

FRAMEWORK 18 DECISION DOCUMENT

Council Meeting – November 17, 2005

The primary purpose of this action is to set specifications for the 2006 and 2007 fishing years. Amendment 10 introduced rotation area management and scallop vessels are now allocated a specific number of days-at-sea (DAS) to fish in controlled access areas, as well as DAS that can be fished in open areas. The alternatives under consideration would change the order of rotation and the fishing mortality targets for the Georges Bank access areas. This action is also considering a number of alternatives related to specific areas and other general management options.

This decision document will outline twelve decisions the Council must make in order to submit Framework 18 to NMFS for approval. Each decision is described separately; first the management issue is briefly explained, followed by a bullet list of the alternatives under consideration, then the biological, economic/social and other impacts are summarized for each decision. In addition, there are three “unresolved issues” the Council must clarify that have been highlighted in the following pages.

- Decision 1 Area specific limits on fishing by limited access vessels (Section 3.3.1.1)
- Decision 2 Georges Bank area access management (Section 3.3.1.2)
- Decision 3 Hudson Canyon area rotation management (Section 3.3.1.3)
- Decision 4 Elephant Trunk area (ETA) rotation management (Section 3.3.1.4)
- Decision 5 Procedures to adjust ETA allocations (Section 3.3.1.5)
- Decision 6 Delmarva area rotation closure (Section 3.3.1.6)
- Decision 7 Open area management (Section 3.3.2)
- Decision 8 Limited access crew limits (Section 3.3.3)
- Decision 9 Trip exchange deadline (Section 3.3.4)
- Decision 10 Controlled access area trip exchanges (Section 3.3.5)
- Decision 11 Broken trip exemption program (Section 3.3.6)
- Decision 12 Research set-aside program (Section 3.3.7)

No Action

If the Council took no action, full-time limited access scallop vessels would receive an allocation of 67 open area DAS in both 2006 and 2007. Part-time and occasional vessels would receive a pro-rata share of 40% and 1/12th, respectively. In addition, full-time vessels would receive an access area allocation of two trips and 24 DAS to fish in Closed Area I and the Nantucket Lightship Area, with a 40% and 1/12th pro-rata share going to part-time and occasional vessels. Thus, the total DAS allocation for a full-time vessel would be 91 DAS in 2006 and 2007. The TACs would remain as estimated in Amendment 10 and Framework 16/39. When Georges Bank access areas close due to yellowtail flounder catches, vessels would receive up to 24 extra open area DAS, 12 for each access area trip not taken due to the closure. And in 2007, the allocations from the most recent fishing year (i.e. 2006) would continue if the Council and NMFS failed to undertake and approve a biennial framework adjustment. Consistent with “No Action”, the Hudson Canyon Area and the Elephant Trunk Area would re-open for fishing by vessels using open area DAS.

Status Quo

The Status Quo alternative is a set of measures that achieve the prescribed fishing mortality targets in Amendment 10. It allows for a change in specifications to achieve the stated plan objectives, consistent with achieving optimum yield (target fishing mortality of 0.20). The calculations show that this policy would mean a full-time allocation of 67 DAS in 2006 and 62 DAS in 2007. The projections also show that the re-calculated TAC consistent with an F=0.20 target would allow for an allocation of three access area trips, or 36 DAS in 2006 (1 trip in Closed Area I, and 2 trips in the Nantucket Lightship Area). And for 2007, two trips in Closed Area II and one trip in the Nantucket Lightship Area. The Elephant Trunk Area would be re-opened as a controlled access area in 2007 with an allocation of 9 full-time trips (72 DAS), with a pro-rata share going to

part-time and occasional vessels. No set-aside or limit for vessels fishing under general category rules, but a three percent set-aside would apply for funding scallop related research and observers. Thus, the total DAS allocation for a full-time vessel would be 103 DAS (67+36) in 2006 and 206 (62+36+108) DAS in 2007. Like No Action, the regulations under the status quo would allow vessels to receive up to 24 open area DAS when Georges Bank areas close due to yellowtail flounder catches, 12 DAS for each unused trip. A two-percent set-aside would apply for vessels fishing in the Georges Bank access areas but like the Hudson Canyon Area, the Elephant Trunk Area would be open for vessels fishing under general category rules. A two-percent set aside for funding scallop related research and a one percent set-aside to fund an observer program would apply to all access areas, including the Elephant Trunk Area.

[See Tables 1 and 2 on pages 10-12 of the FW document for a comparison of No Action and Status Quo]

DECISION 1 Area specific limits on fishing by limited access vessels (Section 3.3.1.1 page 19)

Each controlled access area has a TAC that must be allocated amongst vessels that are authorized to fish. The current method, used since 1999, establishes a scallop possession limit and authorizes each limited access vessel to take a certain number of trips in each access area. These trip allocations have had some negative effects on safety and on fishing costs. An alternative would be to allocate total pounds per vessel rather than a specific number of trips with a possession limit.

- **Area specific allocation of total pounds per vessel OR**
- **Status quo: Maximum number of trips by area and scallop possession limits**

No preferred alternative identified

The alternative under consideration would allocate a certain number of pounds that a vessel may land from each controlled access area, allowing fishermen to determine for themselves what the optimum length of trip should be based on existing weather and expected price. Allocations of pounds would require new reporting requirements. NMFS recommends that if the Council does NOT adopt the alternative to allocate in pounds per area, the additional reporting requirements described for this alternative should be required for the existing broken trip provision (See pages 20-21). This recommendation is related to Decision 11.

Biological Impacts: Total scallops landed would be the same under both alternatives; therefore no additional impact to the resource. The status quo alternative has successfully prevented vessels from landing high volumes of poor quality scallop meats, higher or no possession limits could have negative effects on meat quality.

Economic/Social Impacts: Allocation of total pounds will reduce the fishing costs for vessels that could land their allocations by taking fewer trips compared to the number of trips they need to take if there was a possession limit per trip. Therefore, this measure could increase producer benefits, including the crew income. The benefits will be lower, however, if the incentive to catch the quota at the shortest possible time creates a race to fish and reduces LPUE (Section 5.2.2.1, Tables 100-101, page 185). In addition, the concentration of landings during high catch seasons could dampen the prices and reduce the economic gains. The allocation of total pounds alternative improves flexibility for vessels, which has positive social impacts.

Other Impacts: Elimination of the broken trip provision through the new allocation by pounds alternative would eliminate some of the problems and frustrating administrative issues for both industry and NMFS. Since the allocation by pound alternative may result in longer trips, but fewer trips, the impacts on protected species and EFH are not expected to change.

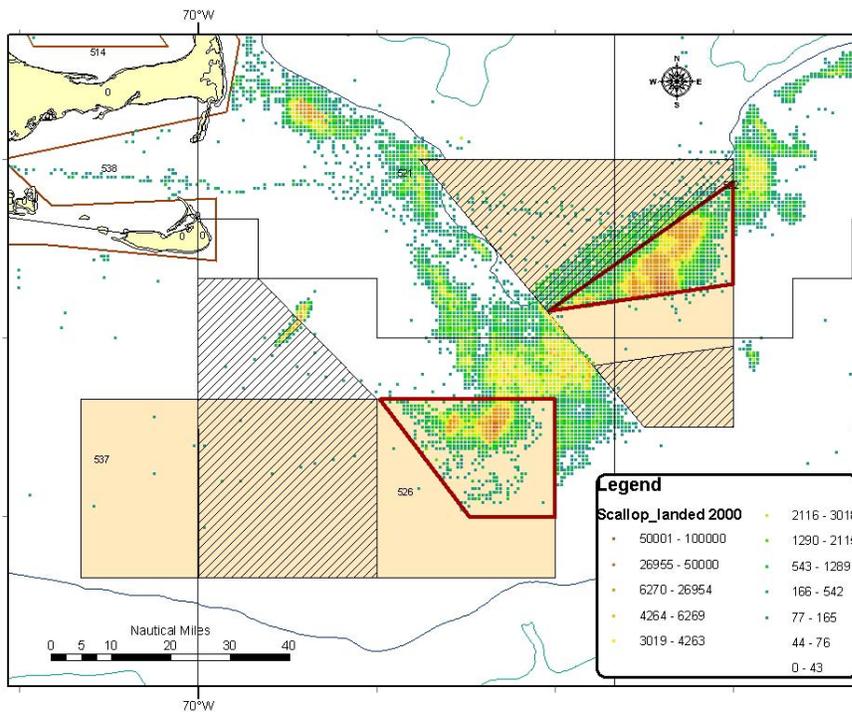
DECISION 2 Georges Bank Area Access Measures (Section 3.3.1.2 page 23)

DECISION 2A

- **Revise the Georges Bank Area Access schedule (*Preferred Alternative*) OR**
- **Status Quo: Continue FW16/39 rotation order OR**
- **Contingency schedule for rotation of Georges Bank Areas**

	2006	2007
Revise GB schedule	5 trips (CAI, CAII, NLSP)	2 trips (CAI, NLSP) 5 trips in ETA for a total of 7 trips
Status Quo	3 trips (CAI, NLSP)	3 trips (CAII, NLSP) 9 trips in ETA for a total of 12 trips
Contingency Alt.	5 trips (CAII, NLSP)	2 trips (CAI, NLSP) 5 trips in ETA for a total of 7 trips

Revising the GB schedule would keep the number of access trips and landings more consistent across years, five in 2006 and 7 in 2007, assuming the Council selects the preferred alternative to allocate 5 trips in the Elephant Trunk Area in 2007. The Contingency Alternative is a result of the court’s decision in *Oceana v Evans* (8/2/05). The Court determined that EFH closures implemented under Amendment 10 and Amendment 13 to the Multispecies FMP apply to scallop vessels. Since the Closed Area I access area would be restricted to a smaller area than anticipated due to both sets of habitat closed area alternatives being in place, the PDT agreed that concentrating all the access effort in such as small area would cause localized depletion; therefore under the Contingency Alternative, the Closed Area I access trip is reassigned to Closed Area II.



Comparison of Amendment 10 access area boundaries with the distribution of scallop catches in 2000. The hatched areas represent the EFH closure areas approved in Amendment 13 to the Multispecies FMP and in Framework 16/39. The areas with a bold outline are the access areas that remain when EFH closures are applied from both Amendment 10 and Amendment 13. Map 11 on page 165 of the FW document compares all the EFH closures implemented by A10 and A13.

Biological Impacts: Revising the GB schedule alternative minimizes the fishing mortality in Closed Area II South, where above average small scallops have been observed. The biological impacts of shifting the CAI trip to CAII under the Contingency Alternative are analyzed in Section 5.1.2.

Economic/Social Impacts: The economic impacts of these measures are analyzed in Section 5.2.1 in combination with the twelve rotation area alternatives including no action and status quo (See Page 8 and 9 of this document for a description of the 12 alternatives). The results show the preferred alternative will increase average scallop landings per year as compared to no action levels both in the short-and the long-term (Table 90, Table 92). There could be a slight reduction in revenues if the decline in prices outweighs the increase in landings depending on the other measures combined with this alternative. Most alternatives with revised Georges Bank access schedule will have larger total economic benefits, however, compared to no action and status quo alternatives (Section 5.2.1, Table 94 and Table 95, and Section 5.2.2.2). Because the total number of controlled access trips will stay the same, short-term impacts of the contingency schedule will be similar to that of the preferred alternative.

Other Impacts: Revising the schedule of GB access trips will not impact turtles due to the location of the areas; there are few if any interactions with sea turtles in Georges Bank.

DECISION 2B (Adjustments when YT Flounder catches reach the 10% TAC limit)

- **Allocate additional open area DAS (at a prorated value) (*Preferred Alternative*) OR**
- **Allocate an equal number of open area trips with an 18,000 possession limit OR**
- **Initial allocations of half the trips in each area, raising them by October 1 OR**
- **Status Quo: allow vessels to fish 12 DAS in open areas for up to two trips (None for 2007)**

According to current regulations, if the yellowtail flounder TAC is reached and areas close, vessels that have not taken trips are authorized to take those trips in the open fishing areas, but the regulations are silent about 2007. To land 18,000 pounds of scallops, the average trip length is estimated to be 6.4 to 6.9 DAS (depending on the area, average meat count and shucking capacity) in contrast to the 12 DAS charged for each access trip. Because the preferred alternative allocates a prorated value of DAS, rather than 12 DAS, this alternative would not cause increases in overall scallop fishing mortality from the effort shift. The second alternative would maintain the same overall scallop removal per trip (18,000 pounds), but trips may take longer in open areas. The third alternative (initial allocation of half the trips) would reduce the potential for a derby-style fishery and provide incentive to avoid catching yellowtail flounder so trip allocations would increase after October 1. This alternative would prevent any shift in fishing effort into open areas.

Biological Impacts: The impacts depend on the number of unused trips. If the average number of unused trips is less than or equal to two trips per vessel, then the Status Quo alternative is the least conservative and the preferred alternative is the most conservative (See Table 78 on page 139).

Economic/Social Impacts: The preferred alternative will help to minimize the loss in pounds and revenue due to the closure of access areas before a vessel takes its trip. It will thus have a positive impact on vessels although the scallop pounds per trip could be lower than the allocated pounds for the Georges Bank access area trips due to prorating (Section 5.2.2.3). The second alternative would also reduce the incentive to take access area trips as quickly as possible, but the long-term impacts on the scallop resource and economic benefits could be negative since fishing transferred trips in the open areas could take longer than in the access areas. Alternative three, to allocate half the access trips would prevent any shift of effort into open areas, but each vessel would be allocated less trips if the TAC is reached, thus lower revenues as compared to the preferred alternative.

Other Impacts: Effects on finfish bycatch and habitat are related to amount of fishing time and area swept. It is estimated that area swept will be higher in open areas. Tables 80-86 (page 142) show the area swept and DAS tradeoffs for trips transferred to open areas for the various alternatives combined with the different FW18 DAS alternatives. If open area effort shifts to the Mid-Atlantic region during the seasons that turtles are in the area (June-October), there could be an increased risk of interaction with scallop gear.

DECISION 3 Hudson Canyon Area Rotation Measures (Section 3.3.1.3 page 35)

The Hudson Canyon area was initially closed in 1998 to protect a strong year class of young scallops. This area re-opened as a controlled access area in 2001. Amendment 10 truncated the area in the south because small scallops again appeared in what is now known as the Elephant Trunk Area. New data suggests that scallop biomass in the Hudson Canyon area in 2005 is not as high as predicted by Amendment 10. Biomass was fished down faster than anticipated, and many vessels took sub-optimal trips in 2005 or chose to delay taking their 2005 access trips. This action is considering alternatives to address this situation.

- **Extend the duration of the HCA access program until February 28, 2008 (Preferred Alternative)**
OR
- **Status Quo: Reclassify the HCA as open to scallop fishing**
(2005 Access trips would have to be taken before the end of the 2005 fishing year)

Biological Impacts: The preferred alternative will have the effect of spreading out effort over time and reducing fishing mortality in 2005. Fishing mortality in the HCA in 2005 would be astronomical if the entire TAC were caught and landed in 2005. If half is deferred until 2006, this alternative could increase optimum yield and reduce the effects of high fishing mortality and effort in the HCA if the area is reclassified as an open area.

Economic/Social Impacts: Extension of the Hudson canyon area access program, by itself, is expected to have positive economic impacts because the vessels could lower their costs and increase their profits by taking trips when catch rates increase relative to the 2005 levels (Section 5.2.2.4). Section 5.2.1 provides a comparative analysis of the economic impacts of these measures combined with Elephant Trunk reopening, GB access alternatives, area closures (Delmarva), and open-area DAS allocations. The combined impacts of these measures on total economic benefits are expected to be positive relative to no action both in the short and the long-term (Tables 92 and 94, page 178-179).

Other Impacts: Because the preferred alternative would spread effort out, this may reduce potential interactions with sea turtles. Under status quo, if HCA is reclassified as an open area and fishing effort increases in that area during the season that turtles are usually present (June-October), there may be an increased risk of interaction with scallop gear.

The Council needs to specify that the extension of the Hudson Canyon access program also applies to unused research set-aside effort. During 2005, scheduled research did not occur within the Hudson Canyon Access Area because some vessels were not fishing in that area due to lower scallop biomass and sub-optimal trips.

DECISION 4 Elephant Trunk Area (ETA) Rotation Measures (Section 3.3.1.4 page 38)

The ETA has been closed to scallop fishing since July 2004 to protect two very strong year classes. Amendment 10 anticipated that the scallops would reach optimum size for harvest in 2007. This action considers several alternatives for managing this access area including how many trips should be allocated, when the area should open and whether or not the area should be closed seasonally to protect sea turtles.

DECISION 4A

- **Precautionary initial trip allocations (F=0.16, 5 trips in 2007 including a 2% set-aside for research, 1% set-aside for observers, and 2% for general category vessels) (*Preferred Alternative*) OR**
- **Status Quo: Allocations at a F rate of 0.32 (9 trips in 2007)**

Biological Impacts: Previous controlled access area programs have overestimated biomass, thus a precautionary approach with initially lower allocations would reduce the risk of over-harvesting the area.

Economic/Social Impacts: The comparative economic impacts of this measure were analyzed in Section 5.2.1 as a part of the 12 rotation area alternatives. Landings and revenues with the precautionary initial trip allocations will be less in 2007 compared to the level of landings and revenues if this area was fully open or opened as controlled access for 3 years (Tables 90 and 94, pages 175 and 179). However, the cumulative value of economic benefits with the preferred alternative will be larger in the short- and the long-term, as compared to Status Quo (Tables 92 and 95, pages 178 and 180). This measure could have negative economic impacts on the general category scallop vessels because it limits the maximum catch from this vessel category, but positive economic impacts for the scallop resource and overall fishery (Section 5.2.2.5).

Other Impacts: Fishing more than 5 trips per vessel could have safety risks and greater effects on the bottom environment from discarded scallop viscera and concentrated fishing effort.

DECISION 4B

- **Re-open ET access area on January 1, 2007 (*Preferred Alternative*) OR**
- **Re-open ET access area on March 1, 2007**

Biological Impacts: The preferred alternative is intended to spread out effort over time to prevent high levels of shucked scallops from collecting on the bottom and increasing biological oxygen demands.

Economic/Social Impacts: The preferred alternative will have positive economic impacts by providing vessels more flexibility about when to fish, thus it will help to keep revenues stable and fishing costs lower compared to an opening on March 1, 2007 (section 5.2.2.5).

Other Impacts: The preferred alternative is intended to spread out effort over time to prevent safety concerns.

DECISION 4C – Seasonal closures to reduce the risk of interactions with sea turtles and reduce scallop and finfish discard mortality

- **Seasonal closure of ETA from June 15 to November 14 (5 months in length) OR**
- **Seasonal closure of ETA from July 15 to October 31 (3.5 months in length) OR**
- **Seasonal closure of ETA from September 1 to October 31 (2 months in length) OR**
- **Year round access**

No preferred alternative identified

Biological Impacts: Seasonal closures are not expected to impact scallop resource since a defined level of effort will shift to that area during the months it is open.

Economic/Social Impacts: Seasonal access restrictions can have negative economic effects on scallop fishermen by reducing their flexibility in choosing when to fish and by increasing the costs of fishing (Section 5.2.2.5, Table 103, page 191) Furthermore, seasonal closures can cause spikes in landings which can have negative effects on price and revenues.

Other Impacts: While the potential to reduce the risk of fishery interactions with sea turtles exists with this action, little information is available to indicate whether or not effort would shift to areas where there are equal or greater risks to turtles.

DECISION 5 Procedures to adjust ETA allocations to account for uncertainty in 2007 ETA biomass estimates (Section 3.3.1.5 page 43)

- **Rulemaking procedure to adjust the number of ETA trips (*Preferred Alternative*) OR**
- **Framework Action to adjust the number of ETA trips**

Biological Impacts: The preferred alternative would allow adjustments to be made more quickly to ensure optimum yield is achieved. If biomass estimates are lower than projected, the number of access trips can be reduced quickly based on event-triggered rulemaking.

Economic/Social Impacts: The preferred alternative (rulemaking procedure) is expected to have positive economic impacts by ensuring that landings and economic benefits do not fall below the sustainable levels by making timely adjustments to management measures when new ETA biomass data becomes available (Section 5.2.2.5).

Other Impacts: None

At the September Council meeting, the Council discussed a rulemaking process that would identify thresholds and adjustments to 2006 ETA allocations based on available survey data. It was decided that if biomass is considerably lower than projected, the number of ETA trips will be reduced consistent with the thresholds defined in Table 22 (page 44). If biomass is within a certain threshold (34,381 - 64,230 mt.), no adjustments would be necessary, and five trips would be allocated in 2006. However, if biomass is considerably higher than projected, it was not clear whether the Council intended to adjust upward the number of allocated trips or allocate five trips in 2006 even if updated survey information projects biomass to be higher. The Council needs to decide if the number of ETA trips will be adjusted upward (to 6, 7, or 8) if biomass is higher than projected based on the thresholds defined in Table 22 OR if the number of ETA trips should remain at 5 even if estimated biomass is higher than originally projected.

DECISION 6 Delmarva Area Rotation Closure (Section 3.3.1.6 page 45)

This action is considering closing the Delmarva rotational area to protect a strong year class of young scallops recently found that area (See Map 5 on page 46 of FW document). High numbers of small scallops from the 2003 year class were observed in most of the stations in Delmarva. The area would be closed for three years until 2010 when the small scallops have grown sufficiently to be harvested.

- **Close Delmarva when ETA opens in 2007 (*Preferred Alternative*) OR**
- **Close Delmarva on September 1, 2006 OR**
- **Status Quo: Do not close Delmarva during 2006 and 2007**

Biological Impacts: Closing Delmarva would ensure the continued success of Scallop FMP by maintaining a high yield per recruit and productivity from the strong year class of young scallops that have been found in that area (south of ETA). Closing this area is expected to boost landings by 15% during 2007-2014. Closing the area is also expected to increase the landings of more valuable scallops (less than 10 meats per pound) by 180%.

Economic/Social Impacts: The impacts of the potential closures of the Delmarva area were examined in combination with the other area rotation and open area DAS alternatives in Section 5.2.1. The results showed that the impacts on total economic benefit would be negative in 2007 because the area would be closed, but slightly positive over the long-term (2008-2019) compared to no action and exceed the benefits for the other rotation alternatives (Tables 90, 92, 94, 95, starting on page 175). Closing Delmarva starting in 2007 could have, however, negative economic impacts on some vessels which mainly fish in Mid-Atlantic areas, by narrowing the fishing grounds they could use for their open-area days (Section 5.2.2.6, Tables 104-107, starting on page 193). Some of these negative economic impacts may be mitigated by the re-opening of the Elephant Trunk area in 2007.

Other Impacts: Closing Delmarva is expected to decrease area swept dramatically. This will reduce overall finfish bycatch and habitat impacts from 2007 through 2014. A closure of the Delmarva area could result in benefits to sea turtles given that observed takes have occurred within the closure boundaries.

DECISION 7 Open Area Management (Section 3.3.2 page 48)

The open area DAS allocations are set annually and adjusted every two years to achieve optimum yield at the target fishing mortality (F=0.2) for the total scallop resource. Since the formula also includes the mortality in controlled access areas, the open area DAS allocations depend on what controlled access area management TACs are approved. This document analyzed 11 options with different combinations of GB access areas, access into ETA, access into Hudson Canyon, and whether or not the Delmarva area would be closed in 2007. The table on the next page compares the different options that were considered. The total number of fleet open area DAS is contingent on what the Council decides for access into GB areas (Decision 2), Hudson Canyon access (Decision 3), ETA access (Decision 4A) and closing the Delmarva area (Decision 6). Once those decisions are made, the number of open area DAS that should be allocated to achieve optimum yield can be determined (ranging from 15,000 to 30,000 DAS). For example, the preferred alternative for open area DAS is 20,000 in both 2006 and 2007; but that is in combination with the ETA being closed in 2006 and open in 2007 with an allocation of 5 trips for full-time vessels, the Delmarva area being closed in 2007, and allowing unused Hudson Canyon trips to be carried over into 2006 and 2007 (See table below). The table on the next page compares all eleven open area management scenarios. The various allocations for the different scenarios for the full-time, part-time and occasional vessel categories can be found in Table 24 of FW18 on page 49.

Preferred Alternative	Open area DAS per FT vessel	Controlled access area trips	Elephant Trunk	Hudson Canyon	Delmarva	Total DAS per FT vessel
DMV closure – 20K open area DAS in 2006 and 2007 (Preferred Alternative)						
2006	52	1 CAI, 2 CAII, 2 NLS (60 DAS)	Closed	2005 trips	Open	112
2007	51	1 CAI, 1 NLS, 5 ETA (84 DAS)	5 trips	2005 trips	Closed	135

Biological Impacts: Table 57 on page 103 shows the fishing mortality estimates by sub-region for the various open area DAS alternatives. The PDT examined these effects and the amount of scallop fishing effort that would occur in open fishing areas. Since fishing mortality is proportional to area swept, these data also have implications for finfish bycatch, scallop non-catch mortality, and for habitat effects. Taking these into consideration, the PDT recommended that in order to achieve optimum yield the open area DAS allocations should not exceed 20,000 DAS whether or not the Delmarva area is closed to fishing in 2007, or whether or not the Hudson Canyon area remained classified as a controlled access area in 2006 and 2007.

Economic/Social Impacts: The economic impacts of the open area DAS allocation alternatives combined with other measures regarding controlled access (Georges Bank, Hudson Canyon, ETA) and area closures (Delmarva) are examined in detail in Section 5.2.1. In general, the higher open area DAS allocations results in lower economic benefits over the long-term (Tables 90, 92, 94, 95, pages 175-180).

Other Impacts: Overall, it is estimated that the alternatives to the no action and status quo will increase long-term area swept from between 3% (preferred alternative) to 14%. However, it is impossible to determine where this new bottom contact will occur and in what types of habitats. It is important to note that none of the alternatives propose any access or changes to the habitat closed areas. As for impacts on protected species, the preferred alternative would result in less potentially negative consequences compared to the No Action, at least in 2006, but potentially greater risks in 2007 when more open area DAS could shift to Mid-Atlantic areas where turtles are seasonally more abundant.

**** Identifies the Preferred Alternative****

Alternatives	Open area DAS per FT vessel	Controlled access area trips	Elephant Trunk	Hudson Canyon	Delmarva	Total DAS per FT vessel
No Action – 24.7K open area DAS in 2006 and 2007, 2 controlled access trips in Georges Bank, with Hudson Canyon and Delmarva fully open in both years and Elephant Trunk fully open in 2007						
2006	67	2 trips in CAI & NLS (24 DAS)	Closed	Fully open	Open	91
2007	67	2 trips in CAI & NLS (24 DAS)	Fully Open	Fully open	Open	91
Status Quo -24.7K open area DAS in 2006 (29.7K in 2007), 3 controlled access trips in Georges Bank, with Hudson Canyon and Delmarva fully open in both years and Elephant Trunk becoming controlled access for 3 years in 2007						
2006	67	2 trips in CAI, 1 trip in NLS (36 DAS)	Closed	Fully open	Open	103
2007	62	1 trip in CAI, 2 trips in NLS (36 DAS)	9 trips	Fully open	Open	206
Delmarva closures with revised Georges Bank access, 5 year ramp for Elephant Trunk and Extended Hudson Canyon access for 2 years						
<i>DMV closure - 18K open area DAS in 2006 and in 2007</i>						
2006	46	1 CAI, 2 CAII, 2 NLS (60 DAS)	Closed	2005 trips	Open	106
2007	45	1 CAI, 1 NLS, 5 ETA (84 DAS)	5 trips	2005 trips	Closed	129
<i>DMV closure – Scenario 1, 20K open area DAS in 2006 (28145 DAS in 2007)</i>						
2006	52	1 CAI, 2 CAII, 2 NLS (60 DAS)	Closed	2005 trips	Open	112
2007	78	1 CAI, 1 NLS, 5 ETA (84 DAS)	5 trips	2005 trips	Closed	162
**DMV closure - 20K open area DAS in 2006 and 2007 ** (Preferred Alternative)						
2006	52	1 CAI, 2 CAII, 2 NLS (60 DAS)	Closed	2005 trips	Open	112
2007	51	1 CAI, 1 NLS, 5 ETA (84 DAS)	5 trips	2005 trips	Closed	135
Extended Hudson Canyon Access, revised Georges Bank access, with Delmarva fully open and Elephant Trunk access becoming controlled access for 5 years in 2007						
<i>FW18: 1YR HCA restriction, 24.7K open area DAS in 2006 (25307 in 2007)</i>						
2006	52	1 CAI, 2 CAII, 2 NLS (60 DAS)	Closed	2005 trips	Open	112
2007	69	1 CAI, 1 NLS, 5 ETA (84 DAS)	5 trips	Closed	Open	153
<i>FW 18: 2Yr HCA restriction, 20K open area DAS in 2006 (25.9K in 2007)</i>						
2006	52	1 CAI, 2 CAII, 2 NLS (60 DAS)	Closed	2005 trips	Open	112
2007	71	1 CAI, 1 NLS, 5 ETA (84 DAS)	5 trips	2005 trips	Open	155
Revised Georges Bank access, with no DMV closures, with Hudson Canyon and Delmarva fully open and Elephant Trunk access becoming controlled access for 5 years in 2007						
<i>Framework 18 - 15K open DAS in 2006 (26.3K DAS in 2007)</i>						
2006	36	1 CAI, 2 CAII, 2 NLS (60 DAS)	Closed	Fully open	Open	96
2007	72	1 CAI, 1 NLS, 5 ETA (84 DAS)	5 trips	Fully open	Open	156
<i>Framework 18 - 20K open area DAS in 2006 (25.3K DAS in 2007)</i>						
2006	52	1 CAI, 2 CAII, 2 NLS (60 DAS)	Closed	Fully open	Open	112
2007	69	1 CAI, 1 NLS, 5 ETA (84 DAS)	5 trips	Fully open	Open	153
<i>Framework 18 - 24.7K open area DAS in 2006 (25049 DAS in 2007)</i>						
2006	67	1 CAI, 2 CAII, 2 NLS (60 DAS)	Closed	Fully open	Open	127
2007	68	1 CAI, 1 NLS, 5 ETA (84 DAS)	5 trips	Fully open	Open	152
<i>Framework 18 - 30K open area DAS in 2006 (24.6K DAS in 2007)</i>						
2006	84	1 CAI, 2 CAII, 2 NLS (60 DAS)	Closed	Fully open	Open	144
2007	67	1 CAI, 1 NLS, 5 ETA (84 DAS)	5 trips	Fully open	Open	151

DECISION 8 Limited Access Crew Limits (Section 3.3.3 page 51)

Vessels with limited access permits may carry no more than 7 persons, a measure that was implemented to control the fishing power of a vessel. In access areas, this measure has decreased the amount of actual fishing time, but may increase costs to vessels by reducing efficiency per DAS. This action is considering several alternatives to adjust crew size for access area trips.

- **Eliminate the 7 person crew limit (5 for small dredge vessels) on controlled access area trips (Preferred Alternative) OR**
- **Raise the crew limit from 7 to 8 for limited access vessels and 5 to 6 for small dredge vessels OR**
- **Status Quo: Continue 7 person crew limit (5 for small dredge) on all limited access vessels**

Biological Impacts: The limit on the number of crew decreases the amount of actual fishing time, because in many areas the vessel must lie-to in order to shuck. In many cases, the crew limit also induces the vessel to target larger scallops and improves size selectivity under certain conditions. However, lifting the crew limit will not affect the total weight of scallops that may be landed. Section 5.1.6 includes a quantitative analysis of shucking rates, and with more crew onboard vessels can shuck and process more scallop weight per day, and with a possession limit, trips would become shorter.

Economic/Social Impacts: Raising or eliminating the crew limit for limited access vessels is expected to lower total fishing costs, increase total benefits for crew and the vessel-owners, but reduce income per crew member. This measure could have negative economic impacts, however, if there is a race to fish by many vessels employing a large crew to fish before catch rates per day decline or before the area is closed due to bycatch (Section 5.2.4, Tables 110-111, page 201 and 202). Furthermore, if unlimited crew size leads to smaller scallops being landed, then both the immediate impacts (if price falls) and long-term impacts (when harvesting smaller scallops affects future landings) would be negative.

Other Impacts: Larger crew sizes will reduce overall trip length, but no net increase in bottom contact time' therefore, fishing impacts on benthic environments and finfish bycatch are expected to be the same. Increasing crew limits could improve safety and provide more opportunities for new recruits and shackers.

DECISION 9 Trip Exchange Deadline (Section 3.3.4 page 25)

The exchange program was established in Amendment 10 to mitigate impacts associated with area-specific allocations on vessels located in distant ports or vessels that prefer not to fish in certain areas because of operational or economic cost. Amendment 10 required that transactions be completed within 90 days of when allocations were made, but this no longer seems necessary for adequate monitoring and compliance.

- **Elimination of the June 1 deadline (Preferred Alternative) OR**
- **Status Quo: Require trip exchanges to be completed by June 1, or 90 days after allocations are made**

Biological Impacts: This measure is primarily administrative and there are no impacts on the scallop resource.

Economic/Social Impacts: Elimination of the deadline is expected to have positive economic impacts by providing greater flexibility for vessel owners and fishermen to respond to existing conditions and to lower fishing costs.

Other Impacts: Providing increased opportunity to exchange trips may improve safety. This measure is not expected to have any impacts on EFH, bycatch or protected species.

DECISION 10 Controlled Access Area Trip Exchanges (Section 3.3.5 page 52)

Amendment 10 allowed for limited access scallop vessels to exchange the ability to take trips in controlled access areas, as a way to reduce fishing costs and mitigate the effects of allocating DAS for specific areas which are not feasible or beneficial for some vessels. Except for unused 2005 Hudson Canyon trips, in 2006 no Mid-Atlantic access area trips will be allocated. Therefore there will be some vessels that fish primarily in the Mid-Atlantic region that will not have any access area trips to exchange Georges Bank access trips for. This action is considering several alternatives to address this issue.

- **One-to-one exchanges of 2006 GB access area trips and 2007 ETA trips with another vessel (*Preferred Alternative*)**
- **Exchanges of 2006 GB access trips and open area DAS with another limited access vessel**
- **One-to-one exchanges of GB access trips and unused 2005 Hudson Canyon area trips to be used in 2006 (*Preferred Alternative*)**
- **Status Quo: One-to-one exchanges of controlled access area trips for areas open to fishing during the same fishing year (*Preferred Alternative*)**

Biological Impacts: The one-to-one exchanges for access area trips will not impact the potential scallop mortality, or the amount and distribution of fishing effort. However, exchanges involving open area DAS have the potential to increase fishing effort and scallop mortality in open areas by some amount. And since catches are unlimited in open areas, these exchanges could have the potential to increase fishing power and cause overfishing in open areas, particularly if the transfers involve shifting effort to open areas by more efficient and powerful vessels.

Economic/Social Impacts: Allowing vessels that are closer or prefer to fish in the Georges Bank access areas than in the Elephant Trunk Area (and vice versa) to exchange their trips with another vessel will have positive economic impacts by providing greater flexibility to vessels regarding which areas to fish, thereby reducing fishing costs without changing the total allocations in each area (Section 5.2.5.2) Similarly, trading Georges Bank trips with another vessel for open access area trips could lower fishing costs and benefit vessels. On the other hand, the exchanges involving open area DAS have the potential to increase fishing effort and scallop mortality in the open areas by some amount, to reduce future yield and economic benefits from the scallop resource (Section 5.2.5.3). One to one exchanges of Georges Bank access trips and unused 2005 Hudson Canyon area trips authorized to be used in the 2006 fishing year is expected to have positive economic impacts by allowing the vessels to delay their unused trips until conditions improve and more catch per DAS could be landed than currently possible (Section 5.2.5.4)

Other Impacts: No expected impacts on EFH or protected species from the alternatives that are one-to-one exchanges within access areas. Impacts on EFH and protected species from the alternatives that include exchanges for open area DAS (a non-preferred alternative) are difficult to assess because it is unknown where the open area effort would be.

DECISION 11 Broken Trip Exemption Program (Section 3.3.6 page 55)

The broken trip exemption program allows vessels that return to port on a controlled access area trip to catch the remaining portion at a later date on a compensation trip. FW17 liberalized the program to remove the disincentive that was formerly associated with the formula that determined how much scallops could be landed on a compensation trip. Compensation trips must be taken within the same fishing year, which may increase safety and business risks near the end of a fishing year. This action considers alternatives to address this potential problem.

- **60-day carry forward of compensation trips OR**
- **Status Quo: no carry forward of compensation trips**

No preferred alternative identified

Biological Impacts: The 60-day carry forward alternative is not expected to have considerable biological consequences. However, if the area where the compensation trip is authorized is closed at the beginning of the year and re-opens later in the year, there could be some biological implications associated with changes in meat yield and finfish distribution.

Economic/Social Impacts: The 60-day carry forward alternative would have positive impacts on vessels by reducing any revenue loss if the compensation trips could not be taken at the end of the same fishing year due to weather or other factors (section 5.2.5.5).

Other Impacts: None

DECISION 12 Research Set-Aside Program (Section 3.3.7 page 56)

Two percent of controlled access area TACs and two percent of open area DAS are set-aside for funding scallop-related research through compensation trips. Researchers submit proposals to do scallop-related research using these funds and contract with commercial scallop vessels. All allocations are made for a fishing year and the research as well as the compensation must be completed before the end of the fishing year. This action is considering several changes to the research set-aside program.

- **Compensation for multi-year research projects (RSA Issue #1)**
- **Disposition of unused research set-asides (RSA Issue #2)**
 - Re-distribute through a second Research Funding Proposal for the current year
 - Set up RSA fund to roll unused amount to subsequent fishing years
 - Re-allocate TAC/DAS to industry during the current fishing year
 - Allow Experimental fisheries with harvest levels consistent with the amount of RSA left
- **Cooperative survey dedicated set-aside (RSA Issue #3)**
- **Allowance of combination research/compensation trips in areas closed to fishing (RSA Issue #4)**

No preferred alternative identified

Biological Impacts: The proposed changes to the research set-aside program are unlikely to have more than a marginal biological impact. Impacts associated with allowing combined compensation/research trips to take place in closed areas will depend on how much research takes place, and where and when the trips are taken. Since only a portion of the 2% TAC might be used this way, overall effects are expected to be low. Other changes are likely to have indirect positive benefits from better research. The changes would allow more research to be conducted during the critical spring period to assess the effects of seasonal changes of scallop meat yield and bycatch rates.

Economic/Social Impacts: Alternatives are expected to have positive economic impacts by improving information, thus management of the scallop resource (section 5.2.6).

Other Impacts: Impacts on EFH and protected resources depend on where compensation/research trips are taken. For example, if effort is concentrated in the Mid-Atlantic region, there is potentially more risk for sea turtle interactions depending on the season, water temperature and depth of fishing effort from research compensation trips, but since the overall level of effort allocated for research, impacts are likely to be marginal.