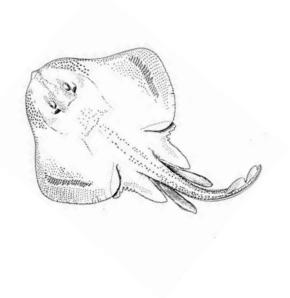
## **Supplemental Environmental Assessment**

# Revised Catch Limits for the Northeast Skate Complex for Fishing Year 2011

Supplements the Environmental Assessment for Framework Adjustment 1 to the Northeast Skate Complex Fishery Management Plan

## Prepared By:

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Leucoraja ocellata

## **EXECUTIVE SUMMARY**

The skate fishery in the Northeast Region is managed by the New England Fishery Management Council through the Northeast Skate Complex Fishery Management Plan (Skate FMP). On March 23, 2010, NOAA's National Marine Fisheries Service (NMFS), on behalf of the U.S. Secretary of Commerce (Secretary), approved Amendment 3 to the Skate FMP. The final rule for Amendment 3, which became effective July 16, 2010, included an acceptable biological catch level (ABC) and annual catch limit (ACL) of 41,080 mt, an annual catch target (ACT) of 30,810 mt, and a total allowable landings (TAL) level of 13,848 mt for the 2010 and 2011 fishing years, based on the best available science at the time. Subsequently, due to an early closure of the directed skate wing fishery in 2010, the Council submitted Framework Adjustment 1 (FW1), which reduced the skate wing possession limits and increased the in-season incidental limit trigger point, to lengthen the fishing season during 2011. The measures in this framework became effective on May 17, 2011.

Since the implementation of FW1, new scientific information has been made available on skates. Estimates of skate biomass updated through autumn 2010 indicate significant increases in the biomass of winter and little skates, supporting increases in the ABC for skates. This action would increase the ABC for the skate complex by 23 percent to 50,435 mt, consistent with the most recent scientific advice and the recommendation of the Council's Scientific and Statistical Committee (SSC). On June 23, 2011, the Council requested that this new ABC be implemented by NMFS during the 2011 fishing year to help avoid another early closure of the directed skate fishery. Commensurate increases in the ACL, ACT, and TALs are also proposed to be implemented, following the ACL framework of Amendment 3. However, this action does not propose further adjustment of the possession limits or other in-season measures implemented by FW1.

The TALs for the skate fisheries are calculated by deducting a projection of skate discards and state-water landings from the ACT. In May 2011, the Skate PDT updated both the skate discard estimates and the assumed discard mortality rate through 2010. Based on new research, the discard mortality rate for little and winter skates caught by trawl gear was reduced from 50% to 20% and 12%, respectively. As a result, the skate discard rate applied to the ACT was reduced from 52% to 36%. An additional 6.7% was deducted to account for state-water landings. In addition to the higher ABC, these adjustments collectively increase the Skate TAL by 56% compared to Amendment 3/FW1 levels. This TAL would then be divided between the skate wing fishery (14,338 mt) and the bait fishery (7,223 mt) based upon the allocation percentages established by Amendment 3.

The impacts of the proposed action are described in Section 6.0. In summary, the proposed action is expected to have a neutral impact on the skate resource in comparison to taking no action. In addition, this action is expected to have a neutral impact on non-target species, protected species, and habitat in comparison to taking no action because it would not likely change or shift the distribution of total fishing effort in the skate fishery. However, the proposed action is expected have a positive direct impact on communities (economic and social) given that it will result in increased overall fishing opportunities through increases in allowable landing levels for fishing year 2011.

The proposed skate catch limits would be implemented based upon Secretarial emergency authority specified in section 305(c) of the Magnuson-Stevens Act, and following the rulemaking requirements of the Administrative Procedure Act. It does not change any of the approved management measures in Amendment 3 or FW1, but only modifies the FY 2011 skate fishery specifications recommended in that amendment.

This environmental assessment was developed in accordance with provisions, requirements, and available guidance on implementing the National Environmental Policy Act (NEPA).

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## **List of Acronyms**

ABC Acceptable biological catch

ACL Annual Catch Limit

ALWTRP Atlantic Large Whale Take Reduction Plan

AM Accountability Measure

APA Administrative Procedures Act

ASMFC Atlantic States Marine Fisheries Commission

CAI Closed Area I
CAII Closed Area II

CPUE Catch per unit of effort
DAM Dynamic Area Management

DAS Days-at-sea

DFO Department of Fisheries and Oceans (Canada)
DMF Division of Marine Fisheries (Massachusetts)
DMR Department of Marine Resources (Maine)

DPWG Data Poor Working Group

DSEIS Draft Supplemental Environmental Impact Statement

EA Environmental Assessment
EEZ Exclusive economic zone
EFH Essential fish habitat

EIS Environmental Impact Statement

ESA Endangered Species Act F Fishing mortality rate

FEIS Final Environmental Impact Statement

FMP Fishery management plan

FW Framework FY Fishing year

GARM Groundfish Assessment Review Meeting

GB Georges Bank

GIS Geographic Information System

GOM Gulf of Maine

GRT Gross registered tons/tonnage
HAPC Habitat area of particular concern
HPTRP Harbor Porpoise Take Reduction Plan

IFQ Individual fishing quota ITQ Individual transferable quota

IVR Interactive voice response reporting system

IWC International Whaling Commission

LOA Letter of authorization
LPUE Landings per unit of effort

MA Mid-Atlantic

MAFAC Marine Fisheries Advisory Committee
MAFMC Mid-Atlantic Fishery Management Council

MMPA Marine Mammal Protection Act

MPA Marine protected area

MRFSS Marine Recreational Fishery Statistics Survey

MSFCMA Magnuson-Stevens Fishery Conservation and Management Act

MSMC Multispecies Monitoring Committee

MSY Maximum sustainable yield

NEFMC New England Fishery Management Council

NEFSC Northeast Fisheries Science Center NEPA National Environmental Policy Act

NERO Northeast Regional Office NLSA Nantucket Lightship closed area

NMFS National Marine Fisheries Service

NOAA National Oceanic and Atmospheric Administration

NT Net tonnage

OBDBS Observer database system

OLE Office for Law Enforcement (NMFS)

OY Optimum yield

PBR Potential Biological Removal
PDT Plan Development Team
PRA Paperwork Reduction Act
RFA Regulatory Flexibility Act
RMA Regulated Mesh Area

RPA Reasonable and Prudent Alternatives

SA Statistical Area

SAFE Stock Assessment and Fishery Evaluation

SAP Special Access Program

SARC Stock Assessment Review Committee

SAW Stock Assessment Workshop

SBNMS Stellwagen Bank National Marine Sanctuary
SEIS Supplemental Environmental Impact Statement

SFA Sustainable Fisheries Act
SIA Social Impact Assessment
SNE Southern New England
SSB Spawning stock biomass

SSC Scientific and Statistical Committee

TAC Total allowable catch
TAL Total allowable landings
TED Turtle excluder device

TEWG Turtle Expert Working Group

TMS Ten minute square

TRAC Trans-boundary Resources Assessment Committee

TSB Total stock biomass

USFWS United States Fish and Wildlife Service

VMS Vessel monitoring system VPA Virtual population analysis

VTR Vessel trip report

WGOM Western Gulf of Maine

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## 1.0 INTRODUCTION

NOAA's National Marine Fisheries Service (NMFS) has prepared this supplemental analysis to evaluate potential impacts that would result from the proposed action to approve revised catch limits for the Northeast Skate Complex for fishing year (FY) 2011 (May 1, 2011 – April 30, 2012). In accordance with the National Environmental Policy Act (NEPA), NMFS previously evaluated the potential impacts of skate catch limits for FY 2011 in Framework Adjustment (FW) 1 to the Northeast (NE) Skate Complex Fishery Management Plan (FMP) in an Environmental Assessment (EA) submitted to NMFS by the New England Fishery Management Council (Council) (NEFMC 2010). Framework 1 analyzed the impacts of a suite of management measures approved by the Council, including a range of possession limits, the annual catch limit (ACL), annual catch target (ACT), and total allowable landings (TALs) for the skate wing and bait fisheries. The conclusion reached in the EA completed for FW1 was that the action of approving the preferred measures would not significantly impact the quality of the human environment. All beneficial and adverse impacts of the action were evaluated in the FW1 EA, resulting in the conclusion of no significant impacts. This supplemental EA presents impact information on the physical, biological, habitat, and socio-economic ecosystem components that would result from approving revised catch limits for skates as described herein. This document is not a stand alone document, but rather a supplemental EA, intended to be utilized in conjunction with the attached FW 1 EA.

## 2.0 BACKGROUND

The New England Fishery Management Council (Council) manages skates through the Northeast Skate Complex Fishery Management Plan (Skate FMP), which was implemented in 2003. Seven skate species are managed together as a species complex: winter (*Leucoraja ocellata*), little (*Leucoraja erinacea*), barndoor (*Dipturus laevis*), thorny (*Amblyraja radiata*), smooth (*Malacoraja senta*), clearnose (*Raja eglanteria*), and rosette (*Leucoraja garmani*). In July 2010, NMFS implemented Amendment 3 to the Skate FMP (NEFMC 2009). Amendment 3 implemented an ACL and accountability measures (AMs) for the skate fishery, as required under the reauthorized Magnuson-Stevens Fishery Conservation and Management Act (MSA). The catch limits are based on scientific recommendations of acceptable biological catch (ABC), using methods approved by the Northeast Data Poor Stock Working Group stock assessment (NEFSC 2009) and the advice of the Council's Scientific and Statistical Committee (SSC). Amendment 3 also implemented a framework for allocating the ACL between the ACT and TALs for the skate wing and bait fisheries (Figure 1), and reduced possession limits for both fisheries. Incidental possession limits go into effect at 80% of the TAL for the wing fishery and at 90% of the seasonal quota or TAL for the bait fishery.

Due to delays in the implementation of Amendment 3, and accelerated landings of skate wings early in fishing year (FY) 2010 (which began May 1, 2010), the wing fishery landed 80% of its TAL earlier in the year than anticipated. This resulted in an early "closure" of the directed skate wing fishery (September 3, 2010) and an incidental possession limit of 500 lb of skate wings in effect for the remainder of the fishing year (through April 30, 2011). According to fishing industry members, this closure resulted in job losses in the fishery and onshore processors,

reduced revenue, loss of overseas market share for skate wing products, and other negative economic impacts during FY 2010. To avoid another mid-season closure of the directed skate wing fishery in FY 2011, the Council initiated FW1 (NEFMC 2010). This action was designed to adjust the Amendment 3 skate wing possession limits and in-season trigger point to extend the fishing season for the skate wing fishery in FY 2011. FW1, which became effective May 17, 2011, reduced the 5000-lb skate wing possession limit to 2,600 lb from May 1 through August 31, and 4,100 lb from September 1 through April 30, and increased the incidental possession limit trigger point from 80% to 85% of the skate wing fishery TAL. The action did not adjust the ABC, ACL, ACT, TALs, or incidental possession limits for the skate fishery.

At its June 23, 2011 meeting, the Council reviewed new scientific information on skates presented by the SSC and Skate Plan Development Team (PDT). This included skate biomass data from the Northeast Fisheries Science Center (NEFSC) bottom trawl survey updated through Fall 2010 (using calibrated values from the FSV Bigelow) (refer to Miller et al. 2010), which indicate significant increases in winter and little skate biomass. Based on new research, the SSC also recommended adjusting the skate discard mortality rate assumption for winter and little skates, which reduces the current and historic estimates of total catch for the skate complex. Total skate discard estimates were also updated through calendar year 2010. These updates resulted in a new recommendation for Skate ABC of 50,435 mt, which represents a 23% increase from the FY 2010-2011 ABC of 41,080 mt established by Amendment 3. The Council is using this new ABC as the basis for skate fishery specifications for the 2012-2013 fishing years. However, in acknowledgment of the skate wing fishery's high current rate of landings in FY 2011 under FW1 possession limits (Figure 1), and the likelihood that they will land 85% of their TAL before the end of the fishing year, the Council made a motion to "request the Secretary of Commerce to initiate an emergency action in the skate fishery to increase the allowable harvest of skate as a result of the increase in the ABC recently recommended by the SSC." This action implements the increase in ABC and associated skate catch limits requested by the Council.

## Northeast Skate Complex Wing Fishery Weekly Report

For week ending: Ju For data reported through: Ju Quota Period: 20 Quota Period Dates: 05

July 16, 2011 July 21, 2011 2011 05/01/11 to 04/30/12

Previously Reported Landings (Whole Pounds)	Previous Weeks' Updates (Whole Pounds)	Current Week's Landings (Whole Pounds)	Cumulative Landings (Whole Pounds)	Quota (Whole Pounds)	Percent of Quota (%)
7,058,232	16,887	537,036	7,612,155	20,302,370	37



These data are the best available to NOAA Fisheries Service when this report was compiled. Data are supplied to NOAA Fisheries Service by dealers via Dealer Electronic Reporting to the Standard Atlantic Fisheries Information System (SAFIS) and/or by state agencies and may be preliminary. Discrepancies with data from previous Weekly Landings Reports are due to corrections made to the database.

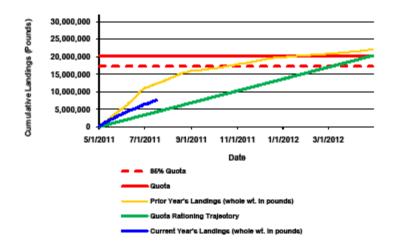


Figure 1. Report of weekly skate wing landings for FY 2010 and 2011. The blue line represents 2011 landings to date, and the yellow line represents 2010 landings. The solid red line represents the skate wing fishery TAL, and dashed red line represents 85% of the TAL.

## 3.0 PURPOSE AND NEED

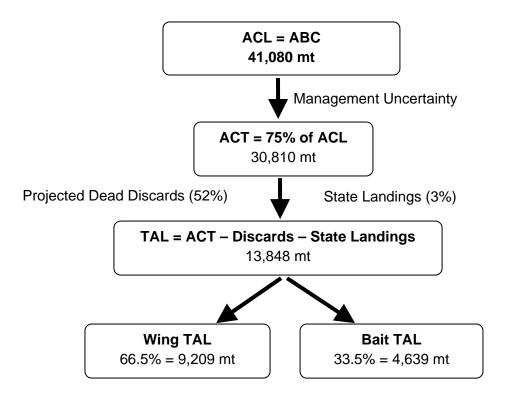
The purpose for this action is to implement a revised ABC (50,435 mt) and associated catch limits for the NE Skate Complex for FY 2011, to achieve a better balance of the conservation and economic objectives of the MSA and Skate FMP. This need is to avoid an early closure of the directed skate wing fishery during FY 2011 and the economic impacts that would result from such a closure. The purpose and need for this action reflect the recommendations of the Council and apply the best available scientific information to the management of skate resources.

## 4.0 PROPOSED ACTION AND ALTERNATIVE

The proposed action and other alternatives considered in this supplemental environmental assessment are described in the following sections and summarized in the subsequent tables. Only one alternative is proposed due to the narrow purpose and need for this action, and because the Council process results in a single recommendation for the Skate ABC. A range of ABCs were considered by the SSC. The SSC justification for its selection is described below.

## 4.1 NO ACTION ALTERNATIVE

The No Action Alternative would allow the skate management measures analyzed and implemented by Amendment 3 and FW1 for FY 2011 to remain in place. The ABC would be allocated as described in the Amendment 3 Final Environmental Impact Statement (FEIS) (NEFMC 2009) and specified as described in the EA for the final 2010-2011 NE Skate Complex Fishery Specifications (NMFS 2010) and in FW1 (NEFMC 2010) (Figure 2). The skate wing possession limit would be 2,600 lb for May 1 through August 31 and 4,100 lb for September 1 through April 30, and the incidental possession limit (500-lb) trigger point would be at 85% of the wing fishery TAL. The skate bait possession limit would be 20,000 lb of whole skates, and the incidental possession limit (whole weight equivalent of the skate wing possession limit) trigger point would be at 90% of the Season 1 or 2 quota, or the annual bait fishery TAL.

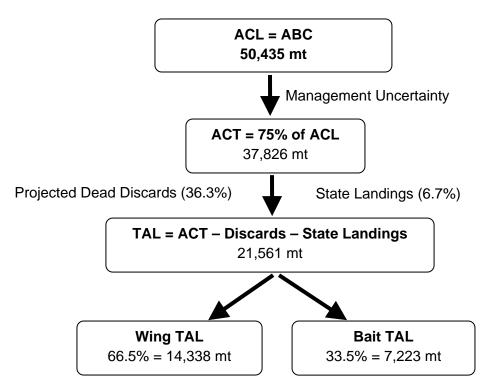


**Figure 2.** Diagram of the Skate ABC allocation framework implemented in Amendment 3 for FY 2011 (No Action Alternative).

## 4.2 PREFERRED ALTERNATIVE – REVISED FY 2011 SKATE ABC AND ASSOCIATED CATCH LIMITS

The Preferred Alternative would be based on the revised Skate ABC recommendations of the Council and SSC at the June 2011 Council meeting: ABC = 50,435 mt. The SSC reviewed analyses by the Skate PDT which incorporated the most recent scientific information on skate biomass (through Fall 2010), landings, and discards, which collectively allow calculation of ABC (median catch/biomass ratio multiplied by the most recent biomass estimate) (NEFMC 2011). The SSC considered an ABC range of 41,080 mt (status quo) to 76,491 mt. In light of the PDT's analyses, the SSC agreed that an ABC of 50,435 mt represented the best available scientific information and most appropriate catch level for skates at this time. The Council accepted this recommendation at their June 2011 meeting.

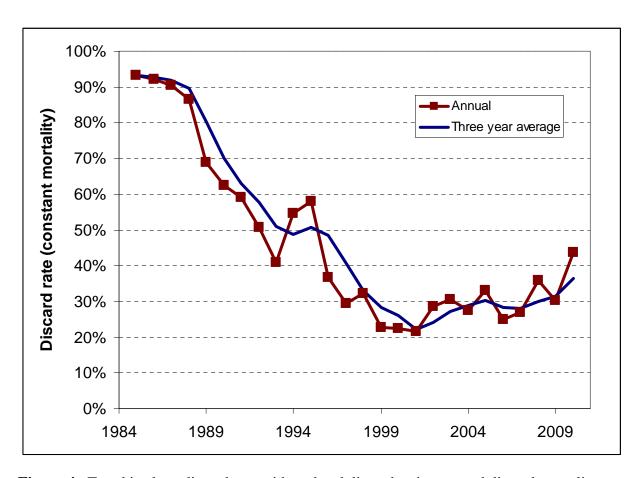
The ACL, ACT, and TALs would be allocated as described in Figure 3, using the methods implemented by Amendment 3. The allocation also reflects new information from the Skate PDT on skate discards (Table 1 and Figure 4) and state landings (Table 2) that affect the TAL. No other management measures would be changed, including the possession limits and trigger points described in the No Action Alternative. The increased TALs are anticipated to extend the fishing season for the directed skate fisheries and help avoid prolonged closures and associated economic impacts in FY 2011. The values of the proposed Preferred and No Action alternatives are compared in Table 3 below.



**Figure 3.** Diagram of the proposed Skate ABC allocation framework for FY 2011 (Preferred Alternative).

**Table 1.** Estimated discards (mt) of skates (all species) by gear type, 1964-2010.

Vear   Traw   Traw   Traw   Traw   Gill Net   Dredge   Half   Traw   Traw   Traw   Gill Net   Dredge   Half   1964   441   54,171   0   12   5,883   60,506   471   35,752   0   7   7,027   43,2   1966   491   59,067   0   17   4,414   63,989   609   39,381   0   5   7,722   43,2   1966   373   63,304   0   26   6,078   69,781   572   34,031   0   7   5,502   40,1   1967   319   57,348   0   22   2,944   60,631   379   33,081   0   8   4,035   37,5   1968   252   56,808   0   37   3,807   60,904   345   31,931   0   10   4,123   37,5   1970   299   44,621   0   22   1,628   46,570   479   25,480   0   7   2,341   28,3   1971   460   35,165   0   21   1,860   37,506   715   19,920   0   8   2,193   22,8   1972   464   32,764   0   31   1,982   35,241   766   18,774   0   13   2,193   21,7   1973   566   34,973   0   31   2,206   37,776   754   19,785   0   15   1,666   22,377   1974   627   36,856   0   58   1,752   39,293   703   17,226   0   24   2,377   20,3   1975   695   25,513   280   61   2,389   28,937   726   16,923   37   26   40,500   21   1,860   34,661   34,821   34,841		Half 1				Half 2				
Year   Traw   Traw   Traw   Gill Net   Dredge   Half   Traw   Traw   Traw   Gill Net   Dredge   Half   1964   441   54,171   0   12   5,883   60,506   471   35,752   0   7   7,027   43,2   1966   491   59,067   0   17   4,414   63,989   609   39,381   0   7   5,502   47,8   1966   373   63,304   0   26   6,078   69,781   572   34,031   0   7   5,502   40,1   1966   379   57,384   0   22   2,944   60,631   379   33,081   0   8   4,035   37,5   1968   25,5730   0   32   2,359   58,395   524   27,736   0   6   2,607   30,8   1970   299   44,621   0   22   1,628   46,570   479   25,480   0   7   2,341   28,3   1971   460   35,165   0   21   1,680   37,506   715   19,920   0   8   2,199   22,8   1972   464   32,764   0   31   1,982   35,241   766   18,774   0   13   2,193   21,7   1976   407   22,845   66   99   3,902   27,382   418   19,943   0   37   7,019   27,4   1976   470   22,845   66   99   3,902   27,382   418   19,943   0   37   7,019   27,4   1977   343   27,301   39   169   6,710   34,561   34,277   0   47   8,497   30,2   1978   838   39,000   26   156   8,822   48,843   785   27,382   0   67   11,326   39,5   1980   1,009   40,300   21   189   9,808   51,326   338   29,024   0   60   2,2845   66   99   3,895   5,895		 	a	 	 		a			
1964									Total	Grand
1965								_	Half 2	Total
1966									43,258	103,763
1967   319   57,348   0   22   2,944   60,631   379   33,081   0   8   4,035   37,5     1968   252   56,808   0   37   33,807   60,904   345   31,931   0   10   4,123   36,000     1970   299   44,621   0   22   1,628   46,570   479   25,480   0   7   2,341   28,3     1971   460   35,165   0   21   1,860   37,506   715   19,920   0   8   2,199   22,8     1972   464   32,764   0   31   1,982   35,241   766   18,774   0   13   2,193   21,7     1973   566   34,973   0   31   2,206   37,776   754   19,785   0   15   1,666   22,200     1974   627   36,856   0   58   1,752   39,293   703   17,226   0   24   2,377   20,3     1975   695   25,513   280   61   2,388   28,937   726   16,923   37   26   4,050   21,7     1976   470   22,845   66   99   3,902   27,382   448   19,943   0   37   7,019   27,1976     1978   754   35,675   0   189   7,999   44,617   564   22,772   0   66   12,026   35,4     1979   838   39,000   26   156   8,822   48,843   785   27,382   0   67   11,326   35,4     1980   1,009   40,300   21   189   9,808   51,326   388   20,024   0   96   96,88   38,7     1983   396   49,891   115   116   8,658   59,176   182   23,550   7   83   10,584   48,198     1984   356   48,904   152   13   8,694   58,260   76   30,674   53   94   8,337   39,2     1985   315   40,693   225   115   6,791   48,140   143   23,149   70   81   7,888   31,984     1986   626   36,459   288   140   12,518   50,987   247   22,370   46   90   16,259   39,099   395   50,465   208   347   18,338   69,743   211   20,264   17   92   16,377   36,9     1991   1,174   22,882   243   99   18,508   24,481   27,25,601   8   131   11,467   37,4     1998   25   26,723   6   217   6,819   33,790   34   20,136   0   252   8,444   28,8     1999   38   53,605   11   266   6,099   71,896   28   43,001   29,444   28,8     1999   23   3,810   3   599   7,194   11,628   24   9,627   0   249   7,955   17,8     1996   28   15,598   26   419   8,360   24,431   27   25,601   8   131   11,467   37,4     1986   200   21,144   0   404   3,767   25,335   22									47,824	111,812
1968									40,112	109,893
1969									37,504	98,135
1970   299									36,409	97,313
1971   460   35,165   0   21   1,860   37,506   715   19,920   0   8   2,199   22,8									30,873	89,268
1972   464   32,764   0   31   1,982   35,241   766   18,774   0   13   2,103   21,7										74,878
1973         566         34,973         0         31         2,206         37,776         754         19,785         0         15         1,666         22,2           1974         627         36,866         0         58         1,752         39,293         703         17,226         0         24         2,377         20,3           1976         470         22,845         66         99         3,902         27,382         418         19,943         0         37         7,019         27,4           1977         343         27,301         39         169         6,710         34,5617         0         47         8,497         30,2           1978         754         35,675         0         189         7,999         44,617         564         22,772         0         66         12,026         35,4           1980         1,009         40,300         21         189         9,808         51,326         338         29,024         0         96         9,228         38,7           1981         527         43,614         99         258         9,389         53,887         272         25,671         0         93         10,664										60,348
1974   627   36,856   0   58   1,752   39,293   703   17,226   0   24   2,377   20,3   1975   695   25,513   280   61   2,389   28,937   726   16,923   37   26   4,050   21,7   1976   470   22,845   66   99   3,902   27,382   418   19,943   0   37   7,019   27,4   1977   343   27,301   39   169   6,710   34,561   342   21,317   0   47   8,497   30,2   1978   754   35,675   0   189   7,999   44,617   564   22,772   0   66   12,026   35,4   1979   838   39,000   26   156   8,822   48,843   785   27,382   0   67   11,326   39,5   1980   1,009   40,300   21   189   9,808   51,326   338   29,024   0   96   9,288   38,7   1981   527   43,614   99   258   9,389   53,887   272   25,671   0   93   10,461   36,4   1982   427   43,877   124   91   7,285   51,805   173   37,260   7   83   10,584   48,1   1983   396   49,891   115   116   8,658   59,176   182   32,350   22   69   10,066   42,6   1984   386   48,904   152   123   8,694   58,260   76   30,674   53   94   8,337   39,2   1985   315   40,693   225   115   6,791   48,140   143   23,149   70   81   7,888   31,3   1986   421   37,367   252   170   7,308   45,518   149   25,975   83   87   10,257   36,5   1987   626   36,459   288   140   12,518   50,031   288   23,377   46   85   15,924   39,7   1988   626   35,635   183   162   14,382   50,987   247   22,370   46   90   16,259   39,0   1989   385   50,465   208   347   18,338   69,743   216   35,720   71   73   19,813   55,8   1991   1,174   22,882   243   99   18,508   42,906   323   29,856   44   113   15,850   46,1   1992   1,646   13,153   247   269   14,558   29,874   1,105   19,609   0   107   18,088   38,9   1993   69   7,994   35   212   9,869   18,80   27   27,791   1   110   12,168   34,0   1994   20   65,500   11   265   6,099   71,896   28   16,301   1   228   5,056   21,6   1995   28   22,993   8   443   8,733   32,205   30   11,701   1   350   19,645   31,9   1996   28   15,598   26   419   8,360   24,431   27   25,801   8   131   11,467   37,4   1997   30   6,633   34   392   11,061   18,151   30				-						56,988
1975										59,996
1976         470         22,845         66         99         3,902         27,382         418         19,943         0         37         7,019         27,4           1977         343         27,301         39         169         6,710         34,561         342         21,317         0         47         8,497         30,2           1978         754         35,675         0         189         7,999         44,617         564         22,772         0         66         12,026         35,2           1980         1,009         40,300         21         189         9,808         51,326         338         29,024         0         96         9,288         38,7           1981         527         43,614         99         258         9,389         53,887         272         25,671         0         93         10,461         48,41           1982         427         43,614         99         258         9,389         53,887         272         25,671         0         93         10,461         48,41           1983         396         49,891         115         116         8,685         59,176         182         32,350 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>59,624</td></td<>										59,624
1977         343         27,301         39         169         6,710         34,561         342         21,317         0         47         8,497         30,2         1978         754         35,675         0         189         7,999         44,617         564         22,772         0         66         12,026         35,4           1979         838         39,000         26         156         8,822         48,843         785         27,382         0         67         11,326         39,5         1980         1,009         40,300         21         189         9,808         51,326         338         29,024         0         96         9,288         38,7           1981         527         43,614         99         258         9,389         53,887         272         25,671         0         93         10,461         36,4           1982         427         43,877         124         91         7,285         51,805         173         37,260         7         83         10,584         48,1         1983         366         48,904         152         123         8,694         58,260         76         30,674         53         94         8,337										50,699
1978										54,798
1979         838         39,000         26         156         8,822         48,843         785         27,382         0         67         11,326         39,5           1980         1,009         40,300         21         189         9,808         51,326         338         29,024         0         96         9,288         38,7           1981         527         43,614         99         258         9,389         53,887         272         25,671         0         93         10,461         36,4           1982         427         43,877         124         91         7,285         51,805         173         37,260         7         83         10,584         48,1         1983         396         49,891         115         116         8,658         59,176         182         32,350         22         69         10,066         42,6         1984         386         48,904         152         123         8,694         58,260         76         30,674         53         94         8,337         39,2         1986         421         37,367         252         170         7,308         45,518         149         25,975         83         87         10,257										64,764
1980         1,009         40,300         21         189         9,808         51,326         338         29,024         0         96         9,288         38,7           1981         527         43,614         99         258         9,389         53,887         272         25,671         0         93         10,461         36,4           1982         427         43,877         124         91         7,285         51,805         173         37,260         7         83         10,584         48,1           1983         396         49,891         115         116         8,658         59,176         182         32,350         22         69         10,066         42,6           1984         386         48,904         152         123         8,694         58,260         76         30,674         53         94         8,337         39,2           1985         315         40,693         225         170         7,308         45,518         149         25,975         83         87         10,257         36,5           1987         626         36,459         288         144,382         50,987         247         22,370         46								,		80,045 88,402
1981         527         43,614         99         258         9,389         53,887         272         25,671         0         93         10,461         36,4           1982         427         43,877         124         91         7,285         51,805         173         37,260         7         83         10,584         48,1           1983         396         49,891         115         116         8,658         59,176         182         32,350         22         69         10,066         42,6           1984         386         48,904         152         123         8,694         58,260         76         30,674         53         94         8,337         39,2           1985         315         40,693         225         115         6,791         48,140         143         23,149         70         81         7,888         31,3           1986         421         37,367         252         170         7,308         45,518         149         25,975         83         87         10,257         36,5         1987         247         22,370         46         85         15,924         39,7         1983         59,635         183										90,072
1982         427         43,877         124         91         7,285         51,805         173         37,260         7         83         10,584         48,1           1983         396         49,891         115         116         8,658         59,176         182         32,350         22         69         10,066         42,6           1984         386         48,904         152         123         8,694         58,260         76         30,674         53         94         8,337         39,2           1985         315         40,693         225         1170         7,308         45,518         149         25,975         83         87         10,257         36,5           1987         626         36,459         288         140         12,518         50,031         288         23,377         46         85         15,524         39,7           1988         626         35,635         183         162         14,382         50,987         247         22,370         46         90         16,259         39,0           1989         536         37,663         73         48         19,609         57,930         211         20,264										
1983         396         49,891         115         116         8,658         59,176         182         32,350         22         69         10,066         42,66           1984         386         48,904         152         123         8,694         58,260         76         30,674         53         94         8,337         39,2           1985         315         40,693         225         115         6,791         48,140         143         23,149         70         81         7,883         31,3           1986         421         37,367         252         170         7,308         45,518         149         25,975         83         87         10,257         36,7         1987         626         36,459         288         140         12,518         50,031         288         23,377         46         85         15,924         39,7           1988         626         35,635         183         162         14,382         50,987         247         22,370         46         90         16,259         39,0           1990         385         50,465         208         347         18,338         69,743         216         35,720         71 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>90,383</td>										90,383
1984         386         48,904         152         123         8,694         58,260         76         30,674         53         94         8,337         39,2           1985         315         40,693         225         115         6,791         48,140         143         23,149         70         81         7,888         31,3           1986         421         37,367         252         170         7,308         45,518         149         25,975         83         87         10,257         36,5           1987         626         36,459         288         140         12,518         50,031         288         23,377         46         85         15,924         39,7           1988         626         35,635         183         162         14,382         50,987         247         22,370         46         90         16,259         39,0           1989         536         37,663         73         48         19,609         57,930         211         20,264         17         92         16,377         36,9           1990         385         50,465         208         347         18,338         69,743         216         35,720										99,913
1985         315         40,693         225         115         6,791         48,140         143         23,149         70         81         7,888         31,3           1986         421         37,367         252         170         7,308         45,518         149         25,975         83         87         10,257         36,5           1987         626         36,459         288         140         12,518         50,031         288         23,377         46         85         15,924         39,7           1988         626         35,635         183         162         14,382         50,987         247         22,370         46         90         16,259         39,0           1990         385         50,465         208         347         18,338         69,743         216         35,720         71         73         19,813         55,8           1991         1,174         22,882         243         99         18,508         42,906         323         29,856         44         113         15,850         46,1           1992         1,646         13,153         247         269         14,558         29,874         1,105										101,867 97,494
1986         421         37,367         252         170         7,308         45,518         149         25,975         83         87         10,257         36,5           1987         626         36,459         288         140         12,518         50,031         288         23,377         46         85         15,924         39,7           1988         626         35,635         183         162         14,382         50,987         247         22,370         46         90         16,259         39,0           1989         536         37,663         73         48         19,609         57,930         211         20,264         17         92         16,377         36,9           1990         385         50,465         208         347         18,338         69,743         216         35,720         71         73         19,813         55,8           1991         1,174         22,882         243         99         18,508         42,906         323         29,856         44         113         15,850         46,1           1992         1,646         13,153         247         269         14,558         29,874         1,105										79,471
1987         626         36,459         288         140         12,518         50,031         288         23,377         46         85         15,924         39,7           1988         626         35,635         183         162         14,382         50,987         247         22,370         46         90         16,259         39,0           1989         536         37,663         73         48         19,609         57,930         211         20,264         17         92         16,377         36,9           1990         385         50,465         208         347         18,338         69,743         216         35,720         71         73         19,813         55,8           1991         1,174         22,882         243         99         18,508         42,906         323         29,856         44         113         15,880         46,1           1992         1,646         13,153         247         269         14,558         29,874         1,105         19,609         0         107         18,088         38,9           1993         69         7,994         35         212         9,869         18,180         27         21,7										
1988         626         35,635         183         162         14,382         50,987         247         22,370         46         90         16,259         39,0           1989         536         37,663         73         48         19,609         57,930         211         20,264         17         92         16,377         36,9           1990         385         50,465         208         347         18,338         69,743         216         35,720         71         73         19,813         55,8           1991         1,174         22,882         243         99         18,508         42,906         323         29,856         44         113         15,850         46,1           1992         1,646         13,153         247         269         14,558         29,874         1,105         19,609         0         107         18,088         38,9           1993         69         7,994         35         212         9,869         18,180         27         21,791         1         110         12,168         34,0           1994         20         65,500         11         265         6,099         71,396         28         16,301 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>82,069 89,752</td>										82,069 89,752
1989         536         37,663         73         48         19,609         57,930         211         20,264         17         92         16,377         36,9           1990         385         50,465         208         347         18,338         69,743         216         35,720         71         73         19,813         55,8           1991         1,174         22,882         243         99         18,508         42,906         323         29,856         44         113         15,850         46,1           1992         1,646         13,153         247         269         14,558         29,874         1,105         19,609         0         107         18,088         38,9           1993         69         7,994         35         212         9,869         18,180         27         21,791         1         110         12,168         34,0           1994         20         65,500         11         265         6,099         71,896         28         16,301         1         228         5,056         21,6           1995         28         22,993         8         443         8,733         32,205         30         11,701										89,999
1990         385         50,465         208         347         18,338         69,743         216         35,720         71         73         19,813         55,88           1991         1,174         22,882         243         99         18,508         42,906         323         29,856         44         113         15,850         46,1           1992         1,646         13,153         247         269         14,558         29,874         1,105         19,609         0         107         18,088         38,9           1993         69         7,994         35         212         9,869         18,180         27         21,791         1         110         12,168         34,0           1994         20         65,500         11         265         6,099         71,896         28         16,301         1         228         5,056         21,6           1995         28         22,993         8         443         8,733         32,205         30         11,701         1         350         19,845         31,9           1996         28         15,598         26         419         8,360         24,431         27         25,801										94,890
1991         1,174         22,882         243         99         18,508         42,906         323         29,856         44         113         15,850         46,1           1992         1,646         13,153         247         269         14,558         29,874         1,105         19,609         0         107         18,088         38,9           1993         69         7,994         35         212         9,869         18,180         27         21,791         1         110         12,168         34,0           1994         20         65,500         11         265         6,099         71,896         28         16,301         1         228         5,056         21,6           1995         28         22,993         8         443         8,733         32,205         30         11,701         1         350         19,845         31,9           1996         28         15,598         26         419         8,360         24,431         27         25,801         8         131         11,467         37,4           1997         30         6,633         34         392         11,061         18,151         30         6,784         <										125,636
1992         1,646         13,153         247         269         14,558         29,874         1,105         19,609         0         107         18,088         38,99           1993         69         7,994         35         212         9,869         18,180         27         21,791         1         110         12,168         34,00           1994         20         65,500         11         265         6,099         71,896         28         16,301         1         228         5,056         21,6           1995         28         22,993         8         443         8,733         32,205         30         11,701         1         350         19,845         31,9           1996         28         15,598         26         419         8,360         24,431         27         25,801         8         131         11,467         37,4           1997         30         6,633         34         392         11,061         18,151         30         6,784         4         91         6,334         13,2           1998         25         26,723         6         217         6,819         33,790         34         20,136         0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>89,091</td>										89,091
1993         69         7,994         35         212         9,869         18,180         27         21,791         1         110         12,168         34,0         1994         20         65,500         11         265         6,099         71,896         28         16,301         1         228         5,056         21,6         1995         28         22,993         8         443         8,733         32,205         30         11,701         1         350         19,845         31,9         1996         28         15,598         26         419         8,360         24,431         27         25,801         8         131         11,467         37,4         1997         30         6,633         34         392         11,061         18,151         30         6,784         4         91         6,334         13,2         1998         25         26,723         6         217         6,819         33,790         34         20,136         0         252         8,444         28,8         1999         23         3,810         3         599         7,194         11,628         24         9,627         0         249         7,955         17,8         2000         14         6,917	-									68,783
1994         20         65,500         11         265         6,099         71,896         28         16,301         1         228         5,056         21,6         1995         28         22,993         8         443         8,733         32,205         30         11,701         1         350         19,845         31,9           1996         28         15,598         26         419         8,360         24,431         27         25,801         8         131         11,467         37,4           1997         30         6,633         34         392         11,061         18,151         30         6,784         4         91         6,334         13,2           1998         25         26,723         6         217         6,819         33,790         34         20,136         0         252         8,444         28,8           1999         23         3,810         3         599         7,194         11,628         24         9,627         0         249         7,955         17,8           2000         14         6,917         4         181         5,208         12,324         26         17,040         0         792 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>52,277</td></td<>										52,277
1995         28         22,993         8         443         8,733         32,205         30         11,701         1         350         19,845         31,9           1996         28         15,598         26         419         8,360         24,431         27         25,801         8         131         11,467         37,4           1997         30         6,633         34         392         11,061         18,151         30         6,784         4         91         6,334         13,2           1998         25         26,723         6         217         6,819         33,790         34         20,136         0         252         8,444         28,8           1999         23         3,810         3         599         7,194         11,628         24         9,627         0         249         7,955         17,8           2000         14         6,917         4         181         5,208         12,324         26         17,040         0         792         4,709         22,5           2001         20         21,144         0         404         3,767         25,335         22         8,439         0         204									21,613	93,509
1996         28         15,598         26         419         8,360         24,431         27         25,801         8         131         11,467         37,4           1997         30         6,633         34         392         11,061         18,151         30         6,784         4         91         6,334         13,2           1998         25         26,723         6         217         6,819         33,790         34         20,136         0         252         8,444         28,8           1999         23         3,810         3         599         7,194         11,628         24         9,627         0         249         7,955         17,8           2000         14         6,917         4         181         5,208         12,324         26         17,040         0         792         4,709         22,5           2001         20         21,144         0         404         3,767         25,335         22         8,439         0         204         3,249         11,9           2002         21         12,176         1         391         6,088         18,677         107         9,663         0         2,46									31,927	64,132
1997         30         6,633         34         392         11,061         18,151         30         6,784         4         91         6,334         13,2           1998         25         26,723         6         217         6,819         33,790         34         20,136         0         252         8,444         28,8           1999         23         3,810         3         599         7,194         11,628         24         9,627         0         249         7,955         17,8           2000         14         6,917         4         181         5,208         12,324         26         17,040         0         792         4,709         22,5           2001         20         21,144         0         404         3,767         25,335         22         8,439         0         204         3,249         11,9           2002         21         12,176         1         391         6,088         18,677         107         9,663         0         2,464         7,696         19,9           2003         38         17,915         8         522         7,913         26,397         10         18,061         0         443<									37,433	61,864
1998         25         26,723         6         217         6,819         33,790         34         20,136         0         252         8,444         28,8           1999         23         3,810         3         599         7,194         11,628         24         9,627         0         249         7,955         17,8           2000         14         6,917         4         181         5,208         12,324         26         17,040         0         792         4,709         22,5           2001         20         21,144         0         404         3,767         25,335         22         8,439         0         204         3,249         11,9           2002         21         12,176         1         391         6,088         18,677         107         9,663         0         2,464         7,696         19,9           2003         38         17,915         8         522         7,913         26,397         10         18,061         0         443         8,068         26,5           2004         9         14,423         4         450         5,232         20,118         11         21,684         0         498<									13,243	31,393
1999         23         3,810         3         599         7,194         11,628         24         9,627         0         249         7,955         17,88           2000         14         6,917         4         181         5,208         12,324         26         17,040         0         792         4,709         22,5           2001         20         21,144         0         404         3,767         25,335         22         8,439         0         204         3,249         11,9           2002         21         12,176         1         391         6,088         18,677         107         9,663         0         2,464         7,696         19,9           2003         38         17,915         8         522         7,913         26,397         10         18,061         0         443         8,068         26,5           2004         9         14,423         4         450         5,232         20,118         11         21,684         0         498         4,078         26,2           2005         91         14,186         2         1,037         6,079         21,395         54         19,196         0         5									28,866	62,656
2000       14       6,917       4       181       5,208       12,324       26       17,040       0       792       4,709       22,5         2001       20       21,144       0       404       3,767       25,335       22       8,439       0       204       3,249       11,9         2002       21       12,176       1       391       6,088       18,677       107       9,663       0       2,464       7,696       19,9         2003       38       17,915       8       522       7,913       26,397       10       18,061       0       443       8,068       26,5         2004       9       14,423       4       450       5,232       20,118       11       21,684       0       498       4,078       26,2         2005       91       14,186       2       1,037       6,079       21,395       54       19,196       0       559       4,613       24,4         2006       195       10,594       0       860       5,728       17,377       17       12,316       1       362       4,935       17,60									17,854	29,482
2001         20         21,144         0         404         3,767         25,335         22         8,439         0         204         3,249         11,9           2002         21         12,176         1         391         6,088         18,677         107         9,663         0         2,464         7,696         19,9           2003         38         17,915         8         522         7,913         26,397         10         18,061         0         443         8,068         26,5           2004         9         14,423         4         450         5,232         20,118         11         21,684         0         498         4,078         26,2           2005         91         14,186         2         1,037         6,079         21,395         54         19,196         0         559         4,613         24,4           2006         195         10,594         0         860         5,728         17,377         17         12,316         1         362         4,935         17,60								,	22,568	34,892
2002     21     12,176     1     391     6,088     18,677     107     9,663     0     2,464     7,696     19,9       2003     38     17,915     8     522     7,913     26,397     10     18,061     0     443     8,068     26,5       2004     9     14,423     4     450     5,232     20,118     11     21,684     0     498     4,078     26,2       2005     91     14,186     2     1,037     6,079     21,395     54     19,196     0     559     4,613     24,4       2006     195     10,594     0     860     5,728     17,377     17     12,316     1     362     4,935     17,60									11,914	37,249
2003     38     17,915     8     522     7,913     26,397     10     18,061     0     443     8,068     26,5       2004     9     14,423     4     450     5,232     20,118     11     21,684     0     498     4,078     26,2       2005     91     14,186     2     1,037     6,079     21,395     54     19,196     0     559     4,613     24,4       2006     195     10,594     0     860     5,728     17,377     17     12,316     1     362     4,935     17,60									19,931	38,608
2004     9     14,423     4     450     5,232     20,118     11     21,684     0     498     4,078     26,2       2005     91     14,186     2     1,037     6,079     21,395     54     19,196     0     559     4,613     24,4       2006     195     10,594     0     860     5,728     17,377     17     12,316     1     362     4,935     17,6	 	 -		 				-	26,582	52,980
2005         91         14,186         2         1,037         6,079         21,395         54         19,196         0         559         4,613         24,4           2006         195         10,594         0         860         5,728         17,377         17         12,316         1         362         4,935         17,6									26,271	46,389
2006 195 10,594 0 860 5,728 17,377 17 12,316 1 362 4,935 17,6									24,421	45,816
									17,631	35,008
===:									24,791	46,431
									18,415	35,588
									19,030	35,195
									18,706	37,547



**Figure 4.** Trend in skate discard rate with updated discard estimates and discard mortality = 0.20 for little skate and 0.12 for winter skate caught by vessels using trawls.

**Table 2.** State and Federal landings of skate bait and wings, 2007-2009. Source: NMFS Fisheries Statistics Office.

Fishery	Year	State Landings (lb)	Federal Landings (lb)	% State
Bait	2007	652,004	8,637,898	7.5
	2008	2,393,550	8,141,965	29.4
	2009	1,133,653	8,631,656	13.1
Wing	2007	704,801	33,222,141	2.1
	2008	1,215,066	29,456,710	4.1
	2009	1,806,645	30,388,686	5.9
	Total	7,905,719	118,479,056	6.7

**Table 3.** No Action and Preferred FY 2011 Skate ABC and associated catch limits (mt).

	No Action	Preferred	<b>Percent Change</b>
ABC	41,080	50,435	23%
ACL	41,080	50,435	23%
ACT	30,810	37,826	23%
TAL	13,848	21,561	56%
Wing TAL	9,209	14,338	56%
Bait TAL	4,639	7,223	56%
Assumed			
Discard Rate	52.0%	36.3%	-30%
Assumed State			
Landings	3.0%	6.7%	123%

## 5.0 AFFECTED ENVIRONMENT

The geographic area and human component of the environment most affected by the proposed alternatives are the Gulf of Maine (GOM), Georges Bank (GB), Southern New England (SNE), and Mid-Atlantic regions, and vessels fishing for skates in those areas. The attached FW1 EA includes detailed descriptions of the valued ecosystem components (VECs) which comprise the affected environment. Discussion of physical environment/habitat is included in Section 5.1 of the attached EA and describes the primary geographic areas affected by the alternatives, habitat, and gear types. Target and non-target species are addressed in Section 5.2, which includes species and stock status descriptions, assemblages of fish species, stock status trends, and gear interactions. The most recent updates to skate biomass from the NEFSC trawl survey are shown in Table 4 of this document. Essential Fish Habitat (EFH), including references to maps and information in the Skate FMP and the Omnibus EFH Amendment, are described in Section 5.3. Protected resources are addressed in Section 5.4. This section discusses protected resources present in the area, protected species potentially affected, species not likely to be affected, and the interactions between gear and protected resources. Human communities within the affected environment are addressed in Section 5.5, which includes an overview of the skate fishery and other fisheries that interact with skates. No changes to the description of the affected environment, as described in the attached EA, have occurred since the approval of FW1.

**Table 4.** Annual and three year average spring (little) and fall skate stratified mean biomass survey weight per tow (kg/tow). The 2006-2008 data were collected by the FSV Albatross, while the 2009-2010 data were collected by the FSV Bigelow and converted using accepted calibration coefficients by species (Method 1). Source: Northeast Fisheries Science Center.

	Barndoor	Clearnose	Little	Rosette	Smooth	Thorny	Winter
2006	1.17	0.48	3.33	0.06	0.21	0.74	2.52
2007	0.76	0.90	4.01	0.07	0.09	0.32	3.74
2008	1.11	1.23	6.29	0.03	0.10	0.20	9.62
2009	1.13	0.89	6.62	0.06	0.21	0.25	11.33
2010	1.10	0.68	10.63	0.03	0.18	0.28	8.09
			Three year	averages			
2006- 2008	1.013	0.871	4.541	0.052	0.135	0.420	5.294
2007- 2009	0.999	1.009	5.639	0.053	0.133	0.258	8.232
2008- 2010	1.114	0.933	7.848	0.040	0.161	0.245	9.684

## 6.0 IMPACTS OF THE PREFERRED ALTERNATIVE AND NO ACTION ALTERNATIVE

## 6.1 DIRECT AND INDIRECT IMPACTS OF THE PREFERRED ALTERNATIVE AND NO-ACTION ALTERNATIVE

The skate fishery has several unique characteristics that make it unlike most other fisheries in the NE Region. Skates are managed as a complex, which is considered data poor. The stock status of some species is better than others, and each species has a unique life history and distributional pattern. Skates are typically caught incidentally in fisheries targeting other more valuable species (e.g. groundfish, monkfish, scallops). Few vessels solely target skates due to their comparatively low economic value, and a large proportion of the catch is discarded. These factors must be considered when projecting the impacts of proposed changes to management measures.

Since skate fisheries use gears capable of catching NE multispecies, most fishing effort is limited by days-at-sea (DAS) or sector allocations used for effort control in that fishery. To possess skate wings beyond an incidental level, the regulations require that vessels be fishing on a NE Multispecies, Scallop, or Monkfish DAS. Therefore, trip-level possession limits for skates tend to have more influence on skate landing activity than overall catch limits (e.g., ACL, TALs). For example, when skate possession limits are low, it does not necessarily equate to reduced fishing effort. Fishing trips for groundfish, monkfish, scallops, etc. would continue, but more of the skate catch would be discarded rather than landed. Conversely, when skate possession limits are high, it does not equate to significantly more fishing trips. Vessels using DAS to target groundfish, monkfish, or scallops may just retain more of the skates they catch (often at levels below the possession limit).

The impacts of FW1, as described in the attached EA, were determined to have no significant impacts on the human environment. The analyses were based on the assumption that adjusting

the skate wing possession limits such that the incidental possession limit of 500 lb would be invoked much later in the fishing year, would lead to no significant additional impacts on the physical environment, habitat, or protected resources, but would have some slight positive impacts on the target and non-target species (fewer discards), and positive economic and social impacts (more landings) (see Table 40 in the FW1 EA). Since the Preferred Alternative in this action does not propose any changes to the skate possession limits, there is no reason to expect changes to these determinations.

In general terms, for the reasons described above, the proposed action to increase the overall skate catch limits further supports the FW1 objective to avoid invoking the incidental possession limit early in the fishing year. Therefore, relative to the No Action Alternative, the Preferred Alternative is expected to only improve the positive impacts of FW1 while maintaining neutral impacts on all other aspects of the environment. This is described in more detail below.

## **6.1.1** Physical Environment/Habitat/EFH

### No Action

Under the No Action Alternative, the ABC, ACL, ACT, and TALs would be those proposed by Amendment 3 and FW1 (Section 4.1). These catch levels are less than those under the Preferred Alternative. No additional impacts on the physical environment beyond those already analyzed in Amendment 3 and FW1 (refer to Section 6.0 of the FW1 EA) are expected. Since possession of skates beyond an incidental level (500 lb) mostly requires vessels to be fishing on a NE Multispecies, Scallop, or Monkfish day-at-sea (DAS), fishing effort and habitat impacts are largely constrained by these other fisheries.

### Preferred Alternative

Under the Preferred Alternative, the ABC, ACL, ACT, and TALs would be higher than those under the No Action Alternative (Table 2). Despite the higher catch limits under the Preferred Alternative, a dramatic increase in fishing effort and direct or indirect impacts on the physical environment is not anticipated. Since most skates are caught incidental to fishing for other species (e.g., groundfish, scallops, etc.), higher skate quotas do not necessarily equate to greater fishing effort. This action does not propose adjustment of the possession limits, so trip level effort should remain unchanged relative to No Action. Additionally, as noted under the No Action Alternative above, fishing effort for skates is largely constrained by DAS limits in the NE Multispecies, Scallop, and Monkfish fisheries. Therefore, regardless of the skate catch limits in effect, fishing effort on skates can be better characterized by effort in these other fisheries (refer to the NE Multispecies, Atlantic Sea Scallop, and Monkfish FMPs). Relative to the No Action Alternative, the higher catch limits under the Preferred Alternative are not expected to result in more bottom contact time, gear interactions, or impacts on EFH.

## **6.1.2** Target Species

## No Action

The primary target species in the skate fishery are winter and little skates. Under the No Action Alternative, skate catch limits would be those implemented by Amendment 3 and FW1. The

direct and indirect impacts of these limits on skates are described in Section 5.1 of the FEIS for the 2010-2011 Skate Fishery Specifications (Amendment 3) and Section 6.1 of the FW1 EA. The intent of the ABC/ACL and TAL setting process contained in Amendment 3 is to reduce skate catch to a level that will enable biomass to rebuild, having a positive overall biological impact on the target species. Therefore, the No Action Alternative would result in continuation of sustainable harvest and biomass growth for skates consistent with the objectives of the Skate FMP. No additional impacts on target species beyond those already analyzed in Amendment 3 and FW1 are expected.

## Preferred Alternative

Under the Preferred Alternative, skate catch limits would be greater than those implemented by Amendment 3 and FW1 and therefore, may result in greater fishing mortality than under the No Action Alternative. However, overall skate biomass has increased in recent years. Since the Skate ABC is dependent on biomass, higher biomass will result in higher catch limits without jeopardizing the sustainability of the target species. The SSC acknowledges that using the median catch/biomass ratio as a basis for setting the Skate ABC is a risk-averse strategy for management. The proposed ABC of 50,435 mt reflects the best available scientific information, and more accurately reflects the latest data on skate biomass, landings, and discards, as compared to the No Action Alternative. Since the proposed action does not change the possession limits implemented under FW1, skate landings patterns are not expected to differ from the No Action Alternative, except that the fishery should be less constrained by its quotas.

While overall fishing effort is not expected to increase under this alternative, the length of the season for the directed skate fisheries is expected to be longer. The incidental possession limit for skates would not be triggered until later in FY 2011, or possibly not at all, as compared to No Action. For trips targeting other species, this means that more of the skates they catch as bycatch could be landed rather than discarded. Therefore, the skate discard rate is expected to be lower as compared to No Action. In summary, while the ABC and associated catch limits are higher under the Preferred Alternative, constraining skate catch to the recommended ABC and FW1 possession limits should not result in any significant adverse impacts on skate stocks and should continue to promote rebuilding of the species.

## 6.1.3 Non-Target Species and Bycatch

## No Action

The direct and indirect impacts of the No Action Alternative on non-target species are described in Section 5.1 of the FEIS for the 2010-2011 Skate Fishery Specifications (Amendment 3) and Section 6.1 of the FW1 EA. Skates are typically caught on trips targeting groundfish, monkfish, or scallops. Since the catch of these species are controlled by DAS and/or sector catch allocations, changes in skate catch limits have no real effect on these species. No additional impacts on non-target species beyond those already analyzed in Amendment 3 and FW1 are expected.

## Preferred Alternative

As described above, the skate wing fishery is not a true directed fishery, but an ancillary fishery that is targeted in conjunction with another, more highly valued, fishery. Furthermore, the Skate FMP requires that all vessels landing skate wings be fishing under a monkfish, multispecies, or scallop DAS. As such, fishing effort in the wing fishery is constrained by the effort controls in place in those other fisheries.

Compared to the No Action Alternative, the Preferred Alternative is expected to have no additional impacts on non-target species but should reduce the discards of skates. This alternative does not change skate possession limits, so trip level impacts on non-target species should be equivalent to No Action. As noted above, the higher catch limits proposed by this action also are not anticipated to result in increases in fishing effort. However, since the skate fisheries will have higher TALs, implementation of the incidental possession limit may be avoided or delayed, allowing the retention of skates that would have been discarded under the No Action Alternative. It is possible that the Preferred Alternative could result in an increase in bycatch of prohibited skate species (barndoor, thorny, and smooth skates). However, due to differences between the distributions and habitats of the target species (winter and little) and the prohibited species (NEFMC 2009), additional interactions between the fishery and these prohibited skates should not be significant. Catch of other species on trips landing skates are controlled by DAS or sector rules in other FMPs.

### **6.1.4 Protected Resources**

## No Action

Under the No Action Alternative, the skate catch limits would be those proposed by Amendment 3 and FW1 (Section 4.1). No additional impacts on protected resources beyond those already analyzed in Amendment 3 and FW1 (refer to Section 6.0 of the FW1 EA) are expected. As described above, since possession of skates mostly requires vessels to be fishing on a NE Multispecies, Scallop, or Monkfish DAS, fishing effort and potential protected species interactions are largely constrained by these other fisheries.

## Preferred Alternative

Under the Preferred Alternative, no additional impacts are anticipated on protected resources beyond those described in FW1. As described above, the increased skate catch limits proposed in this action are not likely to result in an increase in fishing effort. As noted in FW1, the action is also not likely to result in any spatial or temporal shifts in fishing effort that might increase the risk of interaction with protected species. Gear and effort in the skate fishery are largely regulated by the NE Multispecies, Monkfish, and Scallop FMPs, and the Preferred Alternative includes no changes to these restrictions. Therefore, compared to the No Action Alternative, the Preferred Alternative is expected to have no additional impacts on protected resources.

### 6.1.5 Human Communities/Economic/Social Environment

### No Action

Under the No Action Alternative, the skate catch limits would be those proposed by Amendment 3 and FW1 (Section 4.1). No additional impacts on human communities beyond those already analyzed in Amendment 3 and FW1 (refer to Section 6.0 of the FW1 EA) are expected. The FW1 EA determined that the action would have positive economic and social benefits, mainly by reducing the risk of closing the directed skate wing fishery early in the fishing year. This was expected to prolong the fishing season, stabilize skate wing markets and revenue, maintain processing jobs, and reduce the incentives for derby-style fishing behavior. The two seasonal skate wing possession limits implemented by FW1 (2,600 lb for May 1 through August 31, and 4,100 lb for September 1 through April 30) were also expected to increase efficiency and revenue in the skate wing fishery by allowing more landings when prices are typically higher, and when winter skates can generally be captured closer to shore.

## Preferred Alternative

## **Economic Impacts**

Under the Preferred Alternative, skate catch limits would be higher than those implemented by Amendment 3 and FW1 (No Action Alternative) and therefore, are expected to result in greater revenue. Assuming the skate wing fishery lands its entire TAL, which is 56% higher relative to the No Action Alternative, the fishery could potentially increase its revenue proportionally. A comparison of the potential revenue from the proposed skate wing and bait fishery TALs compared with the No Action Alternative is below in Table 5. Since the proposed action does not change skate possession limits, the trip-level revenue would be similar to that expected under the No Action Alternative. However, under the Preferred Alternative, more trips could land skates under the FW1 possession limits, rather than being constrained by the incidental limit triggered at 85-90% of the TAL. Despite the expected positive economic impacts of the Preferred Alternative, skates only represent approximately 4% of the total fishing related revenue of participating vessels (Section 8.7 of the FW1 EA). Most skate fishing vessels derive the vast majority of their revenue from other species, including groundfish and monkfish.

**Table 5.** Estimate of potential FY 2011 skate landing revenues between the No Action and Preferred alternatives, assuming an average bait price of \$0.11 per lb and an average wing price of \$0.23 per lb (whole wt.).

No Ac	tion	Prefer	Percent Change	
Bait TAL (lb)	Revenue	Bait TAL (lb)	Revenue	
10,227,240	\$1,124,996	15,923,990	\$1,751,639	56%
Wing TAL (lb)	Revenue	Wing TAL (lb)	Revenue	
20,302,370	\$4,669,545	31,609,880	\$7,270,272	56%

## Social Impacts

The Preferred Alternative may contribute marginally to improved attitudes towards the Federal fishery management process. Many vessel owners, operators, and crew are currently impacted by the relatively low annual catch limits for many stocks. Therefore, when the actions of the Federal government result in additional economic opportunity, there may be a small amount of positive attitude and relief generated. Second, the ability of fishing businesses to plan is enhanced with the knowledge that the revised skate fishery TALs make it less likely that the fishery will be constrained by closures early in the fishing season. Relative to No Action, the higher TALs proposed in the Preferred Alternative are likely to stabilize employment for vessel operators, crew, and processors, which provides positive social benefits to affected communities. The proposed action should enhance the positive social impacts anticipated from FW1.

## 6.2 CUMULATIVE EFFECTS ANALYSIS

The need for a cumulative effects analysis (CEA) is referenced in the CEQ regulations implementing NEPA (40 CFR Part 1508.25). CEQ regulations define cumulative impacts as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other action." The purpose of this CEA is to consider the effects of the Proposed Action and the combined effects of many other actions on the human environment over time that would be missed if each action were evaluated separately. CEQ guidelines recognize that it is not practical to analyze the cumulative effects of an action from every conceivable perspective; rather, the intent is to focus on those effects that are truly meaningful. The CEA baseline in this case consists of the combined effects of Amendment 3, FW1, and the past, present, and reasonably foreseeable future fishing and non-fishing actions which are described below.

This CEA assesses the combined impact of the direct and indirect effects of the proposed skate catch limits with the impact from the past, present, and reasonably foreseeable future fishing actions, as well as factors external to the skate fishery that affect the physical, biological, and socioeconomic resource components of the skate environment. This analysis is focused on the VECs (see below) and because this action is supplementing FW1, it relies heavily on the analysis contained in the attached FW1 EA (Section 6.6).

Valued Ecosystem Components (VECs): The CEA focuses on VECs, specifically including:

- Physical environment/habitat (including EFH);
- Regulated stocks (skate complex);
- Non-target species and bycatch;
- Protected resources/endangered species; and
- Human communities.

**Temporal and Geographic Scope of the Analysis:** The temporal range that will be considered for habitat, allocated target species, non-allocated target species and bycatch, and human communities, extends from 2010, the year that Amendment 3 was implemented, through May 1, 2012 the beginning of the next fishing year. While the effects of actions prior to Amendment 3 are considered (see Amendment 3 for a full cumulative effects analysis), the cumulative effects analysis for this action is focused primarily on Amendment 3 and subsequent actions because Amendment 3 implemented ACLs for skates and included major changes to management of the skate fishery.

The temporal range considered for endangered and other protected species begins in the 1990s when NMFS began generating stock assessments for marine mammals and developed recovery plans for sea turtles that inhabit waters of the U.S. EEZ. In terms of future actions, the analysis examines the period of approval for this action through May 1, 2012, which is the beginning of the subsequent fishing year when new management measures will be implemented.

The broad geographic scope considered for cumulative effects to habitat, allocated target species, and non-allocated target species and bycatch consists of the range of species, primary ports, and geographic areas (habitat) discussed in Section 5.0 (Affected Environment) of the FW1 EA. Similarly, the range of each endangered and protected species as presented in Section 5.4 of FW1 will be the broad geographic scope for that VEC, however, the most likely geographic scope for all cumulative effects will be the Gulf of Maine, Georges Bank, and Southern New England waters where most of the skate fishery occurs. The geographic scope for the human communities will consist of those primary port communities from which vessels fishing for skates originate.

## **Summary of Direct/Indirect Impacts of the Proposed Action**

The direct and indirect effects on the VECs from the revised ACL analyzed in this supplemental EA (Preferred Alternative) compared to what the impacts would be if the skate catch levels approved are those described in the No Action Alternative are summarized in Table 6 below. The nomenclature used is the following:

Physical Environment: positive = actions that improve or reduce disturbance of habitat; negative = actions that degrade or increase disturbance of habitat;

Biological Environment: positive = actions that increase stock size; negative = actions that decrease stock size;

Human Communities: positive = actions that increase revenue and well-being of fishermen and/or associated businesses; negative = actions that decrease revenue and well-being of fishermen and/or associated businesses

**Table 6.** Summary of Direct and Indirect Effects of the Alternatives.

	Valued Ecosystem Components (VECs)						
	Physical Env	Bio	Human Communities				
Alternative	Habitat/EFH	Allocated Target Species Species Species Species Allocated Resources Species and Bycatch			Skate fishery participants		
No-Action Alternative	negligible	negligible	negligible	negligible	negligible		
Proposed Alternative	negligible	negligible	negligible	negligible	positive		

Impacts to the physical and biological environment from the proposed action were assessed and found to be negligible. In general, the larger allowable amounts of skate catch and landings are not likely to result in considerable additional fishing effort. Fishing effort for skates is largely controlled by DAS in the groundfish, monkfish, and scallop fisheries. The amount of fishing effort in the fishery in FY 2011 is likely to be similar FY 2010 effort and will be within the scope of fishing effort analyzed in Amendment 3 and FW1, as well as in recent actions in the DAS fisheries noted above.

## Past, Present and Reasonably Foreseeable Future Actions

Detailed information on the past, present, and reasonably foreseeable future actions that may impact this action can be found in the FEIS for Amendment 3 and in the FW1 EA (Section 6.6.10). The information on relevant past, present and reasonably foreseeable future actions and their impacts are summarized in this section.

## Other Fishing Effects: Past, Present and Reasonably Foreseeable Future Skate and Related Management Actions

The following is a summary of the past, present, and reasonably foreseeable future fishing actions and effects thought most likely to impact this cumulative effects assessment. The three FMP's that have had the greatest impact on skate fishery VECs, other than the Skate FMP, are the Atlantic Sea Scallop, Monkfish, and NE Multispecies FMPs, because of the spatial overlap of the fisheries, the relatively high level of incidental catch of skate in those fisheries, and the fact that more than 90 percent of the skate permit holders are also permitted in one or the other of those three fisheries. For additional information on the cumulative effects and to view the complete summary of the history of the Skate FMP, please see Amendment 3 and Section 6.6.10 of the attached FW1 EA.

## **Past and Present Actions:**

*Skates*. Amendment 3 to the Skate FMP implemented an ACL and AMs for the skate complex and was designed to reduce skate discards and landings sufficiently to rebuild stocks of thorny

and smooth skates, and to prevent other skates from becoming overfished. Skate FW1, implemented in May 2011, reduced skate possession limits and adjusted other measures to lengthen the fishing season for the directed skate wing fishery.

*NE Multispecies*. Amendment 16 and FW 44 to the NE Multispecies FMP are regulations that have effectively reduced fishing effort for skates as well as other targeted groundfish. FW 45 implemented a variety of measures including revision of biological reference points, updated ACLs for several groundfish stocks, and established new closed areas to protect spawning cod.

*Monkfish*. Monkfish Amendment 5 implemented ACL and AMs for the monkfish fishery, and updated the biological reference points for monkfish stocks. FW 7 has proposed a new ACT for the monkfish Northern Fishery Management Area, increasing the allocated DAS from 31 to 40 days per vessel, and adjustment of some possession limits.

Atlantic Sea Scallops. Amendment 15 to the Scallop FMP implemented ACLs and AMs for the scallop fishery. It also included updates to EFH, biological reference points, the research set-aside program, and other measures to improve the limited access general category fishery. FW 22 implemented fishery specifications for 2011 and 2012 to prevent overfishing on scallops and help improve the yield-per-recruit in the resource. It built upon the measures implemented by Amendment 15, and adjusted DAS and access area trip allocations, and implemented measures to minimize fishery interactions with endangered sea turtles.

Spiny Dogfish. Along with skates, spiny dogfish are one of the primary incidental species in the NE multispecies fishery. Spiny dogfish have historically been landed more with bottom gillnets rather than bottom trawls. Specifications for FY 2010 and 2011 included an overall commercial quota (15 million lb in 2010; 20 million lb in 2011) and a 3,000-lb trip limit. Fishing effort is largely constrained by NE Multispecies and Monkfish DAS.

American Lobster. Since the skate bait fishery supplies a large proportion of bait to lobster trap fisheries, regulations affecting lobster fishing effort may influence demand for skate products. NMFS is in rulemaking to limit future access and control trap fishing effort in Lobster Management areas 2 (southern MA and RI waters) and the Outer Cape Area (east of Cape Cod, MA). This action will address measures to: implement a trap transferability system in these areas, as well as Area 3 (the offshore Area from ME to NC); allow trap transfers among qualifiers; and impose a trap reduction or conservation tax on any trap transfers. Another action proposes to limit future access into the lobster trap fishery in Lobster Area 1 (the inshore Gulf of Maine). This action is intended to discourage lobster non-trap vessels from entering the lobster trap fishery, and discourage lobster trap vessels fishing in other lobster management areas from entering the Area 1 lobster trap fishery. A proposed rule for these actions is under development at this time.

Atlantic Herring. The impacts of the herring fishery on skates catch is considered negligible. However, the 2010-2012 herring specifications reduced the ABC by 45% to 106,000 mt. Herring are often used as lobster bait in the Gulf of Maine and the Area 1A TAC declined by 41% to 26,546 mt. As the supply of herring bait for the lobster fishery declines, it could result in increased demand for skate bait.

Mid-Atlantic Species. Skates are occasionally caught as bycatch in various fisheries managed by the Mid-Atlantic Fishery Management Council (e.g., summer flounder, scup, black seabass, bluefish). NMFS has recently proposed regulations implementing the Mid-Atlantic ACL Omnibus Amendment, which will implement ACLs and AMs for all species managed by the Mid-Atlantic Council. As many of these fisheries are jointly managed with the Atlantic States Marine Fisheries Commission (ASMFC), seasons, quotas, trip limits, and other measures are specified by state agencies. The implementation of ACLs and AMs for these fisheries will help constrain total catch of these species, as well as bycatch of non-target species like skates.

Large Whales. The Atlantic Large Whale Take Reduction Program (ALWTRP) requires the use of sinking groundlines, which may have a negligible to low negative impact on habitat due to associated bottom sweep by the groundline. In addition, required use of weak links in gillnets may result in floating "ghost gear," which could snag on and damage bottom habitat.

### **Future Actions:**

Skates. Skate fishery specifications for the 2012-2013 fishing years would replace the management measures implemented by the proposed action. At this time, it is expected that the ABC (50,435 mt) and catch limits for skates implemented by this action will remain the same for 2012 and 2013. Other measures, including skate possession limits, may be adjusted. An additional action related to skates is currently under development which would create a fishery exemption area (under NE Multispecies regulations) in Southern New England waters for the directed skate bait fishery. If approved, vessels fishing for skate bait with a Letter of Authorization could fish in the exemption area during the specified season without using NE Multispecies, Monkfish, or Scallop DAS.

NE Multispecies. FW 46, if approved by NMFS, would increase the amount of haddock allowed to be caught by the herring fishery ("haddock catch-cap") from its current level of 0.2 percent of the ABC, to 1% of the ABC, and make separate allocations for the Georges Bank and Gulf of Maine stocks. The Council is expected to initiate FW 47 in June 2011 to set specifications (OFLs, ABCs, and ACLs) for 20 groundfish stocks for FYs 2012-2013 (beginning May 1, 2012). Framework 47 would also refine AMs for ocean pout, windowpane flounder, Atlantic halibut, Atlantic wolffish, and SNE/MA winter flounder, consider eliminating the scallop access area yellowtail flounder caps, and consider additional allocation of yellowtail flounder to the scallop fishery based on estimated catch.

*Atlantic Sea Scallops*. The Council is currently developing FW 23 to the Scallop FMP. The action is expected to consider scallop dredge gear modifications and measures to reduce bycatch of sea turtles and yellowtail flounder.

Essential Fish Habitat. Reasonably foreseeable future actions that will likely affect habitat include the EFH Omnibus Amendment (under development at this time). The EFH Omnibus Amendment will provide for a review and update of EFH designations, identify HAPCs, as well as provide an update on the status of current knowledge of gear impacts. It will also include new proposals for management measures for minimizing the adverse impact of fishing on EFH that will affect all species managed by the NEFMC.

Sea Turtles. The Strategy for Sea Turtle Conservation and Recovery in Relation to Atlantic Ocean and Gulf of Mexico ("Strategy") is a gear-based approach to addressing sea turtle bycatch. NMFS is considering increasing the size of the escape opening for Turtle Excluder Devices (TEDs) in the summer flounder fishery, expanding the use of TEDs to other trawl fisheries, and modifying the geographic scope of the TED requirements (74 FR 88 May 8, 2009).

Atlantic Sturgeon. Atlantic sturgeon has been proposed for listing under the Endangered Species Act (ESA). Final listing determinations for the Atlantic sturgeon distinct population segments (DPSs) are expected by October 2011. Serious injuries and mortalities of Atlantic sturgeon in commercial fishing gear are a likely concern for the long-term persistence and recovery of the DPSs, and a primary reason cited for the proposals to list the DPSs under the ESA. If the species is listed under the ESA, reinitiation of formal consultations on FMPs, and the effects of fisheries on the five DPSs would be fully examined. The formal consultation process may result in conservation recommendations and, if pertinent, reasonable and prudent measures or reasonable and prudent alternatives, which would be actions deemed appropriate or necessary to minimize the impact of take of Atlantic sturgeon.

## Non-Fishing Effects: Past, Present and Reasonably Foreseeable Future Actions

Non-fishing activities that occur in the marine nearshore and offshore environments and their watersheds can cause the loss or degradation of habitat and/or affect the species that reside in those areas. Section 6.6.10.2 in the attached FW1 EA provides a summary of past, present, and reasonably foreseeable non-fishing activities and their expected effects on VECs in the affected environment. The following discussions of impacts are based on past assessments of activities and assume these activities will likely continue into the future as projects are proposed.

Construction/Development Activities and Projects: Construction and development activities include, but are not limited to, point source pollution, agricultural and urban runoff, land (roads, shoreline development, wetland loss) and water-based (beach nourishment, piers, jetties) coastal development, marine transportation (port maintenance, shipping, marinas), marine mining, dredging and disposal of dredged material and energy-related facilities. These activities can introduce pollutants (through point and non-point sources), cause changes in water quality (temperature, salinity, dissolved oxygen, suspended solids), modify the physical characteristics of a habitat or remove/replace the habitat altogether. Many of these impacts have occurred in the past and present and their effects would likely continue in the reasonably foreseeable future. It is likely that these projects would have negative impacts caused from disturbance, construction, and operational activities in the area immediately around the affected project area. However, given the wide distribution of the affected species, minor overall negative effects to offshore habitat, protected resources, allocated target stocks, and non-allocated target species and bycatch are anticipated since the affected areas are localized to the project sites, which involve a small percentage of the fish populations and their habitat. Thus, these activities for most biological VECs would likely have an overall low negative effect due to limited exposure to the population or habitat as a whole. Any impacts to inshore water quality from these permitted projects, including impacts to planktonic, juvenile, and adult life stages, are uncertain but likely minor due to the transient and limited exposure. It should be noted that wherever these activities co-occur, they are likely to work additively or synergistically to decrease habitat quality and, as such, may

indirectly constrain the sustainability of the allocated target stocks, non-allocated target species and bycatch, and protected resources.

**Restoration Projects:** Other regional projects that are restorative or beneficial in nature include estuarine wetland restoration; offshore artificial reef creation, which provides structure and habitat for many aquatic species; and eelgrass (*Zostera marina*) restoration, which provides habitat for many juvenile fishes. Due to past and present adverse impacts from human activities on these types of habitat, restorative projects likely have slightly positive effects at the local level.

**Protected Resources Rules:** The NMFS final Rule on Ship Strike Reduction Measures (73 FR 60173, October 10, 2008) is a non-fishing action in the United States-controlled North Atlantic that is likely to affect endangered species and protected resources. The goal of this rule is to significantly reduce the threat of ship strikes on North Atlantic right whales and other whale species in the region. Ship strikes are considered the main threat to North Atlantic right whales; therefore, NMFS anticipates this regulation will result in population improvements to this critically endangered species.

Energy Projects: Cape Wind Associates (CWA) has received approval to construct a wind farm on Horseshoe Shoal, located between Cape Cod and Nantucket Island in Nantucket Sound, Massachusetts. The CWA project would have 130 wind turbines located as close as 4.1 miles off the shore of Cape Cod in an area of approximately 24 square miles with the turbines being placed at a minimum of 1/3 of a mile apart. The potential impacts associated with the CWA offshore wind energy project include the construction, operation, and removal of turbine platforms and transmission cables; thermal and vibration impacts; and changes to species assemblages within the area from the introduction of vertical structures. Other offshore projects that can affect VECs include the construction of offshore liquefied natural gas (LNG) facilities such as the project "Neptune." As it related to the impacts of the Proposed Action, the Neptune project is expected to have small, localized impacts where the pipelines and buoy anchors contact the bottom.

## **Summary of Cumulative Effects**

The following analysis summarizes the cumulative effects of past, present, and reasonably foreseeable future actions in combination with the proposed action on the VECs identified in this section.

## Physical Environment/Habitat/EFH

The management measures described above in the NE Multispecies, Scallop, Monkfish, and Skate FMPs, largely have positive effects on habitat due to reduced fishing efforts, consequently reducing gear interaction with habitat. The other FMP actions that reduce fishing effort generally result in fewer habitat and gear interactions, resulting in low positive effects on habitat. The ALWTRP resulted in low negative to negligible effects on habitat due to the possibility of groundline sweep on the bottom and "ghost gear." The proposed TED requirements would possibly have negative effects on habitat due to potential slight increases in towing time. However, this gear is still being tested. The effects of the proposed action on habitat is

considered neutral. Overall, the cumulative effect of past, present, and reasonably foreseeable future fishing actions has resulted in low positive effects on habitat.

While the impact analysis in this action is focused on direct and indirect impacts to the physical environment and EFH, there are a number of non-fishing impacts that must be considered when assessing cumulative impacts. Many of these activities are concentrated near-shore and likely work either additively or synergistically to decrease habitat quality. Other non-fishing factors such as climate change and ocean acidification are also thought to play a role in the degradation of habitat. The effects of these actions, combined with impacts resulting from years of commercial fishing activity, have negatively affected habitat. However, impacts from the proposed action were found to be negligible. Therefore, when considering the cumulative effects of this action in combination with past, present, and reasonably foreseeable future actions, no significant impacts to the physical environment, habitat or EFH from the proposed action are expected.

## **Target Species**

The management measures described above are expected to have overall neutral to low positive impacts on target species (skates). Effort reductions in the NE Multispecies, Monkfish, and Scallop FMPs are likely to reduce skate catches, while the Skate FMP and the proposed action are likely to convert more skate discards into landings (relatively neutral fishing mortality). Future measures that will likely restrict fishing effort (EFH Omnibus) will also have positive effects on target species. Future measures such as the TED requirements would likely result in positive effects to target species because they may help reduce bycatch. Overall, the cumulative effect of past, present, and reasonably foreseeable future fishing actions has resulted in positive effects on target species. The decline in allowable herring landings could open up new markets for alternative lobster baits, some of it filled by either whole skate landings or by the carcasses of skates landed for the wing market.

As found in the cumulative effects analysis for FW1, the long-term trend has been positive for cumulative impacts to target species. While thorny skate remains overfished, effort reductions in the NE Multispecies, Monkfish, and Scallop FMPs have allowed other skate stocks to rebuild, and the rebuilding process for others is underway. Further, indirect impacts from the effort reductions in other FMPs are also thought to contribute to skate mortality reductions. These factors, when considered in conjunction with the proposed action which would have negligible impacts to target species due to the implementation of the recommended ABC, would not have any significant cumulative impacts.

## **Non-Target Species and Bycatch**

Actions that reduce fishing effort have had positive effects on non-target species and bycatch because in general, less fishing effort results in less impact to non-allocated target species and bycatch. Conversely, actions that increase fishing effort are considered to have low negative effects on non-target species and bycatch because more fishing generally results in more bycatch. Catch of primary non-target species in the skate fishery is monitored and controlled through other FMPs. TED requirements would likely have a positive effect on non-target species and bycatch and discards as they would likely exclude some of these species from capture in the cod-

end. Overall, the cumulative effect of past, present, and reasonably foreseeable future fishing actions has resulted in positive effects on non-target species and bycatch.

Skates are typically harvested incidentally to fishing for other more valuable species. The primary non-target and bycatch species analyzed for the purposes of this EA are monkfish, spiny dogfish, groundfish, and prohibited skates (barndoor, thorny, and smooth). Management efforts in the past have led to these species being managed under their own FMP. While some groundfish stocks remain in an overfished condition, or subject to overfishing, actions in the NE Multispecies FMP (e.g. Amendment 16) are attempting to control mortality on these stocks. Monkfish, spiny dogfish, barndoor skate, and smooth skate are no longer overfished or experiencing overfishing. Only thorny skate remains overfished, but there is little overlap between skate or groundfish fishing effort and thorny skate distribution (e.g. deep basins in the Gulf of Maine) (NEFMC 2009). Mortality and effort controls such as NE Multispecies, Monkfish, and Scallop DAS collectively help reduce bycatch of non-target species. Impacts to all of these species from the proposed action were found to be negligible, and the proposed action would not result in any significant cumulative direct or indirect impacts.

### **Protected Resources**

Past and present actions in fisheries that catch skates (groundfish, monkfish, scallop) have had negligible or positive effects on protected resources. Management plans for marine mammals have implemented effort restrictions and had positive affects by reducing injuries and deaths. Future positive impacts are likely.

The proposed action is not expected to increase the potential for gear interactions with protected species. This action would likely have negligible impacts on protected resources. Historically, the implementation of FMPs has resulted in reductions in fishing effort and as a result, past fishery management actions are thought to have had a slightly positive impact on strategies to protect protected species. Gear entanglement continues to be a source of injury or mortality, resulting in some adverse effects on most protected species to varying degrees. One of the goals of future management measures will be to decrease the number of marine mammal interactions with commercial fishing operations. The cumulative result of these actions to meet mortality objectives will be slightly positive for protected resources. The effects from non-fishing actions are also expected to be low negative as the potential for localized harm to VECs exists. The combination of these past actions along with future initiatives to reduce turtle interactions through the Sea Turtle Strategy when considered with the proposed action would not result in significant cumulative impacts.

## **Human Communities**

The effects of past, present, and reasonably foreseeable future fishery management actions have been slightly positive on nearly all VECs with the exception of human communities. Mandated reductions in fishing effort have resulted in negative economic impacts to human communities. Management measures designed to benefit protected resources and restrict fishing effort have low negative effects on the human communities. However, the implementation of annual catch limits and expansion of opportunities through numerous sectors and achievement of the larger goal of fishing groundfish stocks at sustainable rates and rebuilding groundfish stocks to

sustainable levels will benefit the human communities over the long-term. The sustainable status of scallops, spiny dogfish, and monkfish have also helped increase revenue and positive economic impacts. Overall, the cumulative effect of past, present, and reasonably foreseeable future fishing actions has resulted in negative effects on human communities.

The proposed action will have positive impacts on human communities due to large increases in allowable landings of skates. The positive impacts from the proposed action would provide some mitigation of the negative economic impacts of recent actions in the NE Multispecies fishery. Therefore, the proposed action when taken into consideration with past, present, and reasonably foreseeable future actions is not expected to have significant cumulative impacts.

Table 7 below summarizes the cumulative effects resulting from implementation of the proposed action and CEA baseline.

**Table 7.** Cumulative Effects Resulting from Implementation of the Proposed Action and CEA Baseline.

		Habitat Impacts	В	iological Imp	Human Community Impacts	
			Allocated Target Species	Non- allocated Target Species and Bycatch	Endangered/ Protected Species	
	Effects of					
Cumulative Effect Baseline	Past, Present, and Reasonably Foreseeable Future Non-Fishing Actions	Low negative / negligible	Low negative / negligible	Low negative / negligible	Low negative / negligible	Low negative / negligible
Cumulative	Effects of Past, Present, and Reasonably Foreseeable Future Fishing Actions	Positive	Positive	Positive	Negligible / positive	Negative
Direct and Indirect Effects of Proposed /Supplemental Action		Negligible	Negligible	Negligible	Negligible	Positive
Cumulative Effects  Summary of Effects from implementation of Proposed Action and Cumulative Effect Baseline		Negligible	Negligible	Negligible	Negligible	Low positive

## 7.0 LIST OF PREPARERS AND PERSONS/AGENCIES CONSULTED

The information contained in this document was prepared through the cooperative efforts of the Skate Plan Development Team members, and other members of the staffs of NMFS and the New England Fishery Management Council. Contributors include:

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## 8.0 COMPLIANCE WITH APPLICABLE LAWS AND EXECUTIVE ORDERS

### 8.2 MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

Section 301 of the Magnuson-Stevens Act requires that FMPs contain conservation and management measures that are consistent with the ten National Standards. The most recent Skate FMP changes implemented by Amendment 3 and FW1 address how the proposed management actions comply with the National Standards (refer to Section 7.1 of the FW1 EA). Under Amendment 3, the NEFMC adopted conservation and management measures that would rebuild overfished skate stocks to achieve, on a continuing basis, the optimum yield for U.S. fishing industry using the best scientific information available consistent with National Standards 1 and 2. The Skate FMP and implementing regulations manage all seven skate species throughout their entire U.S. range, as required by National Standard 3. FW1 (Section 7.1) describes how the measures implemented under that action do not discriminate among residents of different states consistent with National Standard 4, do not have economic allocation as their sole purpose (National Standard 5), account for variations in these fisheries (National Standard 6), avoid unnecessary duplication (National Standard 7), take into account fishing communities (National Standard 8), addresses bycatch in fisheries (National Standard 9), and promote safety at sea (National Standard 10). By proposing to meet the National Standards requirements of the Magnuson-Stevens Act through future FMP amendments and framework actions, the NEFMC will ensure that overfishing is prevented, overfished stocks are rebuilt, and the maximum benefits possible accrue to the ports and communities that depend on these fisheries and the Nation as a whole.

The proposed action would comply with all elements of the Magnuson-Stevens Act, including the National Standards, and the Skate FMP. This action is being taken in response to the decision by the NEFMC to revise the FY 2011 ABC for the skate complex. The FW1 EA, completed prior to the development of the updated skate ABC, did not contain an analysis of the revised ABC and associated catch limits. Therefore, this EA analyzes the impacts of the revised ABC, ACL, and TALs for skates, in compliance with applicable laws requirement for an analysis of proposed measures.

The revised skate catch limits would be implemented based upon Secretarial emergency authority specified in section 305(c) of the Magnuson-Stevens Act, and following the rulemaking requirements of the Administrative Procedures Act. NMFS policy guidelines for the use of emergency rules (August 21, 1997; 62 FR 44421) specify the following three criteria that define what an emergency situation is, and justification for final rulemaking: (1) The emergency results from recent, unforeseen events or recently discovered circumstances; (2) the emergency presents serious conservation or management problems in the fishery; and (3) if the emergency action is being implemented without prior public comment, the emergency can be addressed through emergency regulations for which the immediate benefits outweigh the value of advance notice, public comment, and deliberative consideration of the impacts on participants to the same extent as would be expected under the normal rulemaking process. NMFS policy guidelines further provide that emergency action is justified for certain situations where emergency action would prevent significant direct economic loss, or to preserve a significant economic opportunity that otherwise might be foregone.

New scientific information, including significant biomass increases of little and winter skates that support higher catch limits, is considered to be a "recently discovered circumstance," because the Council was not aware of this information when it adopted final measures under FW1 for FY2011. The emergency presents serious management concerns because the lower skate catch limits currently in place (No Action Alternative) could result in substantially reduced landings and revenue compared to the higher catch limits that would be available if this action is taken. For the directed skate wing fishery, it is projected that the fishery could be closed early in the fishing year, repeating economic and community impacts experienced during 2010. Emergency action to increase skate catch limits would enable additional economic opportunity that could otherwise be forgone and, therefore, likely avoid economic impacts from an unnecessarily low ACL and TALs for these stocks. Therefore, NMFS has determined that the current situation meets the criteria for emergency action. However, final rulemaking will only occur after publication of a proposed rule and request for comments in the *Federal Register*.

## 8.3 ENDANGERED SPECIES ACT (ESA)

Section 7 of the ESA requires Federal agencies conducting, authorizing, or funding activities that affect threatened or endangered species to ensure that those effects do not jeopardize the continued existence of listed species. In a Biological Opinion dated October 29, 2010, NMFS determined that fishing activities conducted under the Skate FMP and its implementing regulations are not likely to jeopardize the continued existence of any endangered or threatened species under the jurisdiction of NMFS or result in the destruction or adverse modification of critical habitat. An informal consultation under the ESA for FW1 measures was conducted. This

action is consistent with, and does not affect the analysis and conclusions of the FW1 EA regarding compliance with the ESA. For further information, refer to Section 8.2 of the FW1 EA.

## 8.4 MARINE MAMMAL PROTECTION ACT (MMPA)

NMFS has reviewed the impacts of FW1 and the Skate FMP on marine mammals and concluded that the specifications are consistent with the provisions of the MMPA and would not alter existing measures to protect the species likely to inhabit the management unit of the Skate FMP. For further information on the potential impacts of the proposed management action, see Section 8.3 of the FW1 EA.

## 8.5 NATIONAL ENVIRONMENTAL POLICY ACT

### 8.5.1 Revised FONSI

This supplement updates the Finding of No Significant Impact (FONSI) consistent with the conclusions derived in the FW1 EA and this document.

National Oceanic and Atmospheric Administration (NOAA) Administrative Order 216-6 (NAO 216-6) (May 20, 1999) contains criteria for determining the significance of the impacts of a Proposed Action. In addition, the Council on Environmental Quality (CEQ) regulations at 40 C.F.R. 1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity." Each criterion listed below is relevant in making a finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQ's context and intensity criteria. These include:

1. Can the proposed action reasonably be expected to jeopardize the sustainability of any target species that may be affected by the action?

**Response:** The Proposed Action for the Supplemental EA would not jeopardize the sustainability of any of the target species (primarily winter and little skates) affected by the action, because the biomass of these species has increased to levels significantly above their Bmsy targets. The action is expected to reduce the discards of these species and to increase landings within sustainable levels. The indirect impacts affecting other stocks are expected to be negligible. The biological impacts of the Proposed Action on the allocated target species are analyzed in Section 6.1.2.

2. Can the proposed action reasonably be expected to jeopardize the sustainability of any non-target species?

**Response:** The Proposed Action for the Supplemental EA is not expected to jeopardize the sustainability of any non-target species. As described in Section 6.1.3, fishing for skates is typically done on trips targeting more valuable species such as groundfish and monkfish. Effort and catch in these fisheries are controlled by DAS and/or sectors and trip limits. Changes in

skate catch limits, therefore, are not expected to influence the sustainability of other species caught on trips that land skates.

3. Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat as defined under the Magnuson-Stevens Act and identified in FMPs?

**Response:** The Proposed Action for the Supplemental EA is not expected to allow substantial damage to the ocean and coastal habitats and/or Essential Fish Habitat (EFH) as defined under the Magnuson-Stevens Act and identified in the FMP. This action is not expected to result in increases in fishing effort (Section 6.1.1).

4. Can the proposed action be reasonably expected to have a substantial adverse impact on public health or safety?

**Response:** The Proposed Action for the Supplemental EA is not expected to have a substantial adverse impact on public health and safety. The additional amount of allowable skate landings will likely prolong the fishing season and enable additional flexibility regarding when fishing trips can be planned. Safety could be enhanced if such flexibility enables vessels to fish during more optimal weather conditions.

5. Can the proposed action reasonably be expected to adversely affect endangered or threatened species, marine mammals, or critical habitat of these species?

**Response:** Since this action is not expected to result in an overall increase in fishing effort, the net effect on protected species is expected to be negligible (Section 6.1.4). The Proposed Action for the Supplemental EA does not constitute a modification to the operation of the fishery under the FMP that would cause an effect to ESA-listed species or critical habitat not considered in the October 29, 2010, Opinion or the Section 7 Consultation for the FW1 EA. There have been no new species listed or critical habitat designated that may be affected by the action.

6. Can the proposed action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?

**Response:** The Proposed Action for the Supplemental EA is not expected to have a substantial impact on biodiversity and ecosystem function within the Gulf of Maine, Georges Bank, or Southern New England regions, where the skate fishery primarily occurs. Effort restrictions in the multispecies, monkfish, and scallop fisheries have proven effective at limiting the impacts of fishing.

7. Are significant social or economic impacts interrelated with natural or physical environmental effects?

**Response:** There are no significant social and economic impacts of the Proposed Action for the Supplemental EA that are interrelated with natural or physical environmental effects. The

proposed action would provide additional skate landings and is likely to enable the skate fishery to remain open for a longer period of time. Within the context of the region and the fishery as a whole, these benefits would continue to be insignificant as determined under criteria of the Regulatory Flexibility Act (see Section 8.10). While the fishing industry members that fish for skates would benefit socially and economically by the approval of this action, it is not related with any impacts associated with the biological or physical environment. Such impacts are negligible.

8. Are the effects on the quality of the human environment likely to be highly controversial?

**Response:** The effects of the Proposed Action for the Supplemental EA on the quality of human environment are not expected to be highly controversial. The public is aware of the revised skate ABC recommendation and annual catch limits, resulting from increases in skate biomass. The Proposed Action would not modify the majority of measures proposed by FW1, only increase the ACL and TALs. The Proposed Action is not expected to negatively impact habitat, allocated target species, non-allocated target species and bycatch, or protected resources as described in sections 6.1.1 through 6.1.4.

9. Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, parkland, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas?

**Response:** The Proposed Action cannot be reasonably expected to result in substantial impacts to unique areas or ecological critical areas. There are no known parkland, prime farmlands, wetlands, or wild scenic rivers in the affected area. Vessel operations around the unique historical and cultural resources encompassed by the Stellwagen Bank National Marine Sanctuary would not likely be altered by this action. The skate fishery is mainly prosecuted by trawl and gillnet gear, and this action does not propose alterations in the spatial extent of the fishery. As a result, no substantial impacts are expected from this action.

10. Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

**Response:** The effects of the Proposed Action for the Supplemental EA on the human environment are not expected to be highly uncertain or involve unique or unknown risks. Vessels fishing for skates will primarily use trawl and gillnet gear, and maintain traditional fishing practices which will have no greater impact on habitat, protected species, and limit bycatch species as those conditions existing currently. Approval of the revised catch limits would provide additional revenue to the fishery at a time when some other groundfish catch levels have been reduced and the overall economic environment is difficult for small businesses, while at the same time meeting the conservation requirements of the Skate FMP. The skate fishery has been successfully managed under the FMP, and the trends in biomass for most skates are encouraging. Therefore, the effects on the human environment are not uncertain or involve unique or unknown risks.

11. Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?

**Response:** The cumulative effects analysis presented in Section 6.2 of this supplemental document considers the impacts of the Proposed Action in combination with relevant past, present, and reasonably foreseeable future actions and concludes that no significant cumulative impacts are expected from the approval of the revised catch limits for skates. Since none of the cumulative impacts of the original Proposed Action or the Supplemental Proposed Action are considered significant, Section 6.2 of this document concluded there are no significant cumulative impacts among these related actions. Further, the Proposed Action would not have any significant impacts when considered individually or in conjunction with any of the other actions presented in Section 6.2 (fishing related and non-fishing related).

12. Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources?

**Response:** The fishing operations would take place on ocean waters and would not affect any human communities on the adjacent shorelines. There are no known districts, sites, or highways in the area of the Proposed Action. The Proposed Action is not likely to affect objects listed in the National Register of Historic Places or cause significant impact to scientific, cultural, or historical resources. The only objects in the fishery area that are listed in the National Register of Historic Places are various ship wrecks. However, vessels typically avoid fishing near wrecks to avoid tangling gear on the wreck. Therefore, this action would not result in any adverse affects to the wrecks.

13. Can the proposed action reasonably be expected to result in the introduction or spread of a non-indigenous species?

**Response:** No non-indigenous species would be introduced during the Proposed Action because the increase in catch affects the scope of current fishing practices and does not introduce new methods. No non-indigenous species would be used or transported during fishing activities. Therefore, the Proposed Action would not be expected to result in the introduction or spread of a non-indigenous species.

14. Is the proposed action likely to establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration?

**Response:** Amendment 3 established a process in the Skate FMP to estimate ABC and associated catch limits for skates. These catch limits are determined in relation to estimates of skate catch and biomass trends. Significant effects are unlikely, because any future changes to catch limits are constrained by the biomass estimates, and a sustainable proportion of catch from the resource. Most other direct and indirect impacts of the proposed action are not likely to establish any precedents for future actions with significant effects.

15. Can the proposed action reasonably be expected to threaten a violation of federal, state, or local law or requirements imposed for the protection of the environment?

**Response:** The Proposed Action is not expected to threaten a violation of federal, state, or local law or requirements imposed for the protection of the environment. Vessels fishing for skates are required to comply with all local, regional, and national laws and permitting requirements.

16. Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

**Response:** The Proposed Action is not expected to result in cumulative adverse effects that could have a substantial effect on target or non-target species. As stated in Sections 6.1.2 and 6.1.3, impact on resources encompassing skates, groundfish, and other stocks is expected to be minimal.

DETERMINATION	
In view of the information presented in the FW1 EA and the supporting EA prepared for the approval of revised determined that the approval of the revised Skate ABC impact the quality of the human environment as described addition, all beneficial and adverse impacts of the Proposithe conclusion of no significant impacts. Accordingly, particularly Statement (EIS) for this action is not necessary.	ed catch limits for skates, it is hereby and catch limits will not significantly bed above and in the supporting EA. In sed Action have been addressed to reach
Patricia A. Kurkul Regional Administrator Northeast Region, NMFS	Date

## 8.6 ADMINISTRATIVE PROCEDURE ACT (APA)

Section 553 of the APA establishes procedural requirements applicable to rulemaking by federal agencies. The purpose of these requirements is to ensure public access to the Federal rulemaking process and to give the public adequate notice and opportunity for comment. At this time, no abridgement of the rulemaking process for this action is being requested.

## 8.7 PAPERWORK REDUCTION ACT (PRA)

The purpose of the PRA is to control and, to the extent possible, minimize the paperwork burden for individuals, small businesses, nonprofit institutions, and other persons resulting from the collection of information by, or for, the Federal Government. PRA for data collections relating to the Skate FMP have been considered and evaluated under the original Skate FMP implemented in 2003, and approved by the Office of Management and Budget (OMB). This

action relies upon the existing collections, including those approved by the OMB under the original FMP, and does not propose to modify any existing collections or to add any new collections. Therefore, no review under the PRA is necessary for this action.

## 8.8 COASTAL ZONE MANAGEMENT ACT (CZMA)

Section 307(c)(1) of the CZMA requires that all Federal activities which affect any coastal use or resource be consistent with approved state coastal zone management programs (CZMP) to the maximum extent practicable. NMFS has reviewed the relevant enforceable policies of each coastal state in the NE region for this action and has determined that this action is incremental and repetitive, without any cumulative effects, and is consistent to the maximum extent practicable with the enforceable policies of the CZMP of the following states: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Pennsylvania, Maryland, Virginia, and North Carolina. NMFS finds this action to be consistent with the enforceable policies to manage, preserve, and protect the coastal natural resources, including fish and wildlife, and to provide recreational opportunities through public access to waters off the coastal areas. Pursuant to the general consistency determination provision under Section 307 of the CZMA and codified at 15 CFR 930.36(c), NMFS sent a general consistency determination applying to Amendment 3 to the Skate FMP, and all routine Federal actions carried out in accordance with the FMP, to the following states: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Pennsylvania, Maryland, Virginia, and North Carolina on December 18, 2009. New Hampshire, Connecticut, Pennsylvania, New Jersey, Delaware, Virginia, and North Carolina have concurred with this determination. For the remaining states that have not responded, consistency has been inferred pursuant to the consistency letter.

## 8.9 INFORMATION QUALITY ACT (IQA)

Pursuant to NOAA guidelines implementing Section 515 of Public Law 106-554 (the Information Quality Act), all information products released to the public must first undergo a Pre-Dissemination Review to ensure and maximize the quality, objectivity, utility, and integrity of the information (including statistical information) disseminated by or for federal agencies. The following section addresses these requirements.

## Utility

The information presented in this document is helpful to the intended users (the affected public) by presenting a clear description of the purpose and need of the proposed action, the measures proposed, and the impacts of those measures. A discussion of the reasons for selecting the proposed action is included so that intended users may have a full understanding of the proposed action and its implications.

This document is the principal means by which the information contained herein is available to the public. The information provided in this document is based on the most recent available information from the relevant data sources. The development of this document and the decisions made by NMFS to propose this action are the result of a multi-stage public process.

The *Federal Register* notice that implements the proposed revision to the skate catch limits would be made available in printed publication and on the NMFS NE Regional Office website. Instructions for obtaining a copy of this supplemental EA are included in the *Federal Register* notice.

## Integrity

Prior to dissemination, information associated with this action, independent of the specific intended distribution mechanism, is safeguarded from improper access, modification, or destruction, to a degree commensurate with the risk and magnitude of harm that could result from the loss, misuse, or unauthorized access to or modification of such information. All electronic information disseminated by NMFS adheres to the standards set out in Appendix III, "Security of Automated Information Resources," of OMB Circular A-130; the Computer Security Act; and the Government Information Security Act. All confidential information (e.g., dealer purchase reports) is safeguarded pursuant to the Privacy Act; Titles 13, 15, and 22 of the United States Code (confidentiality of census, business, and financial information); the Confidentiality of Statistics provisions of the Magnuson-Stevens Act; and NOAA Administrative Order 216-100, Protection of Confidential Fisheries Statistics.

## **Objectivity**

For the purposes of the Pre-Dissemination Review, this supplemental EA is considered to be a "Natural Resource Plan." Accordingly, the document adheres to the published standards of the Magnuson-Stevens Act; the Operational Guidelines, Fishery Management Plan Process; the EFH Guidelines; the National Standard Guidelines; and NOAA Administrative Order 216-6, Environmental Review Procedures for Implementing the NEPA.

This information product uses information of known quality from sources acceptable to the relevant scientific and technical communities. Stock status (including estimates of biomass) and the recommended ABC reported in this product are based on the results of the NEFSC bottom trawl survey and catch statistics reported to NMFS, and were subject to peer-review through the Council's Skate PDT and SSC. These methods were developed and peer-reviewed during the 2008 Northeast Data Poor Stocks Working Group stock assessment of the skate complex (NEFSC 2009). These reports are developed using an approved, scientifically valid sampling process. Original analyses in this supplemental EA build upon the analyses contained in Amendment 3 and the FW1 EA, and were prepared using data from accepted sources, and the analyses have been reviewed by NOAA.

Despite current data limitations, the measures proposed for this action were selected based upon the best scientific information available (NEFMC 2011). The principal author of this document is a fishery policy analyst for NMFS, a member of the Council's Skate Plan Development Team, and is familiar with the available data and information relevant to the state of the regulated fisheries under the FMP, fishing techniques in the NE Region, biology of skates, and the socioeconomic impacts of the fisheries on impacted communities.

The policy choices are clearly articulated in Section 4.0 of this document, as the management alternatives considered in this action. The supporting science and analyses, upon which the

policy choices are based, are summarized and described, or incorporated by reference, in Sections 5 and 6 of this supplemental EA. All supporting materials, information, data, and analyses within this document have been, to the maximum extent practicable, properly referenced according to commonly accepted standards for scientific literature to ensure transparency.

The review process used in preparation of this supplemental EA involves the Northeast Fisheries Science Center, the Northeast Regional Office, and NMFS Headquarters. The Center's technical review is conducted by senior level scientists with specialties in population dynamics, stock assessment methods, demersal resources, population biology, and the social sciences. Review by staff at the Regional Office is conducted by those with expertise in fisheries management and policy, habitat conservation, protected species, and compliance with the applicable law. Final approval of the action proposed in this supplemental EA and clearance of any rules prepared to implement resulting regulations is conducted by staff at NMFS Headquarters, the Department of Commerce, and the United States Office of Management and Budget.

### 8.10 REGULATORY FLEXIBILITY ACT (RFA)

### Introduction

The RFA requires agencies to assess the impacts of their proposed regulations on small entities. The Regulatory Flexibility Act Analysis (RFAA) determines whether the proposed action would have a significant economic impact on a substantial number of small entities. The Small Business Administration (SBA) size standards define whether a business entity is small and, thus, eligible for Government programs and preferences reserved for "small business" concerns. Size standards have been established for all for-profit economic activities or industries in the North American Industry Classification System (NAICS). The SBA defines a small business in the commercial fishing and recreational fishing sector, as a firm with receipts (gross revenues) of up to \$4 million.

This section provides an assessment and discussion of the potential economic impacts of the proposed action, as required of the RFA. The objective of the RFA is to require consideration of the capacity of those affected by regulations to bear the direct and indirect costs of regulation. The Final Regulatory Flexibility Analysis (FRFA) must identify the number and types of businesses that would be regulated, indicate how many of these entities are small businesses, explain the expected economic impact of the regulation on small businesses, and describe any feasible alternatives that would minimize the economic impacts.

Description of the Reasons Why Action by Agency is Being Considered

The purpose for this action is to implement revised catch limits for skates for FY 2011, in order to achieve a better balance of the conservation and economic objectives of the MSA. This action is needed due to the change in circumstances caused by the availability of new scientific information and resulting recommendations to increase the ABC for the skate complex. For more information refer to Sections 2.0 and 3.0 of this Supplemental EA.

The Objectives and Legal Basis for the Proposed Action

As stated above, the purpose for this action is to implement a revised ABC and catch limits for skates for FY 2011. The legal basis for the action is the Magnuson-Stevens Fishery Conservation and Management Act.

Summary of the Significant Issues Raised by Public Comments in Response to the IRFA. A Summary of the Assessment of the Agency of Such Issues, and a Statement of Any Changes Made from the Proposed Rule as a Result of Such Comments

The public has not yet had an opportunity to comment on the IRFA and proposed rule for this action. Seven comments were received on the proposed rule to implement FW1, and responses to those comments were addressed in the final rule (76 FR 28328).

Estimate of the Number of Small Entities

The proposed increase in the Skate ACL and TALs would impact vessels that hold Federal open access commercial skate permits that participate in the skate fishery. For the purposes of this analysis, each permitted vessel is treated as a single small entity and is determined to be a small entity under the RFA. Accordingly, there are no differential impacts between large and small entities under this analysis. According to the FW1 final rule and Final Regulatory Flexibility Analysis (76 FR 28328), as of December 31, 2010, the maximum number of small fishing entities (as defined by the Small Business Administration (SBA)) that may be affected by this action is 2,607 entities (number of skate permit holders). However, during fishing year 2010, only 503 vessels landed skates for the wing market, and only 56 landed skates for the bait market.

Reporting, Recordkeeping and Other Compliance Requirements

This action does not introduce any introduce any new reporting, recordkeeping, or other compliance requirements. This proposed action does not duplicate, overlap, or conflict with other Federal rules.

Description of Steps the Agency Has Taken to Minimize the Significant Economic Impact on Small Entities Consistent with the Stated Objectives of Applicable Statutes

During the development of FW1, NMFS and the Council considered ways to reduce the regulatory burden on and provide flexibility to the regulated community. The measures implemented by the FW1 final rule minimize the long-term economic impacts on small entities to the extent practicable. The proposed action is expected to further minimize adverse economic impacts on participants in the skate fishery by increasing skate catch limits, potentially extending the directed fishing season, and avoiding the impacts associated with closures. Overall, long-term impacts of FW1 rule, as well as the related actions of the Skate FMP, are minimized by ensuring that management measures and catch levels are sustainable and contribute to rebuilding stocks and, therefore, maximizing yield, as well as providing additional flexibility for fishing operations in the short term. In particular, the revised catch limits for skates that is the subject of this EA, directly or indirectly provides small entities with some ability to offset at least some portion of the estimated economic impacts associated with FW1 and the FMP as a whole.

## Economic Impacts on Small Entities Resulting from Proposed Action

The economic impact resulting from this action on these small entities is positive since the action would provide additional fishing opportunity for vessels participating in the skate fishery for FY 2011. The Preferred Alternative is almost certain to result in greater revenue from skate landings. Based on recent landing information, the skate fishery is able to land close to the full amount of skates allowable under the quotas. The estimated potential revenue from the sale of skates under the proposed catch limits is approximately \$9.0 million, compared with \$5.8 million if this action were not implemented (Table 5). Due to the implications of closing the directed skate fisheries early in the fishing year, the larger catch limits associated with the Preferred Alternative, compared with the No Action Alternative will result in additional revenue, if fishing is prolonged. According to analyses in FW1, vessels that participate in the skate fishery derive most (an average of 96%) of their revenues from other fisheries (e.g. groundfish, monkfish). Therefore, relative to total fishing revenues, catch limits of other species would be expected to have more significant economic impacts than revenues derived from skates alone. However, as skate prices have begun increasing in recent years, more vessels are deriving a greater proportion of their income from skates.

## **8.11 EXECUTIVE ORDER (E.O.) 12866**

The purpose of E.O. 12866 is to enhance planning and coordination with respect to new and existing regulations. This E.O. requires the Office of Management and Budget (OMB) to review regulatory programs that are considered to be "significant." The Regulatory Impact Review (RIR) for FW1 (refer to section 8.10 of the FW1 EA) concluded that the action was not a "significant regulatory action" because it would not affect in a material way the economy or a sector of the economy. Based on the objectives of the proposed action and alternatives (Sections 3.0 and 4.0) and the analyses contained within FW1 and this supplemental EA (Section 6.0), there is no rationale to change the determination of the FW1 RIR. The proposed action is intended to increase skate landings and revenue, and help avoid the potential negative economic impacts associated with the No Action Alternative. Therefore, this action is also not considered a "significant regulatory action".

### 9.0 LIST OF REFERENCES

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- National Marine Fisheries Service (NMFS). 2010. Final skate fishery specifications for FY 2010-2011 and Environmental Assessment. Northeast Regional Office, Sustainable Fisheries Division, Gloucester, MA. 55 pp.
- New England Fishery Management Council (NEMFC). 2009. Final Amendment 3 to the Fishery Management Plan (FMP) for the Northeast Skate Complex and Final Environmental Impact Statement (FEIS) with an Initial Regulatory Flexibility Act Analysis. Available at: http://www.nefmc.org/skates/. 459 pp.
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- Northeast Fisheries Science Center (NEFSC). 2009. The Northeast Data Poor Stocks Working Group Report, December 8-12, 2008 Meeting: Part A. Skate species complex, deep sea red crab, Atlantic wolffish, scup, and black sea bass Part B. Weakfish. Northeast Fisheries Science Center Reference Document 09-02. Available at: http://www.nefsc.noaa.gov/publications/crd/crd0902/crd0902a.pdf.