendix I
<i>Kogia breviceps</i>	Pygmy sperm whale	G4	SNR	Not ranked	Not ranked	Least concern	Appendix II
<i>Kogia simus</i>	Dwarf sperm whale	G4	SNR	Not ranked	Not ranked	Least concern	Appendix II
<i>Lagenorhynchus acutus</i>	Atlantic white-sided dolphin	G4	Not ranked	Not ranked	Not ranked	Least concern	Appendix II
<i>Lagenorhynchus albirostris</i>	White-beaked dolphin	G4	Not ranked	Not ranked	Not ranked	Least concern	Appendix II
<i>Megaptera novaeangliae</i>	Humpback whale	G3	S1	Endangered	Endangered	Vulnerable	Appendix I
<i>Mesoplodon densirostris</i>	Blainville's beaked whale	G4	SNR	Not ranked	Not ranked	Data deficient	Appendix II
<i>Mesoplodon europaeus</i>	Gervais' beaked whale	G3	SNR	Not ranked	Not ranked	Data deficient	Appendix II
<i>Mesoplodon mirus</i>	True's beaked whale	G3	SNR	Not ranked	Not ranked	Data deficient	Appendix II
<i>Orcinus orca</i>	Killer whale	G4G5	SNR	Not ranked	Not ranked	Conserv. depend.	Appendix II
<i>Pagophilus groenlandicus</i>	Harp seal	G5	S4	Not ranked	Not ranked	Least concern	N/A
<i>Peponocephala electra</i>	Melon-headed whale	G4	SNR	Not ranked	Not ranked	Least concern	Appendix II
<i>Phoca vitulina</i>	Harbor seal	G5	S4	Not ranked	Not ranked	Least concern	N/A
<i>Phocoena phocoena</i>	Harbor porpoise	G4G5	SNR	Not ranked	Not ranked	Vulnerable	Appendix II
<i>Physeter macrocephalus</i>	Sperm whale	G3G4	S1	Endangered	Endangered	Vulnerable	Appendix I
<i>Stenella attenuata</i>	Pantropical spotted dolphin	G5	Not ranked	Not ranked	Not ranked	Least concern	Appendix II
<i>Stenella clymene</i>	Clymene dolphin	G4	SNR	Not ranked	Not ranked	Data deficient	Appendix II
<i>Stenella coeruleoalba</i>	Striped dolphin	G5	SNR	Not ranked	Not ranked	Conserv. depend.	Appendix II
<i>Stenella frontalis</i>	Atlantic spotted dolphin	G5	SNR	Not ranked	Not ranked	Data deficient	Appendix II
<i>Stenella longirostris</i>	Spinner dolphin	G5	Not ranked	Not ranked	Not ranked	Data deficient	Appendix II
<i>Trichechus manatus</i>	West Indian manatee	G2	SNR	Endangered	Not ranked	Vulnerable	Appendix I
<i>Tursiops truncatus</i>	Bottlenose dolphin	G5	SU	Not ranked	Not ranked	Data deficient	Appendix II
<i>Ziphius cavirostris</i>	Cuvier's whale	G4	SU	Not ranked	Not ranked	Data deficient	Appendix II

Rankings and Terms Used in Appendix I: S/G1- Critically imperiled, S/G2- Imperiled, S/G3- Vulnerable, S/G4- Apparently secure, S/G5- Secure, S/GNA- Not applicable, S/GNR- Not ranked, S/GX- Presumed extirpated, S/GH- Possibly extirpated, S/GU- Unrankable (lack of data), E – Endangered.

APPENDIX II – Species Status Assessments

**SPECIES STATUS ASSESSMENTS: Marine Mammals**

**Common Minke Whale (*Balaenoptera acutorostrata*)**

**Status: No Consensus**

Status	# of People	Confidence Level
E		
T		
SC		
S	9	6.9
U	3	4.3
NO		
NA		

**Round 1 Comments:** Minke whales are protected by the Marine Mammal Protection Act (MMPA) and are not listed on the Endangered Species Act (ESA). Their population appears to be stable. Any efforts directed at large whales would most likely benefit this species as well.----- Poorly understood by catch in fixed gear fisheries.-----As noted in the NMFS “U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments – 2006,” (Waring et al., 2007), this is not a strategic stock under the Marine Mammal Protection Act (MMPA) because estimated human-related mortality and serious injury does not exceed the potential biological removal (PBR) level, and the Minke whale is not listed as a threatened or endangered species under the ESA.-----Frequently sighted in NMFS surveys in the Gulf of Maine and adjacent cooler waters. Survey abundance data are not sufficient to determine trends.-----Abundance largely unknown in NJ waters.----- Distribution mostly north of NJ. May winter further south; very small population, gaps in info.---- While Minke whales occur infrequently in NJ state waters, they are common on the shelf and human-related mortality is low.-----NOAA claims this species has most numerous population. <http://www.nmfs.noaa.gov/pr/species/mammals/cetaceans/minkewhale.htm> -----Though not listed as federally endangered, status (abundance/distribution) in NJ is relatively unknown. Because of tendency to inhabit coastal waters though, they are subject to ship strikes which warrants the SC.-----Currently there are no research efforts\* targeting this species in \*\*Delaware State waters, and there is insufficient data to determine population trends. The accuracy of some antidotal sightings of baleen whale have not been confirmed and it is possible that this species has been sighted within State waters but confused with other species of baleen whale. Strandings of this species have not been reported.-----Size and weight should be in both metric and standard or at the very least consistent among data sheets. During the winter aerial surveys conducted by the Riverhead Foundation for Marine Research and Preservation (2005) Minke whales were observed in the New York Bight during the these months. Surveys were not conducted during summer months however stranding were reported along with the take of a Minke whale in a gill net off Jones Beach, NY during the summer of 2001.

**Round 2 Comments:** According to the latest NMFS stock assessment report [http://www.nmfs.noaa.gov/pr/pdfs/sars/ao2006\\_whmi-cneco.pdf](http://www.nmfs.noaa.gov/pr/pdfs/sars/ao2006_whmi-cneco.pdf) there are insufficient data to determine population trends and net productivity rates are unknown. The stock status (relative to the optimum sustainable population) in the US EEZ is unknown. Also, the total US fisheries related mortality and serious injury derived from available data was found to be more than 10% of the PBR (stated in report as ‘not less than 10% of the PBR’). More information is needed in order to determine a status for NJ.-----I suspect that the by catch is well under estimated which is why PBR is apparently not exceeded.-----Since Minke whales are not ESA listed and are fairly stable in population, I believe this species warrants a stable status.----- -Minke whales were rarely sighted off NJ coastal waters in both CETAP and NEFSC marine mammal surveys, therefore, an unknown status determination seems appropriate. Data are insufficient to assign it to status S, and there is little scientific basis to list as a species of concern.-----Reiteration of my previous comments after considering the above. Minke whales are not listed as a threatened or endangered species under the ESA. Also, estimated human-related mortality and serious injury does not exceed the potential biological removal (PBR) level.

“Poorly understood by catch in fixed gear fisheries.” This is not the case. There are annually updated estimates of bycatch, which are less than 0.1% of the estimated stock abundance (about 3,000; Waring et al., 2007). The average estimated fishery-related mortality was 2.6 per year in 2000-2004 (Waring et al., 2007), 2.2/year in 2001-2005 (draft 2007 Stock Assessment Report), and 1.8/year in 2002-2006 (draft 2008 SAR).

“Abundance largely unknown in NJ waters.” The CETAP (1982) surveys extended from the shore to beyond the shelf break, and were conducted in all four seasons. The estimated abundance of Minke whales in survey area Gx (waters shallower than 20 fathoms off New Jersey) was 0 in winter, 0 in spring, 0 in summer, and 0 in fall (Kenney et al., 1985: p. 84).

“Though not listed as federally endangered, status (abundance/distribution) in NJ is relatively unknown.” Not true (see previous comment; CETAP, 1982; Whitaker et al., in prep.)

“Because of tendency to inhabit coastal waters though, they are subject to ship strikes which warrants the SC.” There are only five known ship-strike mortalities along the entire U.S. East Coast in three decades plus—in 1974, 1992, 1998, 2004, and 2005 (the only one in NJ). The average estimated ship-strike mortality was 0.2 per year in 2000-2004 (Waring et al., 2007), 0.4/year in 2001-2005 (draft 2007 Stock Assessment Report), and 0.4/year in 2002-2006 (draft 2008 SAR).

“Surveys were not conducted during summer months however stranding were reported along with the take of a Minke whale in a gill net off Jones Beach, NY during the summer of 2001.” That take was not in the SAR. If released alive and uninjured it does not count as a fishery-related mortality or serious injury for stock assessment purposes under the MMPA.

Minke whales do not occur in New Jersey waters except for the occasional stranding, and strandings should not be used as evidence of occurrence. Strict application of the state-waters criterion would require a status of Not Applicable. Otherwise, with no evidence of population declines or substantial human impacts, they should be considered as Stable.

### **Round 3 Comments:**

Reiteration of my previous comments after considering the above. Minke whales are not listed as a threatened or endangered species under the ESA. Also, estimated human-related mortality and serious injury does not exceed the potential biological removal (PBR) level.-----Minke whales do not occur in New Jersey waters except for the occasional stranding, and strandings should not be used as evidence of occurrence. Strict application of the state-waters criterion would require a status of Not Applicable. Otherwise, with no evidence of population declines or substantial human impacts, they should be considered as Stable. Minkes are protected by the Marine Mammal Protection Act (MMPA) and are not listed on the Endangered Species Act (ESA). Their population appears to be stable. Any efforts directed at large whales would most likely benefit this species as well.-----According to the CETAP data provided (page 140) there is one sighting off the coast of NJ, and from this graphic you can't tell if this sighting was within 3 nm or not. The Riverhead Foundation conducted fairly recent aerial surveys of the New York Bight which may provide more information about any recent sightings off NJ, but I don't feel that Minke whales travel within 3 nm of the NJ shore.-----According to Round 2 comments, abundance estimates in waters shallower than 20 fathoms from CETAP data (1982) were '0' for all seasons, however, Minke have been reported in waters shallower than 20 fathoms off Delaware (which is just south of NJ distribution between the two states may overlap). These occurrences were not part of standardized surveys (although ID reliable), but nonetheless do raise some questions as to changes that may occurred in the 20-25 years since the CETAP & Kenney et al surveys were conducted. Is more recent data available that could be used to determine abundance? Agreed that strandings shouldn't be used as evidence of occurrence, unless, individuals strand as a result of being intercepted by a fisheries or other mortality factor that occurs in State Waters. *There are only five known ship-strike mortalities along the entire U.S. East Coast in three decades plus*—Is it possible that there were additional ship strikes that were not reported?-----The fact that Minke whales were not seen in any season during surveys off New Jersey in 1982 (over 25 years ago) does not mean they do not occur here now (abundance and distribution are not necessarily static). Yet, a “stable” status may be appropriate due the ESA designation as a non-strategic stock and low ship strike mortalities.-----First, some text in Round 1 Comments is incorrect. The text “NOAA claims this species has most numerous population” pertains to the Southern Hemisphere stock. There is little new information on the mink whale stock “Canadian East Coast Stock” off the northeast US. Important points regarding Minke whale status have been addressed in Round 1 and 2 Comments. Basically, Minke whales are occasionally reported off the New Jersey coast. Despite infrequent strandings/entanglement reports, the level of human caused mortality to this stock is substantially below PBR. Further, ship strikes are a minor component of the documented human caused mortality (Waring et al. 2007). Given their infrequent occurrence in NJ waters, a stable or unknown status could be argued, but I believe they should be considered as S.

### **Round 4 Comments:**

Perhaps a stable could be listed, but the various unknowns could be noted at the same time based on comments above.-----Minkes are protected by the Marine Mammal Protection Act (MMPA) and are not listed on the Endangered Species Act (ESA). Their population appears to be stable. Any efforts directed at large whales would most likely benefit this species as well.-----There is no evidence to suggest that the stock is declining or that sources on anthropogenic injury or mortality have increased. Further, there is no empirical evidence that fishing activities are having an indirect trophic impact on this species.-----Other than CETAP data collected 25 years ago, I did not notice any current research cited that involved the collection of abundance data. What data set is being used to support a status of “Stable”? I'm not involved in generating stock assessment statistics, but can fisheries bycatch estimates be used to detect population trends? Fishing effort changes over time and not all mortalities are reported. According to the latest NMFS stock assessment report [http://www.nmfs.noaa.gov/pr/pdfs/sars/ao2006\\_whmi-cneco.pdf](http://www.nmfs.noaa.gov/pr/pdfs/sars/ao2006_whmi-cneco.pdf) there are insufficient data to determine population trends and net productivity rates are unknown. How can a population be deemed stable if there is not enough data to determine trends or productivity? If there is enough research to prove 'Stable' then that status would be appropriate. Otherwise, a status of 'Unknown' seems appropriate.

**Sei Whale (*Balaenoptera borealis*)**

**Status: No Consensus**

Status	# of People	Confidence Level
E	7	6.7
T		
SC	1	5
S		
U	1	5
NO	1	
NA	2	7.5

**Round 1 Comments:** Although Sei whales are currently listed on the Federal ESA, they are typically found in waters further offshore than the 3 mile state line and rarely venture into NJ state waters.-----Reduced population numbers due to whaling.-----Federally listed species.-----Although occurrence within NJ waters is unknown, low population struggles to recover from whaling.-----Occurs mostly north of NJ (Scotian shelf); rare in N. Atlantic.-----While federally listed as endangered, sei whales basically do not occur in NJ state waters except as the rare carcass carried in on the bow of a large ship.-----Listed as federally endangered, but need further information on occurrence and distribution in New Jersey waters to make a more informed decision.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. This species tends to be more pelagic in nature and frequency within State waters is unknown. There have been antidotal sightings of Sei Whales within State waters off the Atlantic Coast although the accuracy of the sightings were not confirmed. One individual dead stranded in 1974, but could have died offshore before making landfall.-----Size and weight should be in both metric and standard or at the very least consistent among data sheets-----Sei whales were observed in the New York Bight during the winter of 2005. Most sightings were >15 miles offshore. **Round 2**

**Comments:** This species is primarily pelagic, although occasional forays inshore occur according to the NMFS stock assessment. It also primarily occurs north of NJ. Is the status of this species within state waters unknown because they rarely occur or because there is a lack of supporting data? Until supporting data is available, maybe their status should follow the federal status.-----Any species that are currently ESA listed should be listed similarly in the state. However, I do not believe this species would be as applicable in NJ waters as some other species of whales.-----Federally listed species that primarily occupies offshore and more northern waters off the northeast US coast. There are no sei whale sightings off NJ waters in either the CETAP or NEFSC data bases. Further, its endangered status must be applied to state waters.-----Listed as federally endangered. Based on lack of information on occurrence and distribution in New Jersey waters, it may be precautionary to list similarly for state waters. However, it could be noted where the whales are typically sighted based on currently available information (e.g. as noted above).

*“Reduced population numbers due to whaling.”* There is no evidence that the North Atlantic population was ever seriously depleted by whaling. The total catch was about 14,000, but most was in the Northeast Atlantic (Reeves & Kenney, 2003). There was some Canadian hunting of the Nova Scotia (=northeastern US) stock, but it was of limited duration (1966-1972) with a total take of 825 whales (Mitchell, 1975). A stock of 2200 animals (CETAP, 1982; Kenney et al., 1997) growing at the 4% default rate assumed in the SARs would add 825 animals in only 8 years.

*“Although occurrence within NJ waters is unknown, low population struggles to recover from whaling.”* Sei whales do not occur in New Jersey waters (CETAP, 1982; Whitaker et al., in prep.). The estimated abundance of sei whales in survey area Gx (waters shallower than 20 fathoms off New Jersey) was 0 in winter, 0 in spring, 0 in summer, and 0 in fall (Kenney et al., 1985: p. 83). See previous re whaling.----- There are only two possible choices. If the official policy is to list as Endangered or Threatened any species that is so listed at the federal level and that might occur, even accidentally, in New Jersey waters, then sei whale status should be Endangered. Otherwise, since they do not occur in NJ, the status should be Not Applicable-----As there are little data on Sei whales it is possible that many sightings are misidentified Fin whales.

**Round 3 Comments:** Based on lack of information on occurrence and distribution in New Jersey waters, it may be precautionary to list similarly for state waters. However, it could be noted where the whales are typically sighted based on currently available information (e.g. as noted above).-----Sei whales do not occur in New Jersey waters (CETAP, 1982; Whitaker et al., in prep.). The estimated abundance of sei whales in survey area Gx (waters shallower than 20 fathoms off New Jersey) was 0 in winter, 0 in spring, 0 in summer, and 0 in fall (Kenney et al., 1985: p. 83). See previous re whaling.----- here are only two possible choices. If the official policy is to list as Endangered or Threatened any species that is so listed at the federal level and that might occur, even accidentally, in New Jersey waters, then sei whale status should be Endangered. Otherwise, since they do not occur in NJ, the status should be Not Applicable.-----This species occasionally occurs in State waters, so it depends on how ‘NA’ is applied. Would those Sei reported in state waters be considered non-breeding strays or transient breeders that fail to persist? If so, then ‘NA’ as defined by this process may be appropriate. If not, then the state should consider following the federal status, especially if this is what they have done for other primarily pelagic species.----- Species that are currently ESA listed should be listed similarly in the state.” -----This species is federally listed as endangered due to

commercial whaling impacts on the population, and this designation should be maintained for state waters. As noted in Round 1 and 2 Comments this species inhabits primarily offshore waters, thus should be considered a rare species in NJ nearshore waters. Current abundance data are insufficient to support the comment “low population struggles to recover from whaling.” Sei whales sightings are difficult to discern from fin whales, thus NEFSC marine mammal observers frequently record sightings as fin/sei. The E status is appropriate for this species.----- Occurred in the New York Bight during the aerial survey conducted in 2005 by the Riverhead Foundation for Marine Research and Preservation.

**Round 4 Comments:** Agree with precautionary approach of mirroring federal status in absence of evidence at state-level.----- Species that are currently ESA listed should be listed similarly in the state. However, information on its known distribution should be noted.-----  
-I am changing my answer from previous rounds. Since we are only concerned with species that may be present in NJ waters, despite the Federal listing status, this species should be listed as NA for NJ because they are rarely, if ever, sighted within NJ waters. To keep things less complicated, the E should only be for those endangered marine mammals that occur within NJ waters. If information is found to show that this species is typically found within NJ waters, this status could be changed.-----Their status in NJ should mirror Federal law. Although their occurrence is rare recent changes in stranding could indicate changes in annual distribution. In 2001 numerous animals (sei, fin, minke and humpback) were brought in on the bow of ships into NY/NJ waters. Understanding that these animals could have come from offshore they still ended up being landed on NY or NJ shores.-----The federal status must be maintained in state waters. However, the offshore habitat of this species makes it unlikely that Sei whales would occupy NJ waters. One suggestion for resolving the status in NJ waters is to use the federal designation, but denote them as NA. The latter is consistent with their offshore habitat preference.-----I can see the point in listing this species as NA (as defined by this process), however, if there is a chance that this species could occur in NJ waters then I’m not sure it makes sense for the State status to be less restrictive than the Federal status. Perhaps there is language in NJ state regulations for this type of situation?

**Blue Whale (*Balaenoptera musculus*)**

**Status: No Consensus**

Status	# of People	Confidence Level
E	8	7.3
T		
SC		
S		
U		
NO	1	
NA	3	7.0

**Round 1 Comments:** Although blue whales are currently listed on the Federal ESA, they are primarily an offshore species and rarely, if ever, venture into NJ state waters. I don’t know of any sightings of blue whales in NJ waters.-----Based on long term photo id project in Canada.-----Federally listed species; rarely sighted in waters off the northeast US coast.-----Although occurrence within NJ waters is unknown, low population struggles to recover from whaling.-----Low numbers; probably not in NJ, but gaps; strategic.-----Federally listed as endangered, but does not occur except on rare occasions in NJ state or US federal waters.----- Ranking based on NMFS determinations. Unable to comment on NJ-specific scope.-----Occurs in more offshore waters, however, very little is known about blue whale occurrence and distribution in Atlantic.----- Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. However, I marked “E” because this species is recognized on a regional basis as rare and federally listed as Endangered. There are no strandings or sightings reported for Delaware, however, I believe a blue whale did strand on the NJ side of the Delaware Estuary several years ago(?). Is that right?-----Size and weight should be in both metric and standard or at the very least consistent among data sheets. Although these are cosmopolitan whales we have not had any reported in the New York Bight in recent years.

**Round 2 Comments:** This species is primarily pelagic, although occasional forays inshore occur according to the NMFS stock assessment. Until supporting data are available, maybe their state status should follow the federal status, especially since it is noted in the stock assessment that they appear to have been depleted by commercial whaling such that they remain rare in formerly important habitats.-----Any species that are currently ESA listed should be listed similarly in the state. However, I do not believe this species would be as applicable in NJ waters as some other species of whales.-----Federally listed species and rarely sighted within continental shelf waters off the northeast US. In 1998 a dead Blue whale was brought into Rhode Island waters on the bow of a tanker, and it is likely that the ship strike occurred in off-shelf waters.----- Listed as federally endangered. Based on lack of information on occurrence and distribution in New Jersey waters, it may be precautionary to list similarly for state waters. However, it could be noted where the whales are typically sighted based on currently available information (e.g. as noted above).-----Blue whale status in New Jersey should be treated the same as for Sei whales, but even more so. For Sei whales the closest area of typical occurrence is Georges Bank; for Blue whales it would be in the Gulf of St. Lawrence.

**Round 3 Comments:**

Listed as federally endangered; it may be precautionary to list similarly for state waters. However, it could be noted where the whales are typically sighted based on currently available information (e.g. as noted above).-----Although blue whales are currently listed on the Federal ESA, they are primarily an offshore species and rarely, if ever, venture into NJ state waters. \*I am ranking this as N/A because according to the definition in the “Terms” document, the following is stated as the definition of endangered: “Applies to species whose prospects for survival within the state are in immediate danger due to one or several factors, such as loss or degradation of habitat, overexploitation, predation, competition, disease or environmental pollution, etc. An Endangered species likely requires immediate action to avoid extinction within New Jersey.” Therefore, if a species does not typically occur within NJ waters, despite Federal listing on the ESA, it should be considered not applicable to the state of NJ. This ranking is different than what I initially put down in the prior two rounds.-----If the State lists other primarily pelagic species as E because they are following the Federal status, then they should do the same with blue whale. Everyone seemed to agree in previous rounds that blue whale are endangered where they occur. MD - Should this species’ population recover to pre-whaling numbers and it be removed from the federal endangered species list, a state listing could still be applied. However, if a species does not occur within state waters, there would be no justification for applying a status other than “NA”.-----Listed as federally endangered. Species that are currently ESA listed should be listed similarly in the state.-----This species is federally listed as endangered due to commercial whaling impacts on the population, and this designation should be maintained for state waters. As noted in Round 1 and 2 Comments this species inhabits primarily offshore waters, thus should be considered a rare species in NJ nearshore waters. The species is rarely seen during NEFSC marine mammal surveys, and those sightings are in offshore New England waters. The E status is appropriate for this species. Note – Sei whale / Blue whale – Given the rarity of these species in NJ waters a NA designation is also relevant.----- Although sightings are few in the NYB effort is low as well.

**Round 4 Comments:**

Agree with precautionary approach of mirroring federal status in absence of evidence at state-level.----- There appears to be consensus that this is an offshore species, not present in NJ waters. Therefore, because consensus had been reached that the beaked whales should be ranked “NA” for the very same reason, the blue whale should also be regarded as “NA”. Until there is such evidence that blue whales do occur in NJ waters aside from a rare stranding, we cannot justify ranking it as State Endangered while omitting other federally-listed species such as manatees which are documented as occurring in NJ waters with some regularity.-----Species that are currently ESA listed should be listed similarly in the state. However, information on its known distribution should be noted.-----I am changing my answer from previous rounds. Since we are only concerned with species that may be present in NJ waters, despite the Federal listing status, this species should be listed as NA for NJ because they are rarely, if ever, sighted within NJ waters. To keep things less complicated, the E should only be for those endangered marine mammals that occur within NJ waters. If information is found to show that this species is typically found within NJ waters, this status could be changed.-----Occurrence is rare however as stated with the sei whale once it is encountered its status should reflect federal ranking.-----The federal status must be maintained in state waters. However, the offshore habitat of this species makes it unlikely that sei whales would occupy NJ waters. One suggestion for resolving the status in NJ waters is to use the federal designation, but denote them as NA. The latter is consistent with their offshore habitat preference.-----I can see the point in listing this species as NA (as defined by this process), however, if there is a chance that this species occurs in NJ waters then I’m not sure it makes sense for the State status to be less restrictive than the Federal status. Perhaps there is language in NJ state regulations for this type of situation?

**Fin Whale (*Balaenoptera physalus*)**

**Consensus: Endangered**

Status	# of People	Confidence Level
E	11	6.9
T		
SC		
S	2	6.0
U		
NO		
NA		

**Round 1 Comments:** Any species that are listed on the Federal ESA that occur in NJ waters should be listed on the state’s endangered species list and currently are. Fin whales are covered by the Atlantic Large Whale Take Reduction Plan to address interactions between large whales and commercial fisheries.-----Issues with accidental take in pair trawling and fixed gear fisheries.-----As noted in the NMFS “U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments – 2006,” (Waring et al., 2007), the status of this stock relative to the optimum sustainable population (OSP) level is unknown, but the species is listed as endangered under the Endangered Species Act (ESA). There are insufficient data to determine the population trend for fin whales (Waring et al., 2007). The total level of human-caused mortality and serious injury is unknown (Waring et al., 2007). This is a strategic stock under the Marine Mammal Protection Act

(MMPA) because the fin whale is listed as an endangered species under the ESA (Waring et al., 2007). Thus, this is a species that warrants immediate action throughout its range. However, it should be noted that the total U.S. fishery-related mortality and serious injury for this stock derived from the available records is less than 10% of the calculated potential biological removal (PBR) level, and therefore can be considered insignificant and approaching zero mortality and serious injury rate (Waring et al., 2007).-----Federally listed species.-----Population still recovering from commercial whaling pressure. Additionally, although not well documented, NJ waters may be critical migration route and/or feeding habitat. Ship strike mortality has been documented within New York Harbor.-----Mostly NC north (some mid-Atlantic); low pop'n. Dominant/most important large cetacean in area. Some calving occurs in mid Atlantic.-----Fin whales are federally listed as endangered and probably the most likely large whale to occur in NJ state waters, but there is no evidence that the population is declining or in immediate threat of extinction.-----State, Federal, and Global listings indicate endangered status.-----Listed as federally endangered, but need further information on occurrence and distribution in New Jersey waters to make a more informed decision.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. There have been sightings of Fin Whale within State waters off the Atlantic coast and within the mouth of the Delaware Bay. One dead stranded in 1998, but this individual could have died offshore before making landfall.-----Size and weight should be in both metric and standard or at the very least consistent among data sheets. Numerous Fin whales were observed in the New York Bight during the winter of 2005. Most sightings were >15 miles offshore. Little is known about their seasonal movements.

**Round 2 Comments:** *“Issues with accidental take in pair trawling and fixed gear fisheries.”* I know of no takes ever in any pair-trawl fishery. Average annual fishery-related mortality is less than 1 whale per year, which is relatively insignificant in comparison with estimated abundance of about 2,800 (Waring et al., 2007). Note that the SAR abundance estimates do not account for diving, therefore actual abundance is likely to be about twice that estimate (CETAP, 1982; Hain et al., 1992; Kenney et al., 1997).

*“Additionally, although not well documented, NJ waters may be critical migration route and/or feeding habitat. Ship strike mortality has been documented within New York Harbor.”* Fin whale migration is much more likely to be inshore-offshore with a winter range well offshore of the shelf break rather than north-south along the immediate shoreline (i.e., in state waters). The estimated abundance of fin whales in survey area Gx (waters shallower than 20 fathoms off New Jersey) was 15 in winter, 0 in spring, 0 in summer, and 22 in fall (Kenney et al., 1985: p. 82). Fin whale occurrence in the mid-Atlantic is more common over the middle and outer shelf rather than nearshore (CETAP, 1982; Hain et al., 1992; Whitaker et al., in prep.). Large-whale ship-strike mortalities recorded in harbors (New York, Boston, Port Elizabeth, etc.) did not occur there, but represent whales struck somewhere else and carried in on the bulbous bows of the vessels.

*“Mostly NC north (some mid-Atlantic); low pop'n. Dominant/most important large cetacean in area . Some calving occurs in mid Atlantic.”* Calving has never been observed; Hain et al. (1992) speculated based on the timing and locations of calf sightings that calving occurred off the shelf at latitudes around the mid-Atlantic.

*“Listed as federally endangered, but need further information on occurrence and distribution in New Jersey waters to make a more informed decision.”* See CETAP (1982), Hain et al. (1992), Waring et al. (2007), and Whitaker et al. (in prep.) for extensive information. If it is the official policy to list as Endangered or Threatened any species that is so listed at the federal level and that might occur, even accidentally, in New Jersey waters, then fin whale status should be Endangered. If not, there is no evidence for a declining population or level of threat either in New Jersey or regionally that would warrant a conclusion that their “prospects for survival ... are in immediate danger.” In fact, it would probably be impossible to list fin whales as federally Endangered or Threatened under the ESA using the law’s listing criteria (they were listed under an earlier statute). An honest assessment of current information would suggest Stable status.-----Agree that if the species is federally listed as E and occurs within State waters that it should also be listed as E, especially if there is a lack of data for State waters. Other reviewers have noted fisheries related mortality, potential migration routes within NJ waters and calving in the mid-Atlantic-----Additionally, takes by ship strikes is an area that could be looked at.-----Listed as federally endangered. Based on lack of information on occurrence and distribution in New Jersey waters, it may be precautionary to list similarly for state waters. However, it could be noted where the whales are typically sighted based on currently available information (e.g. as noted above).

**Hooded Seal (*Cystophora cristata*)**

**Status: No Consensus**

Status	# of People	Confidence Level
E		
T		
SC	1	8
S	2	6.5
U		
NO	4	
NA	5	7.5

**Round 1 Comments:** I don’t feel like I have enough expertise in this species to determine a status listing in NJ.-----Concern with

management of hunt in Canadian waters.-----Extralimital occurrence in US Atlantic waters. -----Mostly North/Canada, but recent increases in strandings in NJ. This ice seal is expected to be negatively affected by global climate change (pup loss).-----Hooded seals in the mid-Atlantic are dispersing young-of-the-year far outside the normal population range.-----Hooded seals that occur in Delaware have been largely juveniles which migrated from northern breeding grounds. It is unknown how long these individuals remain in Delaware but believed that they most likely return northward when water temperatures rise (if not before). Several have been transported to rehabilitation facilities in other states. Other than stranding response efforts and a few reported sightings there is no population trend data. Breeding does not occur in Delaware waters. Available data is insufficient for assigning a population status in Delaware.-----Size and weight should be in both metric and standard or at the very least consistent among data sheets. Although strandings occur annually there does not appear to be a standing population. These events are isolated and will be management issues from the perspective of harassment. Hooded seals are more aggressive and have the potential to show aggression toward the public when they are encountered.

**Round 2 Comments:** Although these seals breed farther north, strandings of them have recently increased markedly in NJ.----- Additionally, changes in ice due to global climate change will certainly affect them negatively. Important to study them now.-----Put 'NO' as I am going to defer to other reviewers (especially those in NJ and NY who should be able to determine a status for NJ). We can't use what is known about this species in Delaware to form an opinion because there are no research efforts designed to determine population trends, just stranding response and antidotal sightings.-----This species has an extralimital presence in US Atlantic coastal regions. Strandings are reported as far south as the Caribbean. The population is monitored and managed by Canada, and important life history events occur in Canadian waters. Given the cyclic nature of stranding events, it cannot be considered to have a stable population in NJ waters.

*"Concern with management of hunt in Canadian waters."* Average annual take from the Front herd was 169 seals in 2000-2004 (Waring et al., 2007), and no commercial harvests from the Gulf of St. Lawrence or Davis Strait herds are allowed. The species is listed as Lower Risk (least concern) on the IUCN Red List.

*"This ice seal is expected to be negatively affected by global climate change (pup loss)."* This is not a concern in New Jersey. Hooded seals in US Atlantic waters are vagrants from Canadian and Greenland populations which combined exceed 700,000 animals.

**Round 3 Comments:** Although these seals breed farther north, strandings of them have recently increased markedly in NJ. Additionally, changes in ice due to global climate change will certainly affect them negatively. Important to study them now. This species has an extralimital presence in US Atlantic coastal regions. Strandings are reported as far south as the Caribbean. The population is monitored and managed by Canada, and important life history events occur in Canadian waters. Given the cyclic nature of stranding events, it cannot be considered to have a stable population in NJ waters.-----This species has an extralimital presence in US Atlantic coastal regions. Strandings are reported as far south as the Caribbean. The population is monitored and managed by Canada, and important life history events occur in Canadian waters. Given the cyclic nature of stranding events, it cannot be considered to have a stable population in NJ waters.-----Hooded seals are clearly an extralimital species in NJ waters. As noted in Round 1 and 2 Comments, this species is managed by Canada, it breeds in northern latitude waters and sub-adults/juveniles comprise most of the NJ strandings. Global warming will undoubtedly impact ice conditions that are integral to the life history of this species. The impact of this on the extralimital distribution of this species is unknown, but it is extremely unlikely that a resident population will be established south of the winter pack ice zone. The **NA** designation is consistent with the occurrence of this species in NJ waters.----- Hooded seal encounters have increased over the years, however they are not as consistent as the other pinnipeds. Any conservation efforts for the other more common pinniped will help the occasional hooded seal as well.

**Round 4 Comments:** The most marine mammal Stock Assessment Report (2007) indicates that this is a highly migratory species, with breeding grounds in Canada. As such, it would be difficult for NJ to implement measures for this species so I have chosen NA. Any measures that are taken for other pinnipeds would most likely benefit any hooded seals there.-----In my NJ Seal study, and with the State Stranding Center, we have seen marked increases in these seals recently. It is important to add that all of the 4 true seals in the Western North Atlantic considered in Delphi occur seasonally in NJ (harbor, harp, gray and hooded). These are part of the same populations that breed further north. They should not be considered rare stranding events. Strandings have increased markedly in the Mid-Atlantic; following their population dynamics is essential at such a time of change.. Additionally, their amphibious lives mean they have an exceptionally close tie to the shore and nearshore areas (hauling out daily onto land). Finally, changes in ice due to global climate change will certainly affect them negatively at their northern grounds, which will affect them in NJ. It is important to study them now.-----Agree with above in bold.-----Hooded seals have an extralimital presence in NJ coastal waters. They are a high profile species to the stranding/rehabilitation network. However, the population center for this ice breeding seal is in Atlantic Canada. The species is rarely observed in mid- Atlantic or New England fishery bycatch. The NA designation is applicable because of the life history of this species, (i.e., it is unlikely to have a long-term presence in NJ coastal waters).-----I don't think NA is appropriate for this species given its regular annual occurrence in NJ. The occurrences are seasonal and maybe 'extralimital' at present, but a species does not have to be a resident or breed in the state to be applicable. Many non-breeding migratory species utilize habitat in NJ and are not listed as NA (shorebirds, humpback whales, etc. for example). I'm not sure what the status should be though.

**Beluga Whale (*Delphinapterus leucas*)**

**Consensus: Not Applicable**

Status	# of People	Confidence Level
E	1	8
T		
SC		
S		
U		
NO	1	
NA	11	6.7

**Round 1 Comments:** Belugas are an Arctic species and don't normally travel as far south as NJ. There was a recent (2005) wayward solitary social beluga whale that traveled into the Delaware River and the main problems were curiosity by boaters and harassment. Belugas could be classified in NJ as "non-breeding strays." -----Small population in southern Quebec ~ 1000 animals.-----Extralimital occurrence in US Atlantic waters.-----Extralimital occurrence NJ waters.-----Not in NOAA stock assessment. Distribution is arctic-subarctic.-----Belugas that occur in the U.S. Atlantic are extralimital strays from the St. Lawrence estuary population. Although they are not listed under the ESA, an endangered listing for that stock was recommended by COSEWIC and Canada listed them as threatened.-----Federally listed as "candidate" species. Listed as "rarely encountered" in NY.-----Occurrence is rare in NJ waters.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine a population status. However, due to the distinctiveness of this species, if it did occur in Delaware waters there is a high probability that it would have been reported. The 2004 occurrence within the Delaware Estuary does raise some questions, but is likely an out of habitat situation rather than an indication that this species normally inhabits the Delaware Estuary and Atlantic Coast of Delaware.

**Round 2 Comments:** While I understand the rationale for assigning a NJ state conservation status to Belugas since any individual found in NJ waters are likely from the imperiled St. Lawrence population, the fact is any individual found in NJ waters is extralimital in a similar manner as the Manatee. Therefore, a status of NA is most appropriate.-----Belugas very clearly occur in US Atlantic waters only as vagrants. Given that I do not necessarily agree with automatically applying US federal ESA classifications to species that occur only as vagrants in New Jersey, I would certainly not automatically assign the Canadian Threatened classification.

**Short-beaked Common Dolphin (*Delphinus delphis*)**

**Status: No Consensus**

Status	# of People	Confidence Level
E		
T		
SC		
S	7	6.3
U		
NO	2	
NA	3	6.3

**Round 1 Comments:** This species is not listed on the ESA and appears from the 2006 SAR to be stable. It does not appear that this species likely traverses state waters but rather occurs over the continental shelf, which is further offshore than state waters. I would defer to biologists who are more familiar with this species.-----Frequently sighted in NMFS abundance surveys, but data are insufficient to determine trends.-----Occur in NJ problems with bycatch and UMEs.-----While NJ strandings are relatively common, common dolphins are very abundant and primarily occur on the outer shelf well beyond state waters.-----Not listed as federally endangered, and are quite prevalent throughout their range of distribution. For a higher confidence level specific to NJ waters, more information is needed on their occurrence within state waters.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine a population status. There have been strandings of this species, however, it is generally believed to be pelagic in nature and not likely to inhabit State waters.-----Size and weight should be in both metric and standard or at the very least consistent among data sheets. Corrections to your fact sheet need to be addressed: In the fact sheet you list the long-beaked (*D. capensis*) as the coastal species. We have the short-beaked (*D. delphis*) off our coast found on the shelf and coastal waters all winter to Georges bank. Range from Florida to Newfoundland however sighting south of North Carolina are less frequent. During the summer they

move more offshore and to the Gulf of Maine, northeast Georges and Scotian shelf. The quote about two genetic species is in accurate. The thought is that there are three possible species: *D. delphis*, *Capensis*, and *tropicalis*, with the latter two thought to be mort (?), Calving can be year-round.

**Round 2 Comments:** The presence of this species in NJ waters is primarily based on stranding records, which is similar to the situation in adjacent states. At this time there are no scientific data (i.e., genetics or morphometrics) to confirm the presence of two genetic forms in this region.

“Occur in NJ problems with bycatch and UMEs.” Common dolphins occur very rarely, if at all, in New Jersey state waters, except as strandings. The estimated abundance of common dolphins in survey area Gx (waters shallower than 20 fathoms off New Jersey) was 622 in winter, 0 in spring, 0 in summer, and 0 in fall (Kenney et al., 1985: p. 93), but they occur almost entirely on the outer shelf and far from state waters (CETAP, 1982; Waring et al., 2007; Whitaker et al., in prep). Average annual fishery-related mortality for 2002-2006 was 161, with only 2 from the mid-Atlantic gillnet fishery, from a total population of nearly 121,000 (Waring et al., 2007). Unless there is clear evidence, it should not be presumed that UMEs represent anything other than natural mortality.

“For a higher confidence level specific to NJ waters, more information is needed on their occurrence within state waters.” See previous. There is disagreement about whether *D. tropicalis* is a valid species or a very-long-beaked subspecies of *D. capensis*, but in either case it is restricted to the Indian Ocean. There are no confirmed records of *D. capensis* anywhere in the North Atlantic. Common dolphins are an offshore species that does not occur in state waters. Beyond state waters their status would be classed as Stable.-----The thought is that there are three possible species: *D. delphis*, *Capensis*, and *tropicalis*, with the latter two thought to be more related.

**Round 3 Comments:** Common dolphins occur very rarely, if at all, in New Jersey state waters, except as strandings. The estimated abundance of common dolphins in survey area Gx (waters shallower than 20 fathoms off New Jersey) was 622 in winter, 0 in spring, 0 in summer, and 0 in fall (Kenney et al., 1985: p. 93), but they occur almost entirely on the outer shelf and far from state waters (CETAP, 1982; Waring et al., 2007; Whitaker et al., in prep).-----There seems to be enough evidence to state that this species is primarily pelagic and doesn’t occur within State waters, therefore, NA would be appropriate. Assigning a status of ‘Stable’ based on an offshore population doesn’t coincide with a review of status in State waters. Is the goal of this process to assign a status overall for the species or a status for NJ waters?-----Because the 2006 SARS reports a stable status for *D. delphis* and they most commonly occur beyond New Jersey state waters (0-3nm), a stable status is appropriate.-----Recent genetic analysis and skull morphometrics failed to provide evidence (p>0.05) of more than a single population in the western North Atlantic, supporting the proposed one stock model (Westgate 2005). The species is primarily seen in NJ shelf-break waters and annually fewer than 10 animals strand in NJ. Based on their occasional presence in NJ waters the **S** status is appropriate.

[Westgate, A. J. 2005. Population structure and life history of short-beaked common dolphins (*Delphinus delphis*) in the North Atlantic. Ph.D thesis.] Nicholas School of the Environment and Earth Sciences, Duke University, Beaufort, NC.

----- The recent mass stranding of common dolphins in Jan of 07 indicate that these animals may be using more of these coastal waters.

**Round 4 Comments:**

While this species may occur in NJ waters through strandings, it sounds like they typically occur further offshore than 3 nm. I think that the designation can change if information is found that would determine that this species is found within NJ waters.-----The species is primarily found in offshore/pelagic waters. The abundance estimates from CeTAP (late 1970’s) are too old to be useful, and more current NMFS summer surveys indicate that this species is not found in mid-Atlantic coastal waters. Annually, few common dolphins strand along the NJ coast, which infers that the species is not common in coastal waters. Information being collected for the NJ wind farm site may provide new distributional data for this species-----I didn’t see enough evidence cited that this species occurs in NJ state waters as it is pelagic in nature. I think a status of NA applies here. If they did occur in state waters then ‘stable’ could be applied, but assigning a status of ‘stable’ based on an offshore population doesn’t coincide with a review of status in state waters.

**North Atlantic Right Whale (*Eubalaena glacialis*)**

**Consensus: Endangered**

Status	# of People	Confidence Level
E	13	7.5
T		
SC		
S		
U		
NO		
NA		

**Round 1 Comments:** Any species that are listed on the Federal ESA that occur in NJ waters should be listed on the state’s endangered species list and currently are. Right whales are critically endangered and efforts to help recover this species must be coordinated

nationally and internationally. Right whales are covered by the Atlantic Large Whale Take Reduction Plan to address interactions between large whales and commercial fisheries.-----The endangered status of Northern Right Whale is well documented.-----Based on 28 year long photo id program and incidental take through ship collisions and entanglement in fixed fishing gear throughout its range.-----As noted in the NMFS “U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments – 2006,” (Waring et al., 2007), the size of this stock is considered to be extremely low relative to its optimum sustainable population level (OSP) in the U.S. Atlantic EEZ, and this species is listed as endangered under the Endangered Species Act (ESA). This is a strategic stock under the Marine Mammal Protection Act (MMPA) as the average annual human-related mortality and serious injury exceeds the potential biological removal (PBR) level for right whales and it is an endangered species (Waring et al., 2007). Thus, this is a species that warrants immediate action throughout its range to avoid extinction.-----Federally listed species; susceptible to injury/mortality in US coastal waters.----- Critically low population subject to ship strike mortality. NJ waters may function as a migration corridor. -----Occurs in, moves through NJ. Severely depleted and affected by human interactions.-----Occurrences of live right whales in NJ state waters are rare, but they are the most critically endangered marine mammal in the North Atlantic, their expected occurrence would be during seasons when observers are least likely to be on the water, they migrate between known calving grounds in the Southeast and known feeding grounds off New England, their sightability during migratory transits is low, they are known to travel near the shore at least some of the time, and the spring migrants include mother-calf pairs, the most vulnerable component of the population.-----Population remains critically endangered even though efforts have been made to reduce human-induced mortality rates.-----Currently there are no research efforts targeting this species in Delaware waters, however, this species was once so plentiful that it supported a commercial whaling industry in Delaware during the 17<sup>th</sup> century. A recent record from January of 1994 was a juvenile which swam up the Delaware River and remained in the estuary for 10 days. The New England Aquarium’s Right Whale Research project later identified this individual as eleven month old male “Shackleton”. There is also a stranding reported from 1991. If historical information is used as a baseline for population trends, then population levels of this species have been significantly reduced in Delaware. RD - The SAS system and survey effort coupled with opportunistic sighting has shown that right whales are still using coastal waters. Numerous animals have been reported in the New York Bight and near shipping lanes.

**Pygmy Killer Whale (*Feresa attenuata*)**

**Consensus: Not Applicable**

Status	# of People	Confidence Level
E		
T		
SC		
S		
U		
NO	5	
NA	8	6.6

**Round 1 Comments:** It doesn’t appear from the 2006 SAR that much is known about this species and sightings are rare. I think if they were a species found commonly in NJ that there would be at least some sightings records. Therefore, I recommend removing this species from consideration, but will defer to biologists who are more familiar with this species.-----Species occupies offshore warm water habitats and is rarely sighted in NMFS surveys off the northeast US coast.-----Distribution and population poorly understood in western Atlantic.-----Small pop’n; little known, not strategic.-----Not known to occur in NJ waters.-----Occurrence in NJ state waters is rare.----- Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. There are no reported strandings of this species and it is generally believed to be pelagic in nature and not likely to inhabit Delaware State waters.

**Round 2 Comments:** In the last sentence, I would change the word Delaware to NJ.-----This species is rarely sighted in US Atlantic shelf waters, thus it is unlikely to be found in NJ waters.

**Short-finned Pilot Whale (*Globicephala macrorhynchus*)**

**Status: Undetermined**

Status	# of People	Confidence Level
E		
T		
SC		
S	1	-
U	9	6.2
NO	2	
NA		

**Round 1 Comments:** From the 2006 SAR, it is difficult at sea to differentiate between long-finned and short-finned pilot whales. It appears that the distribution of both these species is along the continental shelf and not necessarily in NJ state waters. However, I would defer to biologists who are more familiar with these two species.-----Short-finned and long-finned pilot whales are difficult to differentiate at sea. NMFS abundance estimates are pooled, but recent studies should help to delineate stock structure. Both species are likely to occur in NJ.-----This and next lumped in NOAA Stock assessment, due to difficulties of ID in field. Both classified same. Occur in NJ, but no strandings here (though mass strandings in MA, VA).----- Pilot whale stocks appear to be relatively stable and they are primarily residents of the outer shelf beyond state waters, but the mid-Atlantic is the zone of overlap between the two species, which are difficult to impossible to differentiate at sea. The identification issue makes it difficult to make any conclusions about either species.-  
-----NMFS considers this stock non-depleted, however: Serious injuries and mortalities in the pelagic longline and Atlantic trawl gear fishery are primarily limited to the Mid-Atlantic Bight (NJ →

NC). [http://www.nmfs.noaa.gov/pr/pdfs/interactions/pltrp\\_draft\\_8June06.pdf](http://www.nmfs.noaa.gov/pr/pdfs/interactions/pltrp_draft_8June06.pdf)

-----Not listed as federally endangered, and are quite prevalent throughout their range of distribution. For a higher confidence level specific to NJ waters, more information is needed on their occurrence within state waters.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. There has been occasional strandings of this species, however, it is generally believed to be pelagic in nature and not likely to inhabit State waters. Since 1992, there have been occasional sighting reports from anglers and divers offshore but it is unknown if these were short-finned or long-finned pilot whales.-----An understanding as to where the long and short finned pilot whale stocks overlap is poorly understood. Genetic material should be collected for all stranding to be provided to research efforts by NEFSC.

**Round 2 Comments:** Because of difficulties in separating the two species, the status must be unknown. Further, NJ waters likely represent the northern range of this species, which has a preference for warm temperate/tropical waters. There are no confirmed strandings or bycatch in NJ waters.

*“Both species are likely to occur in NJ.”* However neither species is likely to occur in New Jersey state waters except as strandings, as both are outer-shelf and shelf-break residents (CETAP, 1982; Waring et al., 2007; Whitaker et al., in prep.). The estimated abundance of pilot whales (not differentiated to species) in survey area Gx (waters shallower than 20 fathoms off New Jersey) was 170 in winter, 0 in spring, 0 in summer, and 0 in fall (Kenney et al., 1985: p. 88).

*“Occur in NJ, but no strandings here (though mass strandings in MA, VA).”* In the absence of voucher specimens (either skulls or DNA), it should not be presumed that every stranding identified as a long-finned pilot whale was correctly identified. In fact, there are short-finned pilot whales in the stranding records for New Jersey (and Rhode Island), and more short-finned than long-finned specimens in the fishery bycatch records for offshore of New Jersey. Mass strandings in Massachusetts are the long-finned species.

*“For a higher confidence level specific to NJ waters, more information is needed on their occurrence within state waters.”* See above. The pilot whales pose a difficult classification question. Since they do not normally occur in New Jersey state waters, a Not Applicable status for both could easily be argued. Alternatively, since there is no evidence for population declines or high levels of anthropogenic impacts which might lead to declines, a Stable status for both would be justifiable if the classification covered beyond state waters. Finally, one might conceivably assign Unknown status to both because of the inability to differentiate the two.

**Round 3 Comments:**

Finally, one might conceivably assign Unknown status to both because of the inability to differentiate the two. Because of difficulties in separating the two species, the status must be unknown.-----Taking into account the difficulty in identifying short versus long-finned pilot whales, there is insufficient data to designate a “stable” status within New Jersey state waters, and the overall results of the 2006 SAR suggests the same.-----As noted in Round 1 and 2 Comments, it is difficult to visually separate the two species of pilot whales found off the northeast US. Therefore, NMFS applies identical abundance and by-catch estimates to each species. Genetic studies are underway to help delineate the geographic boundaries for the two stocks. NMFS also collects tissue samples from bycaught and stranded animals. Therefore, the status is **U**.

**Round 4 Comments:**

Since it’s difficult to differentiate between this species and long-finned pilot whales, it might be best to consider this species “unknown” in NJ waters until more information can be obtained.-----NMFS is conducting tissue sampling to help delineate the geographic

boundaries between short-finned and long-finned pilot whales. However, based on the known habitat preference it is unlikely that this species has a significant presence in NJ waters.-----Most of the comments received thus far seem to point towards a status of ‘U’ as there is difficulty in positive ID of this species and therefore a gap in information regarding population status. They are primarily considered pelagic although some reviewers stated in other rounds that they occur in NJ waters.

**Long-finned Pilot Whale (*Globicephala melas*)**

**Status: No Consensus**

Status	# of People	Confidence Level
E		
T		
SC		
S	2	5.0
U	8	8.1
NO	2	
NA		

**Round 1 Comments:** From the 2006 SAR, it is difficult at sea to differentiate between long-finned and short-finned pilot whales. It appears that the distribution of both these species is along the continental shelf and not necessarily in NJ state waters. However, I would defer to biologists who are more familiar with these two species.-----Short-finned and long-finned pilot whales are difficult to differentiate at sea. NMFS abundance estimates are pooled, but recent studies should help to delineate stock structure. Both species are likely to occur in NJ.-----Same comments as short-finned pilot whale; lumped in NOAA assessment. -----Pilot whale stocks appear to be relatively stable and they are primarily residents of the outer shelf beyond state waters, but the mid-Atlantic is the zone of overlap between the two species, which are difficult to impossible to differentiate at sea. The identification issue makes it difficult to make any conclusions about either species.-----NMFS considers this stock non-depleted, however:  
Serious injuries and mortalities in the pelagic longline and Atlantic trawl gear fishery are primarily limited to the Mid-Atlantic Bight (NJ → NC). [http://www.nmfs.noaa.gov/pr/pdfs/interactions/pltrp\\_draft\\_8June06.pdf](http://www.nmfs.noaa.gov/pr/pdfs/interactions/pltrp_draft_8June06.pdf)  
Not listed as federally endangered, and are quite prevalent throughout their range of distribution. For a higher confidence level specific to NJ waters, more information is needed on their occurrence within state waters.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. There has been occasional strandings of this species, however, it is generally believed to be pelagic in nature and not likely to inhabit State waters. Since 1992, there have been occasional sighting reports from anglers and divers offshore but it is unknown if these were short-finned or long-finned pilot whales.-----An understanding as to where the long and short finned pilot whale stocks overlap is poorly understood. Genetic material should be collected for all stranding to be provided to research efforts by NEFSC.

**Round 2 Comments:** See short-finned pilot whales.

**Round 3 Comments:**

Same reasoning as above for short-finned pilot whales.-----See short finned pilot whales.-----See short-finned pilot whale.

**Round 4 Comments:**

Since it’s difficult to differentiate between this species and short-finned pilot whales, it might be best to consider this species “unknown” in NJ waters until more information can be obtained.-----As noted in the short-finned PW comments, NMFS is conducting stock identification studies for the two species found in US Atlantic waters.-----Most of the comments received thus far seem to point towards a status of ‘U’ as there is difficulty in positive ID of this species and therefore a gap in information regarding population status. They are primarily considered pelagic although some reviewers stated in other rounds that they occur in NJ waters

**Risso’s Dolphin (*Grampus griseus*)**

**Status: No Consensus**

Status	# of People	Confidence Level
E		
T		
SC		
S		
U	4	7.0
NO	3	
NA	5	6.6

**Round 1 Comments:** This species appears to primarily occupy the continental shelf and occurs further offshore than NJ state waters. I would recommend “not applicable” but would defer to biologists who are more familiar with this species.-----Principally an offshore species, and NMFS abundance estimates are insufficient to determine trends.-----Pretty far out/Gulf stream-associated; low mortality.-----Outer shelf/shelf break resident, with the only significant impacts in the pelagic long-line fishery.-----NMFS considers this stock non-depleted, however: Serious injuries and mortalities in the pelagic longline fishery are primarily limited to the Mid-Atlantic Bight (NJ → NC). [http://www.nmfs.noaa.gov/pr/pdfs/interactions/pltrp\\_draft\\_8June06.pdf](http://www.nmfs.noaa.gov/pr/pdfs/interactions/pltrp_draft_8June06.pdf)

-----Occurs in more offshore waters, however, very little is known about occurrence and distribution in Atlantic.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. There have been occasional strandings of this species, however, it is generally believed to be pelagic in nature and not likely to inhabit State waters.-----Little is known about this species and more survey effort is needed. It is unlikely to see this animal in the near shore environment. Recent years have recorded unusual increase in stranding in the Northwest Atlantic during 2003 and 2004. This trend has leveled off but is still occurring at a higher rate. As these animals are usually seen on the shelf break (DiGiovanni 2005 tracking of a rehabilitated Risso’s) their occurrence in strandings is unusual. This could suggest seasonal shift due to environmental factors not yet understood. Without more survey effort, it is problematic to assess their status or issues. Conservation efforts for other species will help this animal as well.

**Round 2 Comments:** “Occurs in more offshore waters, however, very little is known about occurrence and distribution in Atlantic.” It is true that Risso’s dolphins are offshore residents; their estimated abundance in survey area Gx (waters shallower than 20 fathoms off New Jersey) was 0 in winter, 0 in spring, 0 in summer, and 0 in fall (Kenney et al., 1985: p. 89). However there is ample information on their occurrence off the US East Coast (CETAP, 1982; Waring et al., 2007; Whitaker et al., in prep.).

“Little is known about this species and more survey effort is needed.” See previous.

Since there is no evidence for any decline in the population or substantial impacts that might lead to a decline, if the status is something other than Not Applicable it should be Stable.

**Round 3 Comments:**

There have been occasional strandings of this species, however, it is generally believed to be pelagic in nature and not likely to inhabit State waters.-----Little is known about this species and more survey effort is needed. It is unlikely to see this animal in the near shore environment.

Just because a stranding occurs within a state or its state waters doesn’t necessarily mean the animal occurs within state waters.-----Unless there is more evidence to the contrary, it appears from information gathered in Rounds 1 & 2 that this species occurs primarily offshore out of state waters.-----This species is principally found in shelf-edge and deeper oceanic waters. Most fishery interactions are with the pelagic long line fishery. It is rarely seen during on-shelf abundance surveys, particularly along the coast. However, a few animals strand annually in most mid Atlantic states. Either **U** or **NA** could be reasonably applied to this species. Given the preference for pelagic waters, **NA** is the appropriate status.----- In recent years the stranding have increased throughout the season.

**Round 4 Comments:**

This is typically an offshore species. It is generally believed to be pelagic in nature and not likely to inhabit State waters. As such, this species should be considered NA. If information is obtained that would suggest otherwise, the status can be changed at a later date.-----We have observed an increase in pelagic species stranding in recent years. It is not understood why this is occurring.-----Risso’s dolphin primarily occupies deeper shelf-edge and oceanic waters. The species occasionally strands in the NY to Delaware region.-----Additional data are needed for nearly all of the species that were part of this process, however, there seems to be enough agreement that this species is pelagic and doesn’t occur in NJ state waters.

**Gray Seal (*Halichoerus grypus*)**

**Consensus: Stable**

Status	# of People	Confidence Level
E		
T		
SC		
S	7	7.1
U	1	7.0
NO	5	
NA		

**Round 1 Comments:** I don’t feel like I have enough expertise in this species to determine a status listing in NJ.----- Increasing population growth data from Canadian Maritimes and New England.-----Population in US waters appears to be increasing and expanding its range. Major pupping colony off Massachusetts coast.-----Increasing in numbers within NJ.-----Population extends south to NJ in winter, other. Consistent strandings in NJ. Sensitive to recent UMEs and ice changes.-----Sable Island, Massachusetts, and Maine pupping populations are all increasing. Animals in the mid-Atlantic tend to be mostly young-of-the-year during the post-weaning period.-----Gray seals that occur in Delaware have been largely juveniles which migrated from northern breeding grounds. It is unknown how long these individuals

remain in Delaware but believed that they most likely return northward when water temperatures rise (if not before). Several have been transported to rehabilitation facilities in other states. Other than stranding response efforts and a few reported sightings there is no other population status data. Breeding does not occur in Delaware. Available data is insufficient for assigning a population status in Delaware. There is a perceived increase in the number of strandings/sightings but it is unknown if this is due more to an increase in public awareness and reporting or to an increased presence.-----Size and weight should be in both metric and standard or at the very least consistent among data sheets. As pupping increases on Muskeget Island off MA the occurrence of these animals will increase in local waters. The NY stranding program observed gray seals year round on the eastern end of Long Island, gull and plum Islands. An additional animal radio tagged by the NY stranding program was observed in South NJ during the early summer.

**Northern Bottlenose Whale (*Hyperoodon ampullatus*)**

**Consensus: Not Applicable**

Status	# of People	Confidence Level
E	1	8
T		
SC		
S		
U		
NO	2	
NA	10	6.6

**Round 1 Comments:** According to the 2006 SAR, this is a deep-water species that isn't sighted very often. I would recommend "not applicable" as there has most likely never been a sighting of this species in NJ waters. Plus, little information is known about the status and population size of this species as it is rarely sighted.-----Listed as species of special concern in Canada. Prefers cold temperate deep-water habitats.-----Primarily an offshore, deep sea species.-----Probably not in NJ (George's Bank, Canada); depleted and U in NOAA; very deep distribution.-----Offshore resident; closest known population is in the Gully off Nova Scotia, only one sighting record in the U.S. mid-Atlantic.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine a population status. There are no reported strandings of this species and it is generally believed to be pelagic in nature and not likely to inhabit State waters.-----Recent stranding data has reported strandings. However these occurrences are rare. As little is know about this species any survey effort would increase our knowledge on their distribution. New Jersey is thought to by the southern portion of their summer range in the area of Hudson Canyon.

**Round 2 Comments:** Prefers deep waters which do not exist within NJ state waters, therefore a status of NA is appropriate.----- The distribution of this species is largely confirmed to offshore and cold temperate waters, and is unlikely to utilize shelf waters in the US mid-Atlantic region.

*"Plus, little information is known about the status and population size of this species as it is rarely sighted."* There is a great deal of information on status and abundance, and it all applies to Canadian populations.

*"As little is known about this species any survey effort would increase our knowledge on their distribution. New Jersey is thought to by the southern portion of their summer range in the area of Hudson Canyon."* No matter how much survey effort increases, if a species is not present you won't learn anything new about their distribution. There are no records of northern bottlenose whales in or near Hudson Canyon, despite multiple summer stock assessment surveys by NMFS since the early 1990s; the closest are a capture and two strandings in Rhode Island in 1867 and a sighting near the shelf break due east of Cape May in June 1981. A dedicated survey, for beaked whales in general and bottlenose whales in particular, along the entire shelf break as far south as North Carolina by a vessel from Dalhousie University failed to sight any bottlenose whales west of the Nova Scotian Shelf.

**Pygmy Sperm Whale (*Kogia breviceps*)**

**Status: Not Applicable**

Status	# of People	Confidence Level
E		
T		
SC		
S		
U	1	6
NO	3	
NA	8	6.3

**Round 1 Comments:** I don't believe pygmy or dwarf sperm whales are found particularly close to shore and are more offshore species. I would defer to biologists who are more familiar with these two species but I don't believe that they should be considered marine mammal species of NJ.-----NMFS abundance estimates are pooled for pygmy and dwarf sperm whales because they are difficult to differentiate at sea. Both species prefer warm water habitats.-----Need more info; strategic due to high fishery-related mortality.-----Uncommon offshore resident in the mid-Atlantic, but there are questions about the species identity of sighted and stranded individuals.-  
----Very little known about abundance throughout range, especially in NJ waters.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine a population status. There have been occasional individual strandings, and also a female with a calf in 1995 that initially stranded alive. However, this species is generally believed to be pelagic in nature and not likely to inhabit State waters.-----This species has been encountered by stranding programs however, normal distributional data has them south of VA.

**Round 2 Comments:** Although found to be primarily pelagic, it appears as if we need more information on this species to make a determination as to their status in state waters. Since the last Delphi round, there was another live stranding of a female and calf well upstream within the Delaware Estuary.-----

"Need more info; strategic due to high fishery-related mortality." While it is true that the stock has been designated as strategic because average fishery mortality (=6, based on a single animal taken in one year in the pelagic long-line fishery) exceeds PBR (=2), there is not any real concern for the stock. It is clear that the estimated abundance (395 for both *Kogia* species combined) has a substantial negative bias because these animals simply are very difficult to detect at sea. *Kogia* sp. is consistently the second most common stranded cetacean in the Southeast, which obviously could not be sustained if the population was truly only a few hundred animals. Both *Kogia* species are offshore residents, and more common in warmer waters to the south. An Unknown status based on species identification issues might be argued, however they are so similar in occurrence and biology that lumping them together is not that much of a stretch.

**Round 3 Comments:**

However, this species is generally believed to be pelagic in nature and not likely to inhabit State waters.-----This species has been encountered by stranding programs however, normal distributional data has them south of VA.-----This species is principally found in warmer shelf-edge and deeper oceanic waters. Given the preference for warmer pelagic waters, **NA** is the appropriate status.

**Round 4 Comments:**

This species is generally believed to be pelagic in nature and not likely to inhabit State waters. If information is gathered in the future that would suggest that this species inhabits state waters, its status should be changed.-----This species has a preference for deep waters in tropical to warm temperate regions.-----Additional data are needed for nearly all of the species that were part of this process, however, there seems to be enough agreement that this species is pelagic and doesn't occur in NJ state waters except as stranded individuals.

**Dwarf Sperm Whale (*Kogia sima*)**

**Status: Not Applicable**

Status	# of People	Confidence Level
E		
T		
SC		
S		
U	1	6
NO	2	
NA	9	6.6

**Round 1 Comments:** I don't believe pygmy or dwarf sperm whales are found particularly close to shore and are more offshore species. I would defer to biologists who are more familiar with these two species but I don't believe that they should be considered marine mammal species of NJ.-----NMFS abundance estimates are pooled for pygmy and dwarf sperm whales because they are difficult to differentiate at sea. Both species prefer warm water habitats.-----Very deep.-----Uncommon offshore resident in the mid-Atlantic, but there are questions about the species identity of sighted and stranded individuals.-----Very little known about abundance throughout range, especially in NJ waters.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine a population status. There are no reported strandings of this species on the Delaware coast, however, it is generally believed to be pelagic in nature and not likely to inhabit State waters.-----Encountered in waters south of VA and along the shelf break.

**Round 2 Comments:** Still put 'NA' but could maybe also go with 'U'. This species inhabits deep pelagic water and likely does not occur within State waters, however as several reviewers pointed out, this species can get misidentified as a pygmy sperm whale. Clearly, more research is needed (as is the case with most species on this list).

“Encountered in waters south of VA and along the shelf break.” There are two *K. sima* stranding records for Rhode Island (and two *K. breviceps*). The distribution is actually well offshore of the shelf break, out to at least the Gulf Stream (Waring et al., 2007). See *Kogia breviceps*.

**Round 3 Comments:**

There are no reported strandings of this species on the Delaware coast, however, it is generally believed to be pelagic in nature and not likely to inhabit State waters.-----This species is principally found in warmer shelf-edge and deeper oceanic waters. Given the preference for warmer pelagic waters, **NA** is the appropriate status.

**Round 4 Comments:**

This species is generally believed to be pelagic in nature and not likely to inhabit State waters. If information is gathered in the future that would suggest that this species inhabits state waters, its status should be changed.-----This species has a preference for deep waters in tropical to warm temperate regions.-----Additional data are needed for nearly all of the species that were part of this process, however, there seems to be enough agreement that this species is pelagic and doesn’t occur in NJ state waters except as stranded individuals.

**Atlantic White-sided Dolphin (*Lagenorhynchus acutus*)**

**Status: No Consensus**

Status	# of People	Confidence Level
E		
T		
SC		
S	3	6.3
U	1	
NO	3	
NA	5	6.4

**Round 1 Comments:** I am unfamiliar with the distribution of this species and will defer to biologists who have more knowledge on this particular species relative to its occurrence in NJ waters.-----NMFS abundance estimates are insufficient to determine trends in US waters.-----Not many in NJ (mostly ME, Canada); few strandings in VA, NC.-----White-sided dolphins are abundant and mainly Gulf of Maine residents, but do occur in the mid-Atlantic in winter-spring, though rarely near NJ. Fishery-related mortality in the mid-Atlantic is primarily in mid-water fisheries, not in the coastal gillnet fishery that might be a concern in state waters.----- Stock not depleted according to NMFS. However, susceptible to injury and mortality in the Atlantic Trawl Gear fishery. [http://www.nero.noaa.gov/prot\\_res/atgtrp/](http://www.nero.noaa.gov/prot_res/atgtrp/)

-----Not listed as federally endangered, and are quite prevalent throughout their range of distribution. For a higher confidence level specific to NJ waters, more information is needed on their occurrence within state waters.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. There have been occasional strandings of this species, however, it is generally believed to be pelagic in nature and not likely to inhabit State waters.-----Atlantic White-sided are encountered by stranding programs in NY and NJ. These animals are encountered on a year round basis along the shelf break from Hudson canyon north to the Gulf of Maine.

**Round 2 Comments:**

There doesn’t seem to be sufficient evidence to indicate what the status of this species should be in NJ waters. Although more pelagic in nature and not expected to occur within state waters, more research is needed to determine their status. GW - This species is commonly seen in waters off the New England coast, primarily the Gulf of Maine. South of New England, its presence is mainly know through strandings records. Data are insufficient to assign a stable status.-----

“NMFS abundance estimates are insufficient to determine trends in US waters.” It is, in fact, very difficult to ever detect a trend if a population is stable; the null hypothesis for regression analysis is that slope=zero.

“For a higher confidence level specific to NJ waters, more information is needed on their occurrence within state waters.” See CETAP (1982), Selzer & Payne (1988), Waring et al. (2007), and Whitaker et al. (in prep.) for extensive information. However, their occurrence is beyond state waters. The estimated abundance of Atlantic white-sided dolphins in survey area Gx (waters shallower than 20 fathoms off New Jersey) was 0 in winter, 0 in spring, 0 in summer, and 0 in fall (Kenney et al., 1985: p. 91).

“These animals are encountered on a year round basis along the shelf break from Hudson canyon north to the Gulf of Maine.” They do occur year-round, but not necessarily at the shelf break; they are more broadly scattered across the middle and outer shelf and in low numbers.

The only alternative to Not Applicable status would be Stable.

**Round 3 Comments:**

However, their occurrence is beyond state waters. The estimated abundance of Atlantic white-sided dolphins in survey area Gx (waters shallower than 20 fathoms off New Jersey) was 0 in winter, 0 in spring, 0 in summer, and 0 in fall (Kenney et al., 1985: p. 91).“These

animals are encountered on a year round basis along the shelf break from Hudson canyon north to the Gulf of Maine.” They do occur year-round, but not necessarily at the shelf break; they are more broadly scattered across the middle and outer shelf and in low numbers.-----This species is not likely to inhabit coastal waters because it is primarily pelagic. I don’t think assigning a status of ‘Stable’ based on an offshore population is appropriate for this review which is based on status in State waters. Is the goal of this process to assign a status overall for the species or a status for NJ waters?-----Not listed as federally endangered, and are quite prevalent throughout their range of distribution.-----Off the northeast US coast, the distribution is centered in the Gulf of Maine, but seasonally it does extend to LI and perhaps NJ in on-shelf waters. Given the uncertainty regarding trends in recent NMFS abundance, the **U** status is appropriate.

**Round 4 Comments:**

I believe this species is found further offshore than NJ state waters. If information is collected in the future to suggest otherwise, its status should be changed to reflect that.-----Agree with comments above.-----This species occasionally strands in the New York to Delaware region, and is bycaught in several mid-Atlantic trawl fisheries. It is an uncommon species in NJ waters based on survey data.-----Additional data are needed for nearly all of the species that were part of this process, however, there seems to be enough agreement that this species is pelagic and doesn’t occur in NJ state waters. I don’t think a status of “stable” should be applied if this status is based on an offshore population that does not occur in NJ state waters.

**White-beaked Dolphin (*Lagenorhynchus albirostris*)**

**Consensus: Not Applicable**

Status	# of People	Confidence Level
E		
T		
SC		
S		
U	1	7
NO	2	
NA	8	7.0

**Round 1 Comments:** I am unfamiliar with the distribution of this species and will defer to biologists who have more knowledge on this particular species relative to its occurrence in NJ waters.-----Prefers cold water habitats and in US Atlantic waters it is rarely sighted south of the Gulf of Maine.-----Extralimital occurrence NJ waters.-----Mostly north (southern New England to Greenland); limited distance probably due to food. Some NY, MA strandings.-----Primarily residents of Canadian waters.-----Rare occurrence in NJ waters.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. This species is generally believed to be pelagic in nature and not likely to inhabit State waters.-----Occurrences of this species are rare. However over the last five years the stranding program in NY has recovered one animal.

**Round 2 Comments:** Indications from the NMFS stock assessment (and other reviewers) are that this species occurs north of Gulf of Maine and in deep offshore waters.-----This cool water species is infrequently sighted in the Gulf of Main and Georges Bank waters. It is unlikely to have a presence in NJ waters.-----

“Some NY, MA strandings”. I am aware of only one New York stranding record—19 February 2002 at Fort Tilden, Gateway National Recreation Area, Rockaway.

“Rare occurrence in NJ waters.” Very rare—once! A decomposed carcass stranded in Edison, about 15 km up the Raritan River, in July 1997.

Rare occurrences, not really a species encountered.

**Round 3 Comments:**

Rare occurrences, not really a species encountered.-----This species is not likely to inhabit coastal waters because it is primarily pelagic. I don’t think assigning a status of ‘Stable’ based on an offshore population is appropriate for this review which is based on status in State waters. Is the goal of this process to assign a status overall for the species or a status for NJ waters?-----This species is normally found in cold temperate waters and historically it was found in northern New England. However, any sighting in NJ coastal waters would be considered to be extralimital. Therefore, **NA** is the most appropriate assignment.

**Humpback Whale (*Megaptera novaeangliae*)**

**Consensus: Endangered**

Status	# of People	Confidence Level
E	11	7.1
T	1	6
SC		
S		
U		
NO		
NA	1	7

**Round 1 Comments:** Any species that are listed on the Federal ESA that occur in NJ waters should be listed on the state’s endangered species list and currently are. Humpback whales are covered by the Atlantic Large Whale Take Reduction Plan to address interactions between large whales and commercial fisheries.----- The threatened status of the humpback whale is well documented.-----Population growth rate on the increase. As noted in the NMFS “U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments – 2006,” (Waring et al., 2007), although recent estimates of abundance indicate continued population growth, the size of the humpback whale stock may be below the optimum sustainable population (OSP) level in the U.S. Atlantic EEZ. In particular, the continued high level of mortality among humpback whales off the U.S. mid-Atlantic states (Barco et al, 2002, as referenced in Waring et al., 2007) is a concern given that at least some of these animals are known to be from the Gulf of Maine population. Also, this species is a strategic stock because the average annual human-related mortality and serious injury exceeds the potential biological removal (PBR) level and because the North Atlantic humpback whale is an endangered species under the Endangered Species Act (ESA; Waring et al., 2007). Thus, this is a species that warrants immediate action throughout its range.-----Federally listed species.----- Population still recovering from commercial whaling pressure. NJ waters may be critical migration route and/or feeding habitat. Ship strike mortality has been documented.-----Lots of “human problems”, esp in mid-Atlantic (collision, entangling).-----The species is federally listed as endangered, although North Atlantic stocks are known to be increasing. Humpbacks occur very rarely in NJ state waters. There are occasional ship-strike mortalities in the mid-Atlantic, but fishery-related mortality in the mid-Atlantic seems to involve primarily juvenile animals that sometimes feed near shore in winter well south of NJ in Virginia and the Carolinas.-----NMFS designated as depleted and endangered throughout its range.-----Listed as federally endangered and population estimates are fairly low, but need further information on occurrence and distribution in New Jersey waters to make a more informed decision.-----Currently there are no research efforts targeting this species in Delaware waters. It is important to note that sightings are regularly reported within State waters along the Atlantic Coast and within the Delaware Bay during spring and fall migratory periods. There are also historical accounts of this species seasonally inhabiting the Delaware Bay. Both adults and juveniles have stranded on the coast of Delaware. Currently there is a lack of baseline data to determine population trends in Delaware waters, but with the annual occurrence of this species and potential mortal threats, it should at least be a species of special concern.-----Numerous humpback whales were observed in the New York Bight during the winter of 2005. Most sightings were >15 miles offshore. Sighting from shore have occurred in NY during the fall. Little is known about their seasonal movements.

**Round 2 Comments:**

Agree that if the species is federally listed as E and occurs within State waters that it should also be listed as E. During migratory periods, this species definitely occurs within Delaware state waters along the coast and within the mouth of the Delaware Bay, therefore, it must also occur within NJ State waters (eastern half of Delaware Bay is NJ). Also, reviewers have noted a high level of mortality off the US mid-Atlantic.-----Listed as federally endangered. Based on lack of information on occurrence and distribution in New Jersey waters, it may be precautionary to list similarly for state waters. However, it could be noted where the whales are typically sighted based on currently available information (e.g. as noted above).-----

*“NJ waters may be critical migration route and/or feeding habitat.”* There is no evidence that humpback whales migrate through New Jersey state waters. They don’t even occur in state waters except as strandings (CETAP, 1982; Whitaker et al, in prep). The estimated abundance of humpback whales in survey area Gx (waters shallower than 20 fathoms off New Jersey) was 0 in winter, 0 in spring, 0 in summer, and 0 in fall (Kenney et al., 1985: p. 79).

*“There are also historical accounts of this species seasonally inhabiting the Delaware Bay.”* I believe that the historical accounts are generally assumed to have referred to right whales, although Mead & Mitchell (1984) suggested they might actually have been North Atlantic gray whales, now extirpated.

*“Little is known about their seasonal movements.”* This is simply not the case. The seasonal migrations of humpback whales are among the best known for any marine mammal, although the exact routes between feeding and calving grounds are not well known.

If the official policy is to list as Endangered or Threatened any species that is so listed at the federal level and that might occur, even accidentally, in New Jersey waters, then humpback whale status should be Endangered. (Note that it is likely that NMFS will consider delisting North Atlantic humpbacks within the next several years. The immediate effect would be to change the recovery factor in the PBR calculation from 0.1 to 0.5. Using all the other numbers from the 2006 SAR (Waring et al., 2007), PBR would change from 1.3 to 6.5,

average mortality (3.0) would be below PBR, and it would not be a strategic stock.) If there is not such a policy, a population that has shown continued growth cannot be classified as anything other than Stable.-----Humpbacks have been encountered close to shore off Long Island and have been seen in Jones Inlet.

**Blainville’s Beaked Whale (*Mesoplodon densirostris*)**

**Consensus: Not Applicable**

Status	# of People	Confidence Level
E		
T		
SC		
S		
U	1	6
NO	4	
NA	8	7.4

**Round 1 Comments:** Beaked whales are fairly understudied and I believe they are found more in offshore waters. I will defer to the opinions of biologists who are more familiar with these species, but I believe that they rarely occur in NJ waters and thus I have assigned them with an “NA.” -----Offshore and deep-water species. -----Primarily an offshore, deep sea species.-----Blainsville’s, Gervais’ Beaked and True’s Beaked lumped in NOAA assessment as Mesopledon spp. All same U there.-----Strictly an offshore resident.-----Little is known but seems rare.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. There have been occasional strandings of this species, however, it is generally believed to be pelagic in nature and not likely to inhabit State waters.-----Recent stranding data has reported more beaked whales. However these occurrences are rare. As little is known about this species, any survey efforts would increase our knowledge on their distribution.

**Round 2 Comments:** All of the beaked whales are found only in deep waters from the shelf edge out, and do not occur in state waters.

**Gervais’ Beaked Whale (*Mesoplodon europaeus*)**

**Consensus: Not Applicable**

Status	# of People	Confidence Level
E		
T		
SC		
S		
U	1	6
NO	3	
NA	7	7.4

**Round 1 Comments:** Beaked whales are fairly understudied and I believe they are found more in offshore waters. I will defer to the opinions of biologists who are more familiar with these species, but I believe that they rarely occur in NJ waters and thus I have assigned them with an “NA.”-----Offshore and deep-water species.-----Primarily an offshore, deep sea species.-----Blainsville’s, Gervais’ Beaked and True’s Beaked lumped in NOAA assessment as Mesopledon spp. All same U there.-----Strictly an offshore resident.-----Little is known but seems rare.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. There have been occasional strandings of this species, however, it is generally believed to be pelagic in nature and not likely to inhabit State waters. As little is know about this species any survey effort would increase our knowledge on their distribution.

**Round 2 Comments:** All of the beaked whales are found only in deep waters from the shelf edge out, and do not occur in state waters.

**Round 3 Comments:** All of the beaked whales are found only in deep waters from the shelf edge out, and do not occur in state waters.--  
----If Blainsville’s is NA, so should this species as they are equally pelagic and rarely occur inshore. Little is known about these species because they occur in deep water.-----Consensus has been reached for both Blainville’s and Cuvier’s Beaked Whales as having a “Not Applicable” status – this species occurs in similar deep waters and should also receive “Not Applicable” for status.-----This species is principally found in shelf-edge and deeper oceanic waters. Given the preference for pelagic waters, NA is the appropriate status.

**True’s Beaked Whale (*Mesoplodon mirus*)**

**Consensus: Not Applicable**

Status	# of People	Confidence Level
E		
T		
SC		
S		
U	1	6
NO	3	
NA	7	7.4

**Round 1 Comments:** Beaked whales are fairly understudied and I believe they are found more in offshore waters. I will defer to the opinions of biologists who are more familiar with these species, but I believe that they rarely occur in NJ waters and thus I have assigned them with an “NA.”-----Offshore and deep-water species.-----Primarily an offshore, deep sea species.-----Blainsville’s, Gervais’ Beaked and True’s Beaked lumped in NOAA assessment as Mesopledon spp. All same U there.-----Strictly an offshore resident.-----Little is known but seems rare.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. There have been occasional strandings of this species, however, it is generally believed to be pelagic in nature and not likely to inhabit State waters.-----Recent stranding data has reported more beaked whales. However these occurrences are rare. As little is know about this species any survey effort would increase our knowledge on their distribution.

**Round 2 Comments:** All of the beaked whales are found only in deep waters from the shelf edge out, and do not occur in state waters.--  
---Rare occurrence have been observed in the stranding network.

**Round 3 Comments:**

All of the beaked whales are found only in deep waters from the shelf edge out, and do not occur in state waters.-----If Blainsville’s is NA, so should this species as they are equally pelagic and rarely occur inshore. Little is known about these species because they occur in deep water.-----Consensus has been reached for both Blainville’s and Cuvier’s Beaked Whales as having a “Not Applicable” status – this species occurs in similar deep waters and should also receive “Not Applicable” for status.-----This species is principally found in shelf-edge and deeper oceanic waters. Given the preference for warmer waters, **NA** is the appropriate status.

**Killer Whale (*Orcinus orca*)**

**Consensus: Not Applicable**

Status	# of People	Confidence Level
E		
T		
SC		
S		
U	1	6.0
NO	5	
NA	7	6.9

**Round 1 Comments:** As far as I know, killer whales are not sighted regularly in waters near NJ and I have assigned them with an “NA.” ---  
--Rarely sighted in NMFS Atlantic coast surveys.-----Accidental in NJ waters.-----NOAA assessment, and not strategic.-----Occurs accidentally in the mid-Atlantic.-----Rare occurrence in NJ waters.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. However, it is doubtful that this species occurs in Delaware waters. Due to the distinctiveness of this species, and public persona, if it did occur in Delaware waters there is a high probability that it would have been reported.-----The range of these animals does cover New Jersey however encounters are rare.

**Harp Seal (*Pagophilus groenlandicus*)**

**Status: No Consensus**

Status	# of People	Confidence Level
E		
T		
SC	1	6
S	3	7.3
U		
NO	5	
NA	3	7.7

**Round 1 Comments:** I believe harp seals are more of an ice seal species but will defer to biologists more familiar with seal species for harp seals.-----Population figures from Canada indicating a decline, likely due to overhunting.-----Extralimital presence in US Atlantic waters; population is closely monitored by Canadian scientists because species is commercially hunted.-----Stable numbers, but increased numbers, strandings in NJ. These ice seals expected to be negatively affected by ice change.-----Mid-Atlantic harp seals are mainly juveniles after their first winter, often those animals that have problems making the transition to feeding at deeper depths. Canadian stocks are very large and have been growing, though may now have stabilized.-----Harp seals that occur in Delaware have been largely juveniles which migrated from northern breeding grounds. It is unknown how long these individuals remain in Delaware but believed that they most likely return northward when water temperatures rise (if not before). Several have been transported to rehabilitation facilities in other states. Other than stranding response efforts and a few reported sightings there is no population trend data. Breeding does not occur in Delaware waters. Available data are insufficient for assigning a population status in Delaware.-----This is a species of concern based on the increase in strandings. This species has a different behavior than the harbor seal and would allow the public to approach closer. This will lead to an increase in harassment issues.

**Round 2 Comments:** Strandings of this species have increased sharply in NJ and mid-Atlantic region, sometimes outnumbering strandings of harbor seals (formerly most abundant) in NJ. Although breed on ice, climate change is expected to affect these seals negatively. These are important to watch.-----Put 'NO' as I am going to defer to other reviewers (especially those in NJ and NY who should be able to determine a status for NJ). We can't use what is known about this species in Delaware to form an opinion because there are no research efforts designed to determine population trends, just stranding response and antidotal sightings.-----Recent strandings suggest that tens of animals occupy NJ waters on a seasonal basis. They have a strictly extralimital presence in US Atlantic waters.-----

*"Population figures from Canada indicating a decline, likely due to overhunting."* On the contrary, populations are increasing even with a substantial hunting rate; the 2000 estimate was 5.5 million and the 2004 estimate was 5.9 million (Waring et al., 2007).

*"These ice seals expected to be negatively affected by ice change."* Not relevant to New Jersey.

Harp seals in US mid-Atlantic waters appear to be primarily vagrant juveniles in their first or second years. Despite substantial takes by hunting, the abundance in Canada continues to increase. Stranding mortality in the US should be considered as natural mortality. In fact, one could argue that rehabilitation efforts might be counter-productive in terms of population health and vigor.

**Round 3 Comments:** Strandings of this species have increased sharply in NJ and mid-Atlantic region, sometimes outnumbering strandings of harbor seals (formerly most abundant) in NJ. Although breed on ice, climate change is expected to affect these seals negatively. These are important to watch.-----On the contrary, populations are increasing even with a substantial hunting rate; the 2000 estimate was 5.5 million and the 2004 estimate was 5.9 million (Waring et al., 2007). Even though this species might not be found as much as others in NJ waters, NJ stranding centers would have to deal with animals that strand alive.-----Harp seals are clearly an extralimital species in NJ waters. As noted in Round 1 and 2 Comments, this species is managed by Canada, it breeds in northern latitude waters and sub-adults/juveniles comprise most of the NJ strandings. Global warming will undoubtedly impact ice conditions that are integral to the life history of this species. The impact of this on the extralimital distribution of this species is unknown, but it is extremely unlikely that a resident population will be established south of the winter pack ice zone. Despite recent stranding trends in NJ and rehabilitation efforts, the NA designation is consistent with the occurrence of this species in NJ waters. The SC designation is not applicable because the population is not resident in NJ.

**Round 4 Comments:** I gave this an NA because all breeding populations are in Canada, Greenland, and Russia. Harp seals are highly migratory and while they may end up in NJ, I would not consider them residents. If information is gathered that would indicate otherwise, their status should be changed.-----In my NJ study and with the state Stranding Center, we have seen marked increases in these seals recently. It is important to add that all of the 4 true seals in the Western North Atlantic considered in Delphi occur seasonally (winter/spring) in NJ (harbor, harp, gray and hooded). These are part of the same populations that breed further north. They should not

be considered rare stranding events. Strandings have increased markedly in the Mid-Atlantic, and include both adult and subadult harp seals (MMSC) following their population dynamics is essential at such a time of change. Additionally, their amphibious lives mean they have an exceptionally close tie to the shore and nearshore areas (hauling out daily onto land). Finally, changes in ice due to global climate change will certainly affect them negatively at their northern grounds, which will affect them in NJ. It is important to study them now.-----Although the population is not resident in NJ the occurrences are increasing not just of sick or stranded animals but healthy ones. These animals are usually undergoing a molt and are not in need of rehabilitation. The problem is the increase encounter rate with the public.-----I don't think NA is appropriate for this species given its regular annual occurrence in NJ. The occurrences are seasonal and maybe 'extralimital' at present, but a species does not have to be a resident or breed in the state to be applicable. Many non-breeding migratory species utilize habitat in NJ and are not listed as NA (shorebirds, humpback whales, etc. for example). I'm not sure what the status should be though.

**Melon-headed Whale (*Peponocephala electra*)**

**Consensus: Not Applicable**

Status	# of People	Confidence Level
E		
T		
SC		
S		
U	1	7.0
NO	5	
NA	7	6.4

**Round 1 Comments:** From the 2006 SAR, it appears that this species is more widely studied in the Gulf of Mexico and natural numbers might be generally low. It does not appear that this species frequents NJ waters.-----Rarely sighted in NMFS surveys, prefers offshore tropical to sub-tropical habitats. --Distribution and population poorly understood in western Atlantic.-----Tropical to subtropical (not in NJ).-----Not known to occur in NJ – a tropical species.-----Mostly pelagic species.-----Occurrence is rare.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. There are no reported strandings on the Delaware coast, however, it is generally believed to be pelagic in nature and not likely to inhabit State waters.-----Usually found in the Gulf of Mexico and south of South Florida.

**Harbor Seal (*Phoca vitulina*)**

**Consensus: Secure/Stable**

Status	# of People	Confidence Level
E		
T		
SC	1	8
S	9	6.9
U		
NO	3	
NA		

**Round 1 Comments:** Harbor seal populations are increasing and may be expanding to other areas. They are probably considered a common marine mammal in NJ and its waters. There may be concerns regarding potential interactions with humans due to these expanding populations and time spent on land.-----2001 abundance survey data indicated that population is increasing at an annual rate of ~6%. Unlike the northeast Atlantic populations, there have been no major epizootic events over the past two decades.----- Increasing in numbers.-----Dominant seal in NJ; winter here. Population increasing and distribution changing. Numbers stable, but recent UMEs a real concern.-----The only seal likely to be a "normal" resident in NJ. Popping populations in Maine and Canada have been increasing, but may now be stabilizing. There is mortality in the mid-Atlantic coastal gillnet fishery, but at a very low level.-----Harbor seals that occur in Delaware have been largely juveniles which migrated from northern breeding grounds. It is unknown how long these individuals remain in Delaware but believed that they most likely return northward when water temperatures rise (if not before). Several have been transported to rehabilitation facilities in other states. Other than stranding response efforts and a few reported sightings there are no other research efforts resulting in population status data. Breeding does not occur in Delaware waters. Available data is insufficient for

assigning a population status in Delaware. This is the most commonly reported species, but also the most recognizable by the public.-----  
The population of harbor seals is increasing. Animals historically were encountered during winter months from November through May. In recent years animal have been observed year round. Pupping has been reported in NY by the stranding program. It is expected that more haul-out sites will be identified in NJ and year round occurrence will become more normal. Unpublished tracking data (DiGiovanni) has shown that harbor seals travel between haul out sites in NY, RI and MA regularly. Once animals are satellite tagged in NJ it is likely that this trend will continue.

**Round 2 Comments:** This is the most abundant seal in NJ waters, both in wild healthy colonies and in strandings. As such, studies of them should continue and expand. Numbers in Western North Atlantic population have expanded overall, but increased numbers in NJ colonies exceeds this. Diseases and UME’s recently add to the importance in marine ecosystems.-----Put ‘NO’ as I am going to defer to other reviewers (especially those in NJ and NY who should be able to determine a status for NJ). We can’t use what is known about this species in Delaware to form an opinion because there are no research efforts designed to determine population trends, just stranding response and antidotal sightings.

“Numbers stable, but recent UMEs a real concern.” One should expect an increase in the rate of disease and other components of natural mortality as a population grows.

New Jersey is part of the normal winter range for some harbor seals, but it is not likely that the pupping range will ever extend that far south.-----Populations are stable and these animals are reestablishing haul out sites.

**Harbor Porpoise (*Phocoena phocoena*)**

**Consensus: Special Concern**

Status	# of People	Confidence Level
E		
T	1	6
SC	8	6.6
S		
U		
NO	2	
NA		

**Round 1 Comments:** Although harbor porpoises are not listed on the ESA, they are protected under the MMPA and there is a take reduction plan in effect for this species to address interactions with gillnet fisheries. I list them as a species of concern because there are gillnet fisheries operating in NJ and just outside NJ state waters and these fisheries are covered by the take reduction plan. There is also little understanding of the current status of the population in NJ state waters, as much of the population abundance survey effort is directed in northern New England and Canadian waters.-----Information from NMFS indicates that in recent years, harbor porpoise bycatch has steadily increased to levels above potential biological removal (PBR).-----Bycatch issues.-----NMFS routinely conducts abundance surveys for this species, however data have not been used to estimate trends.-----Although abundance in NJ waters poorly understood, subject to high mortality throughout its range due to interactions with fisheries.-----Gulf of ME/Bay of Fundy (none seen in NJ, NOAA); some winter off NJ, NC, increased strandings in NJ.-----Harbor porpoises are winter and spring residents of coastal and shelf waters in the mid-Atlantic, where there is significant fishery-related mortality in coastal gillnet fisheries. There is concern that mortality is again increasing, perhaps due to lack of compliance with Take Reduction Plan measures. There are still questions about the stock identity (Gulf of Maine/Bay of Fundy vs. other Canadian stocks) of porpoises in the mid-Atlantic.----- Formerly Federally listed as species of concern. Listed as species of concern in NY. NMFS re-convening harbor porpoise take reduction team meeting in November.-----  
Though population trends are relatively unknown (U), fishery-related mortality, especially in recent years, is sufficient enough to denote special concern.-----Currently there are no research efforts targeting the population status of this species in Delaware waters. However, it is important to note that small to medium sized pods are reported on an annual basis within the Delaware Estuary during the colder months. Regular strandings of this species occurs and near shore fisheries are a suspected mortality source (gill net primarily). Both adults and juveniles have stranded on the coast of Delaware. Currently there is a lack of baseline data to determine population trends in State waters, but with annual sightings and strandings of this species, and potential mortality factors, it should be at least a species of special concern.-----Size and weight should be in both metric and standard or at the very least consistent among data sheets.

Fact sheet.

Should note females larger than males.

Average length and weight 60kg and 160cm.

Most individuals live 8 to 10 years but have lived to 20.

Lactation is eight months to a year.

Seeing groups of 50 to 100 is not an occasional occurrence. It is a rare occurrence.

**Round 2 Comments:** The mortality level is increasing above the PBR with no indication that the population is also increasing.-----NMFS is reconvening the HPTRT in Dec 2007 to address recent increases in harbor porpoise bycatch in gillnet fisheries in both the Gulf of Maine and mid-Atlantic. The HPTRP includes management areas that cover NJ waters.-----Bycatch in recent years has exceeded PBR, thus potential additional human sources of mortality make this a species of concern.

“NMFS routinely conducts abundance surveys for this species, however data have not been used to estimate trends.” Because the estimates from the surveys are either not comparable because of differences in areas surveyed or because the estimates are not significantly different.

“Formerly Federally listed as species of concern.” There is no Species of Concern category established under the ESA. The Gulf of Maine harbor porpoise stock was listed as a Candidate population after a petition to list the stock as Threatened was submitted, however the petition was denied and the Candidate designation was withdrawn.

The distribution and abundance of harbor porpoise in the mid-Atlantic are poorly known despite significant survey effort. Harbor porpoises are small, inconspicuous, and difficult to detect; tend to avoid vessels, and do not occur in groups (especially outside their summer range). Effective survey effort requires surveys specifically targeted at only this species. In the mid-Atlantic, stranding and bycatch records actually outnumber sighting records. The mid-Atlantic gillnet fishery is the second most serious source of bycatch mortality, and the numbers are increasing sharply (76, 137, 470, 511 in 2003-2006, respectively; draft 2008 SAR). Since management in New Jersey state waters in this case may well benefit the stock, a Special Concern status is supportable.-----Many of the animals observed during the 2005 surveys were near shore. These animals could be at risk from state and federal fisheries.

**Round 3 Comments:** Although harbor porpoises are not listed on the ESA, they are protected under the MMPA and there is a take reduction plan in effect for this species to address interactions with gillnet fisheries. I list them as a species of concern because there are gillnet fisheries operating in NJ and just outside NJ state waters and these fisheries are covered by the take reduction plan. There is also little understanding of the current status of the population in NJ state waters, as much of the population abundance survey effort is directed in northern New England and Canadian waters.-----Harbor porpoise bycatch is above potential biological removal (PBR).-----The distribution and abundance of harbor porpoise in the mid-Atlantic are poorly known despite significant survey effort. NMFS would benefit from surveys related to species distribution in the waters off NJ, as abundance surveys are conducted by the NEFSC in the upper part of the harbor porpoise range in the summer (Maine and Canada) when the animals are more concentrated. Knowing more about the distribution of this species in the Mid-Atlantic region may aid management efforts for reducing takes in Mid-Atlantic gillnet fisheries.------The SC designation is appropriate due to bycatch problems in mid-Atlantic gillnet fisheries, and the recent increase in strandings in NJ (Waring et al., 2007).

**Sperm Whale (*Physeter macrocephalus*)**

**Status: No Consensus**

Status	# of People	Confidence Level
E	7	6.0
T	1	4
SC		
S		
U		
NO	1	
NA	3	6.8

**Round 1 Comments:** Although sperm whales are currently listed on the Federal ESA, they are primarily an offshore species that I don’t believe typically occur in NJ state waters.-----Federally listed species.----- Primarily and offshore species.-----Federally listed as endangered but an offshore resident.-----Federally listed as endangered and depleted throughout its range. Also listed as endangered in NY.-----Listed as federally endangered and population estimates are fairly low, but need further information on occurrence and distribution in New Jersey waters to make a more informed decision.-----Currently there are no research efforts targeting this species in Delaware waters, however, this species was once so plentiful that it supported a commercial whaling industry in Delaware during the 17<sup>th</sup> century. Since whaling was terminated, there has only been one other reliable report of a sperm whale in State waters. A female stranded in 1978 and necropsy revealed a distended uterus, indicating it had recently given birth. If historical information is used as a baseline for population trends, then population levels of this species have been significantly reduced in Delaware.-----Size and weight should be in both metric and standard or at the very least consistent among data sheets. Although these animal are usually encountered offshore the stranding program in NY has recovered three animals since 2000. Two of the animals were calves and the other from May of 2005 was an adult.

**Round 2 Comments:** Listed federally and historically present in state waters prior to population reduction from whaling.-----Any species that are currently ESA listed should be listed similarly in the state. However, I do not believe this species would be as applicable to NJ

waters as some others species of whales.-----Listed as federally endangered. Based on lack of information on occurrence and distribution in New Jersey waters, it may be precautionary to list similarly for state waters. However, it could be noted where the whales are typically sighted based on currently available information (e.g. as noted above).

*“Listed as federally endangered and population estimates are fairly low, but need further information on occurrence and distribution in New Jersey waters to make a more informed decision.”* The estimated abundance in the 2006 SAR was nearly 5000 animals (Waring et al., 2007), and it was pointed out that the SAR estimates are negatively biased, possibly by a large amount, because they do not account for diving and because the surveys only cover a portion of the stock’s range. Note also that North Atlantic sperm whales could not be classified as Endangered under the criteria established in the ESA, but were classified as Endangered under prior legislation. There is substantial information on occurrence off New Jersey, but they are exclusively offshore animals and do not occur in state waters (CETAP, 1982; Waring et al., 2007; Whitaker et al., in prep.).

*“... this species was once so plentiful that it supported a commercial whaling industry in Delaware during the 17<sup>th</sup> century.”* There was no sperm whaling in the 17th Century; the first sperm whale taken by a Nantucket vessel was supposedly in 1712. Any 16th Century whaling in Delaware would have been taking right whales. In addition, any later records of sperm whaling for Delaware would certainly refer to vessels berthed in Delaware but taking whales far offshore, to as far away as the Pacific and Indian Oceans.

If the official policy is to list as Endangered or Threatened any species that is so listed at the federal level and that might occur, even accidentally, in New Jersey waters, then sperm whale status should be Endangered. Otherwise it should be Not Applicable, since they do not occur except as strandings in state waters.

**Round 3 Comments:** There is substantial information on occurrence off New Jersey, but they are exclusively offshore animals and do not occur in state waters (CETAP, 1982; Waring et al., 2007; Whitaker et al., in prep.).

Otherwise it should be Not Applicable, since they do not occur except as strandings in state waters.----- Apologies---correction *“... this species was once so plentiful that it supported a commercial whaling industry in Delaware during the 17<sup>th</sup> century.”* This should have said *“...during 1833-1845”*. It is true that the ships were berthed in Delaware and had to go offshore to capture sperm whale. The point I was trying to make (maybe not so eloquently) was that sperm whale were historically more abundant than today. If the State lists other primarily pelagic species as E because they are following the Federal status, then they should do the same with Sperm Whale.-----Should this species’ population recover to pre-whaling numbers and it be removed from the federal endangered species list, a state listing could still be applied. However, if a species does not occur within state waters, there would be no justification for applying a status other than “NA”.-----Species that are currently ESA listed should be listed similarly in the state.-----This species is federally listed as endangered due to commercial whaling impacts on the population. Sperm whales have a preference for shelf break and deeper oceanic waters, but seasonally there an on-shelf presence off eastern LI and the Great South Channel off Massachusetts. Their occurrence in coastal NJ waters would be considered rare. Either **E** or **NA** could be reasonably applied to this species. However, in the rare event that an animal would be seen in NJ coastal waters the **E** status is appropriate.

**Round 4 Comments:** Agree with precautionary approach of mirroring federal status in absence of evidence at state-level.----- There appears to be consensus that this is an offshore species, not present in NJ waters. Therefore, because consensus had been reach that the beaked whales should be ranked “NA” for the very same reason, the sperm whale should also be regarded as “NA”. Until there is such evidence that sperm whales do occur in NJ waters aside from a rare stranding, we cannot justify ranking it as State Endangered while omitting other federally-listed species such as manatees which are documented as occurring in NJ waters with some regularity.----- --Species that are currently ESA listed should be listed similarly in the state. However, information on its known distribution should be noted.-----I am changing my answer from previous rounds. Since we are only concerned with species that may be present in NJ waters, despite the Federal listing status, this species should be listed as NA for NJ because they are rarely, if ever, sighted within NJ waters. To keep things less complicated, the E should only be for those endangered marine mammals that occur within NJ waters. If information is found to show that this species is typically found within NJ waters, this status could be changed.-----I can see the point in listing this species as NA (as defined by this process), however, if there is a chance that this species could occur in NJ waters then I’m not sure it makes sense for the State status to be less restrictive than the Federal status. Perhaps there is language in NJ state regulations for this type of situation?

**Pantropical Spotted Dolphin (*Stenella attenuate*)**

**Consensus: Not Applicable**

Status	# of People	Confidence Level
E		
T		
SC		
S		
U	1	5.0
NO	6	
NA	6	6.0

**Round 1 Comments:** I am unfamiliar with the distribution of this species and will defer to biologists who have more knowledge on this particular species relative to its occurrence in NJ waters.-----Offshore warm water species.-----Primarily and offshore species.-----Lumped with Atlantic spotted dolphin; tropical.-----Mostly tropical, occurs only rarely and far beyond the shelf off the mid-Atlantic.-----Not listed as federally endangered, and are quite prevalent throughout their range of distribution. For a higher confidence level specific to NJ waters, more information is needed on their occurrence within state waters (including population estimates).-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. There are no reported strandings of this species on the Delaware coast. It is generally believed to be pelagic in nature and not likely to inhabit State waters.-----Usually found south of Delaware Bay in the summer. Occurrences are rare but little work has been done to understand extensive movements.

**Clymene Dolphin (*Stenella clymene*)**

**Consensus: Not Applicable**

Status	# of People	Confidence Level
E		
T		
SC		
S		
U	1	5.0
NO	6	
NA	6	6.5

**Round 1 Comments:** I am unfamiliar with the distribution of this species and will defer to biologists who have more knowledge on this particular species relative to its occurrence in NJ waters.-----Offshore warm water species, rarely sighted in NMFS surveys off the northeast US coast.-----Tropical and subtropical; not in surveys (NOAA).-----Tropical, with the only one NJ stranding record.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. There are no reported strandings of this species on the Delaware coast. It is generally believed to be pelagic in nature and not likely to inhabit State waters.-----Usually found in the Gulf of Mexico and south of South Florida.

**Striped Dolphin (*Stenella coeruleoalba*)**

**Consensus: Unknown**

Status	# of People	Confidence Level
E		
T		
SC		
S		
U	6	5.8
NO	6	
NA	1	6.0

**Round 1 Comments:** I am unfamiliar with the distribution of this species and will defer to biologists who have more knowledge on this particular species relative to its occurrence in NJ waters.-----Frequently sighted in NMFS offshore surveys, few confirmed sightings in neashore waters.----- U (NOAA); very deep; not strategic.-----Very abundant, offshore shelf break and slope resident.-----Need more information.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine a population status. There have been occasional strandings of this species. It is generally believed to be pelagic in nature and not likely to inhabit State waters.-----As their habitats appear to overlap with Risso’s, offshore bottlenose and common dolphin conservation efforts for the latter species will benefit the former.

**Atlantic Spotted Dolphin (*Stenella frontalis*)**

**Status: No Consensus**

Status	# of People	Confidence Level
E		
T		
SC		
S		
U	2	6.5
NO	4	
NA	6	6.2

**Round 1 Comments:** I am unfamiliar with the distribution of this species and will defer to biologists who have more knowledge on this particular species relative to its occurrence in NJ waters.-----Atlantic and pan-tropical spotted dolphins are difficult to differentiate at sea, therefore abundance estimates are combined. This species has a disjoint distribution: coast waters south of Cape Hatteras and offshore waters north of Cape Hatteras.-----No NJ strandings or seen in surveys (NOAA).-----Relatively abundant, occurs offshore in the mid-Atlantic but does occur inshore in the Southeast. There are some questions about stock divisions.----- Not listed as federally endangered, and are quite prevalent throughout their range of distribution. For a higher confidence level specific to NJ waters, more information is needed on their occurrence within state waters (including population estimates).-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. There are no reported strandings of this species on the Delaware coast. It is generally believed to be pelagic in nature and not likely to inhabit State waters.-----Although encountered through the stranding program these occurrences are rare. Southern New Jersey offshore waters near Baltimore and Hudson Canyon would represent the northern summer range.

**Round 2 Comments:** “No NJ strandings or seen in surveys (NOAA).” There have been five strandings of Atlantic spotted dolphins in New Jersey (1981, 1982, 1987, 1992, and 1997).

“For a higher confidence level specific to NJ waters, more information is needed on their occurrence within state waters (including population estimates).” There have been surveys and no sightings, therefore the estimated abundance in state waters is zero.

This is an offshore species, especially north of Cape Hatteras.

**Round 3 Comments:** No NJ strandings or seen in surveys (NOAA).” There have been five strandings of Atlantic spotted dolphins in New Jersey (1981, 1982, 1987, 1992, and 1997). “For a higher confidence level specific to NJ waters, more information is needed on their occurrence within state waters (including population estimates).” There have been surveys and no sightings, therefore the estimated abundance in state waters is zero.-----If there is enough evidence to state that this species does not occur within state waters and is primarily pelagic, then NA is appropriate.-----This species occupies warmer shelf-edge pelagic waters north of Cape Hatteras, and more commonly found in shelf waters south of 35EN latitude. The species presence in NJ waters is based on sporadic strandings. Despite strandings records the NA status is appropriate.

**Round 4 Comments:** This species appears to occur offshore of NJ waters. As such, I have given it an NA. If information is collected in the future to determine otherwise, its status should be changed.-----I agree there may be a lack of occurrences however we are seeing changes in stranding and sightings for species such as *Tursiops truncatus* (usually associated with warmer water) indicate that encounters with the public may increase. ES - Additional data are needed for nearly all of the species that were part of this process, however, there seems to be enough agreement that this species is pelagic and doesn’t occur in NJ state waters.

**Spinner Dolphin (*Stenella longirostris*)**

**Consensus: Not Applicable**

Status	# of People	Confidence Level
E		
T		
SC		
S		
U	1	6.0
NO	6	
NA	6	6.5

**Round 1 Comments:** I am unfamiliar with the distribution of this species and will defer to biologists who have more knowledge on this particular species relative to its occurrence in NJ waters.-----Offshore warm water species, rarely sighted in NMFS surveys.-----Primarily and offshore species.-----Oceanic and coastal tropical; deep; no strandings in NJ.-----Very tropical.-----Need more information, but

commonly misidentified with other *Stenella* sp.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. There are no reported strandings of this species on the Delaware coast. It is generally believed to be pelagic in nature and not likely to inhabit State waters.-----As their habitats appear to overlap with Risso's, coastal bottlenose and common dolphin conservation efforts for the latter species will benefit the former. Southern New Jersey offshore waters near Baltimore and Hudson Canyon would represent the northern summer range.

**West Indian Manatee (*Trichechus manatus*)**

**Consensus: Not Applicable**

Status	# of People	Confidence Level
E	1	5
T		
SC		
S		
U		
NO	4	
NA	8	7.4

**Round 1 Comments:** Manatees are found in Florida and there is the occasional wayward animal that may swim up the coast and end up in NJ waters. I would consider this type of animal a “non-breeding stray,” similar to any wayward belugas that may rarely visit.-----Extralimital occurrence of US mid-Atlantic.-----A federally-listed species, largely due to human-related mortality. Individuals have been documented with some regularity in NJ waters, but these are accidental. However, if all federally-listed species which could possibly occur in NJ (including sperm or blue whales, for example), are to be assigned a state conservation status, then this species, which has been observed alive in NJ more often than either sperm or blue whales, should be listed as well.-----Not in NJ; Gulf and FL (north to GA; extreme to VA).-----Federally listed as endangered but proposed for downlisting to threatened. Occurs only as accidental strays in NJ/NY.-----Downlisted to “threatened” in State of Florida, but Federally listed and “endangered”. -----Presence is rare and accidental in NJ waters.-----This species is not likely to inhabit State waters despite one individual that repeatedly migrated to the area in the 1990s. Assigning a population status based on one transient individual does not seem credible. Although there are no in-water research efforts determining population trends of marine mammals in Delaware waters, this species is very distinct and if it did regularly occur in Delaware waters there is a high probability that it would be reported.-----Although there have been a few rare visitors these are infrequent.

**Bottlenose Dolphin (*Tursiops truncatus*)**

**Consensus: Special Concern**

Status	# of People	Confidence Level
E		
T		
SC	10	6.7
S	1	6
U		
NO	2	
NA		

**Round 1 Comments:** Bottlenose dolphins are not listed on the ESA but are protected under the MMPA and a take reduction plan exists for this species to address interactions with commercial fisheries. I believe this species should be a species of concern due to potential fisheries interactions but also due to potential interactions with and disturbance by the general public such as vessels, especially since it seems that some southern NJ waters may be a nursery and calving ground for bottlenose dolphins.-----Takes are currently at or slightly below PBR. This information comes from a recent meeting of the BDTRT.-----The coastal morphotype is listed as depleted under the MMPA. The population is comprised of several management units.-----NJ waters provide a critical calving and nursery area for the “coastal” stock. Listed as depleted by MMPA in 1993, largely as a result of epizootic die-off.-----Depleted (MMPA) and highly affected by humans.-----The offshore stock is abundant, has low human impacts, and occurs well beyond NJ state waters. The inshore stocks (probably a separate species) were listed as depleted under the MMPA after the 1987 mortality event, but that designation was based on an incorrect stock separation scheme and incomplete abundance estimates. There is significant mortality in coastal gillnet fisheries, at least some presumably in state waters. Because of the migratory nature of the northernmost coastal stock and uncertainty about the stock identity of dolphins taken in the winter in the Carolinas, mortality cannot be attributed reliably to stock.-----W. North Atlantic coastal stock is considered depleted by NMFS.-----Though the population appears to be stable in NJ coastal waters, this species is still

vulnerable to habitat modification/disturbance as well as unknown effects from the dolphin-watching industry. Because NJ is an important calving/birthing ground for bottlenose dolphins, special attention/concern should be paid to areas within state waters in which animals frequently occur.-----Currently there are no research efforts targeting the population status of this species in Delaware waters. It is important to note that small to large sized pods are reported on an annual basis within the Delaware Estuary and along the coast of Delaware during the warmer months. This species is sighted on a daily basis and regular strandings occur. Fisheries that occur in State waters are suspected to be a source of mortality (gill net primarily with some reports of pot fishery entanglements). Adults, juveniles and neonates have stranded on the coast of Delaware and there is evidence that calving occurs near or within the mouth of the Delaware Bay. An annual dolphin count has taken place for more than 10 years, however, this information may not be useful in determining population trends. Currently there is a lack of much needed baseline data for Delaware waters. With the annual occurrence of this species, number and age structure of strandings, proximity of calving grounds, and potential mortality factors, it should at least be a species of special concern.-----Size and weight should be in both metric and standard or at the very least consistent among data sheets. The coastal management units for this stock are listed as depleted and PBR in VA has been exceeded. Therefore the species is listed a concern. The two morphotype are encountered in the northwest Atlantic. Although there appears to be segregation by water depth, animals of each morphotype have been observed across those barriers. The coastal form is usually found in water < than 20m and the offshore usually found in water > 40m. (2006 stock assessment). The weight and size are really for the coastal species and a note should be made that in the NW Atlantic the offshore morphotype is larger.

**Round 2 Comments:** The draft 2008 SAR (which includes information already presented to the Bottlenose Dolphin Take Reduction Team) includes a modified stock structure. The stock that occurs off New Jersey would be the Northern Migratory stock, with an estimated abundance of 7,489, PBR of 56, and average annual fishery-related mortality of 12—well below PBR. This seems to substantially lower the level of concern for this stock. It still retains the depleted status under the MMPA (even though it is clear that the designation was based on poor and incomplete data and no understanding of the structure of the complex of coastal stocks), but only because the process of removing the designation is very complex and time-consuming, and also a low priority. Consequently, I’ve changed my recommendation from Special Concern to Stable.-----Recent strandings in NY have been offshore animals. The frequency of these strandings appear to be increasing.

**Cuvier’s Beaked Whale (*Ziphius cavirostris*)**

**Consensus: Not Applicable**

Status	# of People	Confidence Level
E	1	6
T		
SC		
S		
U		
NO	4	
NA	7	7.0

**Round 1 Comments:** Beaked whales are fairly understudied and I believe they are found more in offshore waters. I will defer to the opinions of biologists who are more familiar with these species, but I believe that they rarely occur in NJ waters and thus I have assigned them with an “NA”.-----Deep water species.-----Primarily an offshore, deep sea species.-----U by NOAA; not strategic.-----Strictly an offshore resident.----- rare.-----Currently there are no research efforts targeting this species in Delaware waters, and there is insufficient data to determine population trends. There are no reported strandings of this species on the Delaware coast. It is generally believed to be pelagic in nature and not likely to inhabit State waters.

\*Currently, stranding data is the only data set collected on a regular basis. While it is recognized that stranding data can provide insight, I do not feel that in Delaware it is a reliable indicator of population trends for most of the species listed. Individuals can die well offshore and end up stranding in Delaware. For some species, fisheries interactions and sightings can support stranding trends, but stranding data on its own is limited in terms of live population analysis.

\*\*Note: For the purposes of this review, Delaware State waters are defined as:

- 1) Waters of the Delaware Bay and its tributaries,
- 2) Waters of the Inland Bays: Rehoboth, Indian River and Assawoman,
- 3) Within 3-miles offshore of the Atlantic coast of Delaware

-----Little is know about this species and more survey effort is needed. It is unlikely to see this animal in the near shore environment. Recent years have recorded unusual animals reported opportunistically in areas such as Hudson canyon and on the shelf. Without more survey effort is problematic to assess their status or issues. Conservation efforts for other species will help this animal as well.

**Round 2 Comments:** All of the beaked whales are found only in deep waters from the shelf edge out, and do not occur in state waters.

NOTE: the following are helpful lists of NMFS designations for marine mammal populations: <http://www.nmfs.noaa.gov/pr/species/mammals/cetaceans/>, <http://www.nmfs.noaa.gov/pr/species/mammals/pinnipeds/>

**GENERAL COMMENT for all species:** Our charge was to address status in New Jersey state waters (i.e., within 3 nautical miles), not range-wide for either the regional population or the species as a whole. Many of the comments on the previous round are not relevant to the species in New Jersey, or simply incorrect according to the best available scientific information for the species. There have been quite a number of surveys over the years, so an absence of occurrence records should not be used as support for arguing that the occurrence of a species in state waters is unknown (i.e., since there has been survey effort, absence of evidence is evidence of absence). Neither should strandings be used as evidence for occurrence in the absence of other data unless they are very frequent, since strandings do not necessarily represent normal animals. In addition, with respect to detection of trends in abundance, the analysis by Taylor et al. (2007: Lessons from monitoring trends in abundance of marine mammals, *Mar. Mamm. Sci.* 23:157-175) clearly showed how difficult it is to detect a trend as drastic as a 50% decline in 15 years with any statistical confidence or power.

**GENERAL COMMENT received during Round 3:** According to the “Definition of Terms” that was provided, status refers to “within New Jersey.” The status of any species not known to occur within New Jersey state waters then, very clearly, should be “Not Applicable.” Expanding the list to species that occur only accidentally, or even not at all, in state waters dilutes the effectiveness of the state listing process to the point where it becomes a meaningless exercise in feel-good pseudo-conservation. Of all the species on the original list provided, there is scientific justification for including only seven on a “status of New Jersey mammals” listing, because there is evidence that they occur in state waters predictably. For the fin whale, short-beaked common dolphin, and pilot whales (two species pooled because sightings cannot be differentiated), there were abundance estimates greater than zero in at least one season in the 0–20 fathom stratum off New Jersey during the CETAP study in 1978–1982 (see the table on the following page). Even then, there may have been no sightings within state waters, since that stratum extends farther offshore than 3 miles. For harbor porpoise, harbor seal, and bottlenose dolphin, it is clear that they do occur (in the case of harbor seals and bottlenose dolphin) or likely occur (in the case of harbor porpoises) in state waters even though there were no non-zero abundance estimates for one reason or another. In the case of harbor seals, for example, seals were specifically excluded from the CETAP sampling per the contract from the federal agency.

Of those seven (dark blue shading on the table), we have already reached consensus on fin whales (Endangered), harbor seals (Secure/Stable), and bottlenose dolphins (Special Concern). For harbor porpoise, a Special Concern status can be supported because of known bycatch in mid-Atlantic gillnet fisheries. For common dolphins and pilot whales, there is no evidence for declining populations or for significant sources of anthropogenic mortality, so all three should be Secure/Stable.

The only other question deals with how to handle species that are federally listed under the ESA but are not known to occur normally in New Jersey state waters (lighter blue shading in the table). Where do you draw the line? Any automatic rule should apply to all species, not just charismatic marine species. If you include blue whales, why not bowhead whales, American crocodiles, or Gulf sturgeon? Or to stretch the point to a ridiculous extent, why not Steller’s sea lions or San Francisco garter snakes? I’m simply trying to make the point that any rule automatically transferring federal status to state status has to make sense and be consistently applied. We are already being inconsistent just within marine mammals. We reached consensus on a Not Applicable status for West Indian manatee, but still are moving toward Endangered status for blue whales and sei whales, when in fact there have been more known records of living, normal (more or less) manatees in New Jersey in the last 25 years than for either of those two whale species. In fact, the probability of a manatee occurring in state waters is also likely to be higher than that of either a sperm whale or humpback whale.

If I were to list the other six endangered species in order of their likelihood of occurrence in New Jersey state waters, it would probably be:

- (1) North Atlantic right whale—known nearshore occurrences both north and south of NJ
- (2) Manatee—three since 1998 north of NJ that all must have gone through state waters
- (3) Humpback whale—but low probability
- (4) Sperm, blue, and sei whales—remote probability at best

APPENDIX III  
REFERENCES

- Angliss, R. P., Silber, G.K. and R. Merrick. 2002. Report of a Workshop on Developing Recovery Criteria for Large Whale Species. U.S. Dept. of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. NOAA Technical Memorandum NMFS-F/OPR-21. 32 pp.
- COSEWIC 2002. COSEWIC assessment and update status report on the Blue Whale *Balaenoptera musculus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vi + 32 pp.
- Conservation Impact. 2006. NJ Marine Mammal and Sea Turtle Conservation Workshop Proceedings (April 17-19, 2006). Report for NJ Division of Fish and Wildlife, Endangered and Nongame Species Program. 71 pp.
- National Marine Fisheries Service. 1998. Recovery plan for the blue whale (*Balaenoptera musculus*). Prepared by Reeves R.R., P.J. Clapham, R.L. Brownell, Jr., and G.K. Silber for the National Marine Fisheries Service, Silver Spring, MD. 42 pp.
- National Marine Fisheries Service. 2005. Recovery Plan for the North Atlantic Right Whale (*Eubalaena glacialis*). National Marine Fisheries Service, Silver Spring, MD.
- National Marine Fisheries Service. 2006. Draft recovery plan for the fin whale (*Balaenoptera physalus*). National Marine Fisheries Service, Silver Spring, MD.
- National Marine Fisheries Service. 2006. Draft recovery plan for the sperm whale (*Physeter Macrocephalus*). National Marine Fisheries Service, Silver Spring, MD.
- U.S. Fish and Wildlife Service. 2001. Florida Manatee Recovery Plan, (*Trichechus manatus latirostris*), Third Revision. U.S. Fish and Wildlife Service. Atlanta, Georgia. 144 pp. + appendices.
- Whitaker, J.O., Jr., Hicks, A., Thomas, H.H., Bopp, J. and R.D. Kenney. Marine Mammals of the New York Region (in prep.).
- Marine Mammal Stock Assessment Reports, National Marine Fisheries Service:  
Atlantic Spotted Dolphin, Western North Atlantic Stock, 2005  
Blainsville's Beaked Whale, Western North Atlantic Stock, 2005  
Blue Whale, Western North Atlantic Stock, 2002  
Bottlenose Dolphin, Western North Atlantic Coastal Morphotype Stocks, 2005  
Bottlenose Dolphin, Western North Atlantic Offshore Stock, 2005  
Clymene Dolphin, Western North Atlantic Stock, 2005  
Common Dolphin, Western North Atlantic Stock, 2005  
Cuvier's Beaked Whale, Western North Atlantic Stock, 2005  
Dwarf Sperm Whale, Western North Atlantic Stock, 2005  
Fin Whale, Western North Atlantic Stock, 1995  
Gervais' Beaked Whale, Western North Atlantic Stock, 1995  
Gray Seal, Western North Atlantic Stock, 2005 Harbor Porpoise, Gulf of Maine/Bay of Fundy Stock, 2005  
Harbor Seal, Western North Atlantic Stock, 2005  
Harp Seal, Western North Atlantic Stock, 2005  
Hooded Seal, Western North Atlantic Stock, 2005  
Humpback Whale, Gulf of Maine Stock, 2005  
Killer Whale, Western North Atlantic Stock, 1995  
Long-finned Pilot Whale, Western North Atlantic Stock, 2005  
Minke Whale, Canadian East Coast Stock, 2005  
Northern Right Whale, Western Atlantic Stock, 2005  
Pygmy Sperm Whale, Western North Atlantic Stock, 2005

Risso's Dolphin, Western North Atlantic Stock, 2005  
Sei Whale, Nova Scotia Stock, 2005  
Short-finned Pilot Whale, Western North Atlantic Stock, 2005  
Sperm Whale, North Atlantic Stock, 2005  
Striped Dolphin, Western North Atlantic Stock, 2005  
True's Beaked Whale, Western North Atlantic Stock, 1995

Marine Mammal Stock Assessment Reports, US Fish and Wildlife Service

West Indian Manatee, Florida Stock, 2000

Appendix 4. ENSAC recommendations for 11 non-consensus species.

Scientific name	Primary common name	Current Status	Vote count	ENSAC Recommendation
<i>Balaenoptera musculus</i>	Blue whale	Endangered	8E/1NO/3NA	Remove from NJ list of species
<i>Balaenoptera borealis</i>	Sei whale	Endangered	7E/1SC/1U/1NO/2NA	Remove from NJ list of species
<i>Physeter macrocephalus</i>	Sperm whale	Endangered	7E/1T/1NO/3NA	Remove from NJ list of species
<i>Stenella frontalis</i>	Atlantic-spotted dolphin	None	2U/4NO/6NA	Remove from NJ list of species
<i>Lagenorhynchus acutus</i>	Atlantic white-sided dolphin	None	3S/1U/3NO/5NA	Remove from NJ list of species
<i>Balaenoptera acutorostrata</i>	Common Minke whale	None	9S/3U	Remove from NJ list of species
<i>Globicephala melaena</i>	Long-finned pilot whale	None	2S/8U/2NO	Remove from NJ list of species
<i>Grampus griseus</i>	Risso's dolphin	None	4U/3NO/5NA	Remove from NJ list of species
<i>Pagophilus groenlandicus</i>	Harp seal	None	1SC/3S/5NO/3NA	Stable
<i>Cystophora cristata</i>	Hooded seal	None	1SC/2S/4NO/5NA	Stable
<i>Delphinus delphis</i>	Short-beaked common dolphin	None	7S/2NO/3NA	Undetermined