

DRAFT

Atlantic Deep-Sea Red Crab FMP

Specifications for Fishing Years 2014-2016,

Including a

Regulatory Flexibility Analysis

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Prepared by the New England Fisheries Management Council

In consultation with:

United States Department of Commerce

National Oceanic and Atmospheric Administration

National Marine Fisheries Service, Northeast Region

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1.0 Background

Deep-sea red crab is a data poor stock. In the absence of better scientific information, the New England Fishery Management Council's (Council) Science and Statistical Committee (SSC) recommended setting the acceptable biological catch (ABC) equal to the long-term average landings of the directed red crab fishery (1,775 mt) for fishing years 2011-2013. Recent landings, landings per unit of effort (LPUE), port samples, discard information, and economic data suggest there is no change in the size of the red crab stock. There has not been an update to the red crab assessment and the maximum sustainable yield (MSY) and the overfishing limit (OFL) remain unknown.

On August 21, 2013, the SSC recommended a status quo ABC for fishing years 2014-2016 (expressed in terms of landings of male crab by the directed fishery) of 1,775 mt.

1.1 Original Atlantic Deep-Sea Red Crab Fishery Management Plan and Modifications

The Atlantic Deep-Sea Red Crab Fishery Management Plan (FMP) was implemented in 2002. The FMP originally included a target total allowable catch (TAC) limit, limited access permits and trip limits based on historical participation, days-at-sea allocations for the limited access fleet, a prohibition on retaining more than 100 lb of female red crab, as well as other gear requirements and restrictions. Framework Adjustment 1 to the FMP modified the annual review process to allow specifications to be set for up to 3 years. Amendment 1 incorporated the Standardized Bycatch Reporting Methodology, and Amendment 2 is reserved for the Council's Essential Fish Habitat Omnibus Amendment that is currently under development. Amendment 3 to the FMP ensured consistency with the annual catch limit (ACL) and accountability measure (AM) requirements of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), removed the trip limit restriction, and replaced the target TAC and DAS allocation with a total allowable landings (TAL) limit.

1.2 Data-Poor Stocks Working Group and Fishing Years 2011-2013 Specifications

The management unit specified in the Red Crab FMP includes red crab (*Chaceon quinque-dens*) in U.S. waters of the Atlantic Ocean from 35° 15.3' N. lat. (the latitude of Cape Hatteras Light, North Carolina) northward to the U.S./Canada border. The most recent peer-reviewed scientific advice that is applicable to the red crab fishery was produced by the Data Poor Species Working Group (DPSWG) and the associated Peer Review Panel, which met in December 2008 and issued its report on January 20, 2009. The DPSWG was tasked with recommending biological reference points (BRPs), measurable BRPs and MSY proxies for several species, as well as advising on the scientific uncertainty and risks for the SSC to consider when recommending catch limits.

The methods used by the DPSWG are explained in a working paper that is available at <http://www.nefsc.noaa.gov/publications/crd/crd0902>. The DPSWG produced estimates of sustainable yield that approximated recent and long-term average annual landings, leading the DPSWG to “recommend a catch limit that mimics both recent and long term mean annual landings.” The Council’s Red Crab Plan Development Team (PDT) further analyzed the methodology employed by the DPSWG and determined that estimates of sustainable yield from the Depletion Corrected Average Catch (DCAC) model are likely to be less than MSY. The SSC, therefore, concluded that “the information available for red crab is insufficient to estimate MSY or OFL.” In lieu of an estimate of OFL, the SSC recommended an interim ABC based on the long-term average landings of male red crab. The SSC noted that the two survey estimates of abundance and their variance do not provide evidence of significant depletion of currently market-sized males from 1974 to 2003-2005. Further, the SSC determined that there is insufficient data to determine the historic level of discards and discard mortality that accompanied the historic landings that were used to establish the ABC. However, the SSC concluded that the historical landings of male red crab and historical discarding practices appear to be sustainable and that an interim ABC based on long-term average landings of males by the directed fishery (1,775 mt) is safely below an undetermined overfishing threshold and adequately accounts for scientific uncertainty. The TAL for fishing years 2011-2013 was set at 1,775 mt in Amendment 3 (76 FR 60379, September 29, 2011). All of the specification values assume a male-only directed fishery.

2.0 Purpose

To be completed

3.0 Changes to the Status Quo Action

The specifications for fishing years 2014-2016 do not constitute a change in the status quo action. The status quo action is a 3-year specification of ACL based on the best available scientific information. The fishing years 2011-2013 ABC, ACL, and TAL were based on average long-term (1974-2008) landings of the directed red crab fishery. Red crab was last assessed by the Data Poor Stocks Working Group in 2009, and there have been no updates to the assessment method or the specifications methods.

4.0 New Information

The sources of new information directly related to the action and its impacts are the 2010-2012 red crab landings, LPUE, port samples, discard information, and economic impact analyses. Other components, including incidental landings and bycatch, the Canadian red crab fishery, essential fish habitat, and protected resources are also considered.

4.1 Red Crab Landings, LPUE and Port Samples

The Red Crab PDT reviewed red crab fishery information compiled by the NEFSC, including updated landings, LPUE and port sampling data. The updated information indicated that 2010-2012 landings were lower than the TAL, and appeared to be consistent with average landings since 2000 (Figure 1). Landings were grouped by three fishing regions based on VTR reported statistical area fished (Figure 2), and landings by region indicated that the fishery operates nearly equally in all regions in recent years (Figure 3). LPUE appeared stable between 2010 and 2012 and showed an increasing trend since 2007 (Figure 4). There are some caveats with LPUE data due to interpretation of VTR reports; however the method to interpret LPUE data is consistent with the method applied in Amendment 3. Port sampling data indicated that the 2010-2012 mean size of landed males was consistent with average landed size since 2001 (Figure 5). There were differences in landed size frequency distributions among the three fished areas (Figure 6). Landed crabs in area 3 were larger than the other areas, which may indicate increased fishing effort in area 3 in recent years compared to the past. Updated landings, LPUE and port samples did not indicate any decline in overall stock size.

The red crab fishery is market-driven and landings are very closely tied to market demand, which explains why the landings have been lower than the TAL recently. Permit holder, Jon Williams confirmed that the market for red crabs decreased in 2010-2012, despite high landings per unit of effort. In area 3 (Figure 2), vessels are targeting larger crabs to meet the market demand (Figure 4). There may be discarding of smaller crabs in area 3 to meet the demand for larger crabs in the southern region. A comparison of sea sampling conducted by Rick Wahle of the University of Maine in 2010 to sampling in 2012-2013 has shown a size distribution shift to larger crabs. This research has shown a significant increase in the landed size distribution in area 3 in 2012. The PDT reviewed where landings were occurring, and noted that landings were distributed all along the coast compared with early years in the fishery when most of the landings were concentrated in the northern region of the fishery. Based on the landings, LPUE, and port sampling information from recent fishing years, setting the TAL at 1,775 mt for fishing years 2014-2016 would not result in stock decline and would allow flexibility to the fishing industry. Thus, the proposed action would not result in any impacts to the status of the red crab fishery that are significant or uncertain or outside the range of impacts considered in the EA for Amendment 3 in 2010.

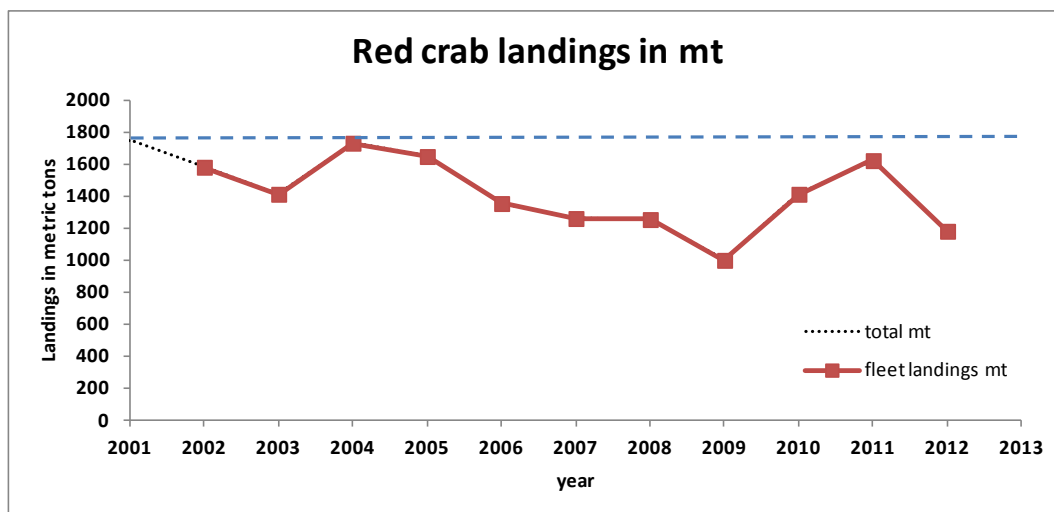


Figure 1: Red crab landings since 2000. The blue dashed line represents the Total Allowable Landings (TAL) limit of 1,775 mt. The black dashed line is total red crab landings; the red line is red crab permitted vessel landings. Landings other than the red crab directed fishery account for less than one percent most years.

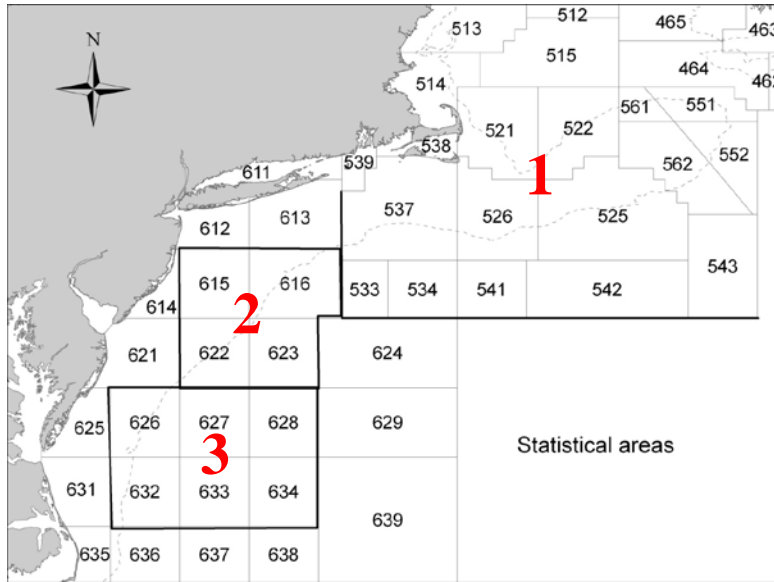


Figure 2: Statistical area groups of red crab fishing effort; area 1 in the north, area 2 off of New Jersey, and area 3 in the south.

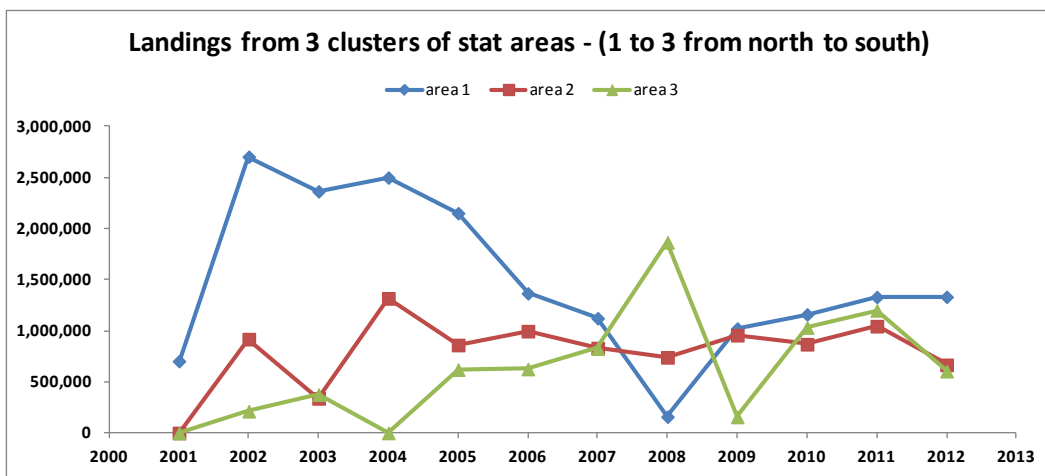


Figure 3: Red crab landings from the three fishing regions.

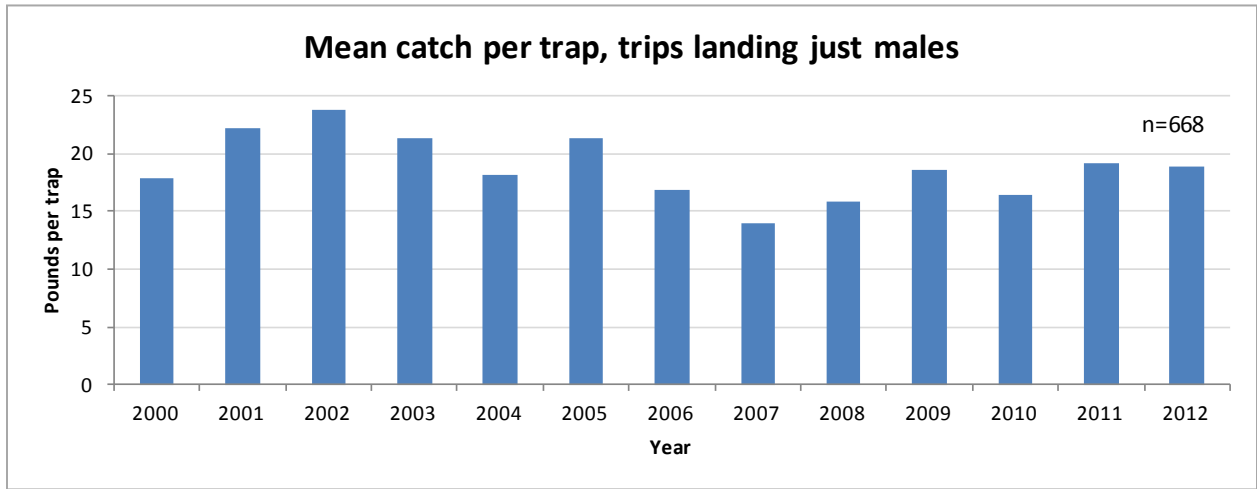


Figure 4: Red crab Landings per Unit Effort (LPUE) excluding trips that landed females in 2010 and 2011 interpreted from the VTR-reported data, following methods develop by A. Applegate in 2006.

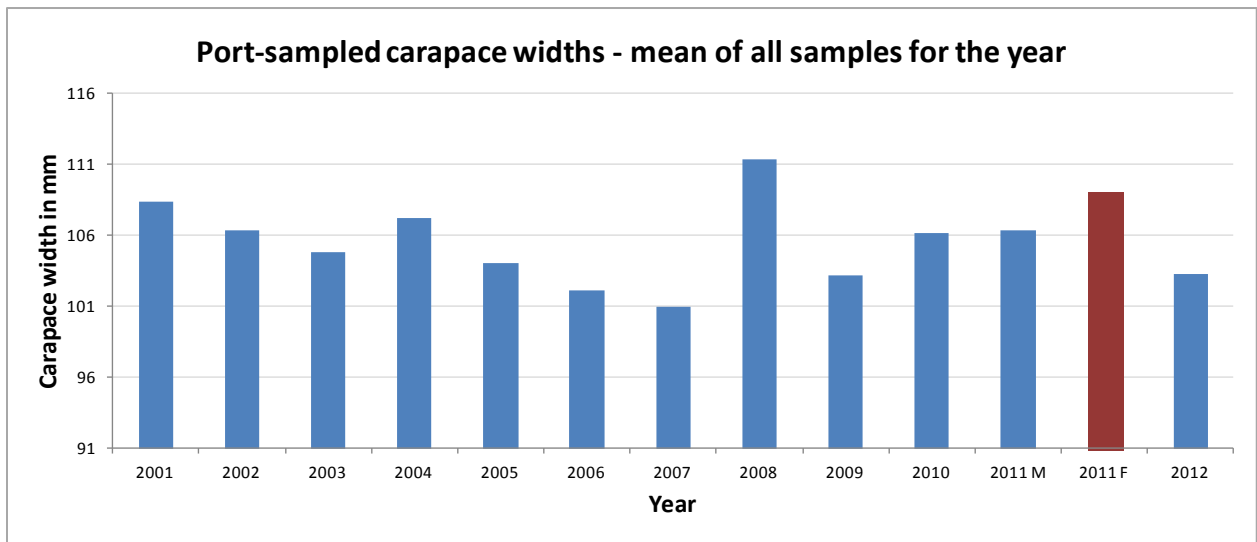


Figure 5: Mean of male red crab carapace widths from port samples, including sampled females in 2011 (red bar).

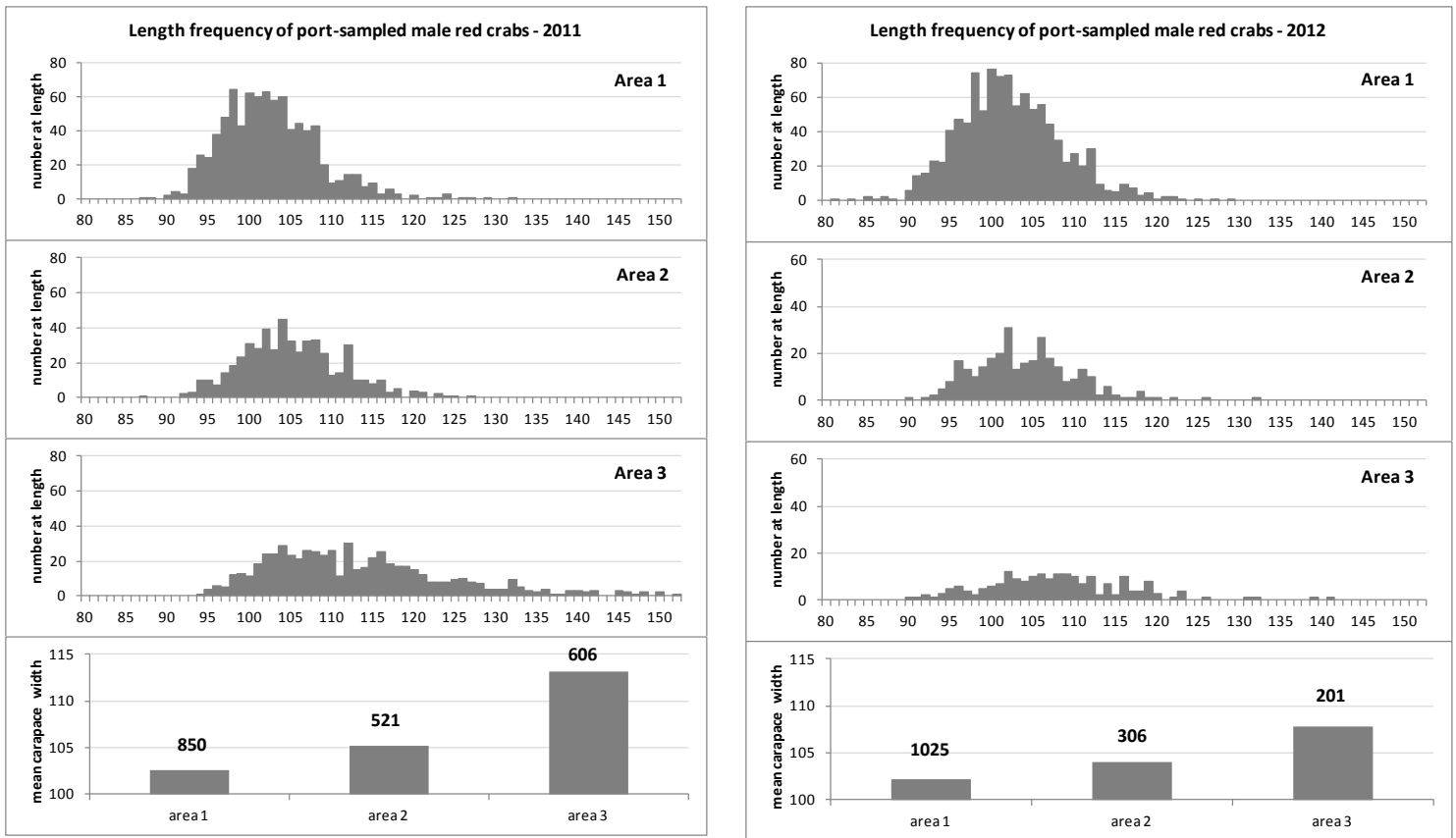


Figure 6: Length frequencies of port-sampled male red crabs from 2011 (left) and 2012 (right), divided into three fishing regions (Figure 2). The numbers above the columns in the bottom panel are the number of crabs measured per area.

4.2 Red Crab Discards

The PDT reviewed data related to current discard rates and whether or not there are any changes in the discard rates in recent years from the past. There is minimal data from at-sea monitoring to determine the total amount of discards in the red crab fishery, and the SSC previously concluded that the available monitoring data on discards and research on discard mortality were inadequate to reliably estimate dead discards. The SSC concluded that the best scientific information available for deriving ABC in 2010 was the time series of landings. The PDT examined VTR reports from 2000-2012 and noted that there is a high level of uncertainty in the amount of reported discards (Table 1; Figure 7). The VTR-reported increase in discards in 2010-2012 may be a result of increased accuracy of reporting and compliance to VTR reporting regulations, rather than an actual increase in discarded crabs. The discard rates reported on the VTR logs were generally lower than those estimated by the Northeast Fisheries Observer Program. The SSC reviewed the updated discard data on August 21, 2013 and again concluded that the time series of landings was the best scientific information available for deriving the ABC. Based on the discard information from recent fishing years, setting the TAL at 1,775 mt for fishing years 2014-2016 would not result in stock decline. Thus, the proposed action would not result in any impacts on red crab discards or the red crab stock as a whole that are significant or uncertain or outside the range of impacts considered in the EA for Amendment 3 in 2010.

Table 1: The percentage of annual trips where the VTR log included both landings and discard estimates

year	percentage of VTR logs with both landings and estimated discards
2000	100
2001	44
2002	28
2003	29
2004	56
2005	44
2006	49
2007	36
2008	27
2009	60
2010	96
2011	89
2012	100
mean	58

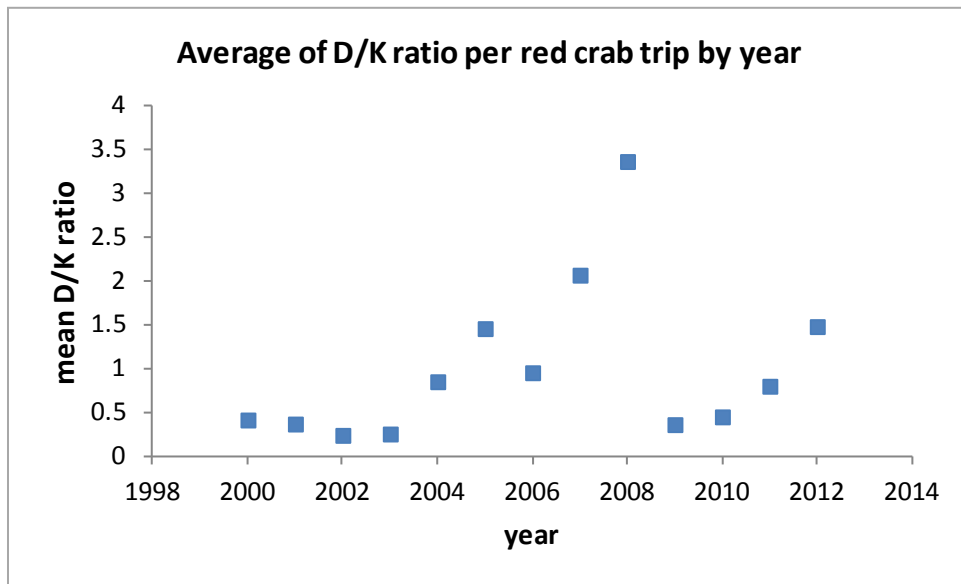


Figure 7: Discard to kept (D:K) ratios for all trips with both landings and discards on the VTR log.

4.3 Economic Description of the Red Crab Fishery and Economic Impact Statement

Section 6.3 of Amendment 3 to the FMP contains a detailed economic description of the red crab fishery, including a community profile of New Bedford, MA where all red crab vessels are docked. Updated information related to prices and revenue is included in Table 2 and Figure 8.

The recommended TAL for fishing years 2014-2016 is the same as the current TAL (1,775 mt) therefore, there are no short-term economic impacts. The proposed TAL is not expected to change the current supply of red crab to the market or the ex-vessel price of red crab and wholesale or retail prices. Consequently, the proposed TAL is not expected to measurably or predictably change consumer surplus. Additionally, the few boats with limited access permits in the red crab fishery have overlapping ownership and operate as a voluntary cooperative. The cooperative relationship fosters a strong incentive to harvest red crab in a way that maximizes profits for the fleet as a whole. As a result, the vessels are not expected to compete to harvest the largest possible amounts of red crab per vessel as a quickly as possible before the TAL is reached. In addition, the current market conditions, not the landings limit, constrain the catch of red crab, so there is no incentive for boats to land as much as they can before the TAL would be reached. A status quo TAL is not expected to have any impacts on employment or on the income of crew members. The status quo TAL is also not expected to have any social impacts. Thus, the proposed action would not result in any economic impacts that are significant or uncertain or outside the range of impacts considered for Amendment 3 in 2010.

Table 2. Fishing years 2002-2012 red crab price per pound, inflation adjusted price (based on 2010 dollars), Vessel Trip Report (VTR) landings in pounds and estimated revenue.

* The consumer price index (CPI) used to convert nominal dollars to 2010 equivalent dollars is from the Bureau of Economic Analysis Table 1.1.9 (www.bea.gov/iTable/iTable.cfm?ReqID=9&step=1).

** Landings data is from VTRs, which do not exactly match dealer data.

*** Revenue is estimated based on VTR reported landings and prices calculated from dealer data.

Fishing year	Price per Pound	* Inflation Adjusted Price	** VTR Reported Landings	*** Inflation Adjusted Revenue
2002	\$0.86	\$1.04	3,484,283	\$3,623,654
2003	\$0.85	\$1.00	3,111,953	\$3,111,953
2004	\$0.94	\$1.08	3,815,415	\$4,120,648
2005	\$0.90	\$1.00	3,631,754	\$3,631,754
2006	\$0.90	\$0.97	2,984,084	\$2,894,561
2007	\$0.92	\$0.96	2,777,723	\$2,666,614
2008	\$1.01	\$1.03	2,763,519	\$2,846,425
2009	\$0.96	\$0.97	2,202,021	\$2,135,960
2010	\$0.97	\$0.97	3,111,892	\$3,018,535
2011	\$0.97	\$0.95	3,575,278	\$3,396,514
2012	\$1.00	\$0.97	2,602,352	\$2,524,281
Average	\$0.93	\$0.99	3,096,389	\$3,065,425

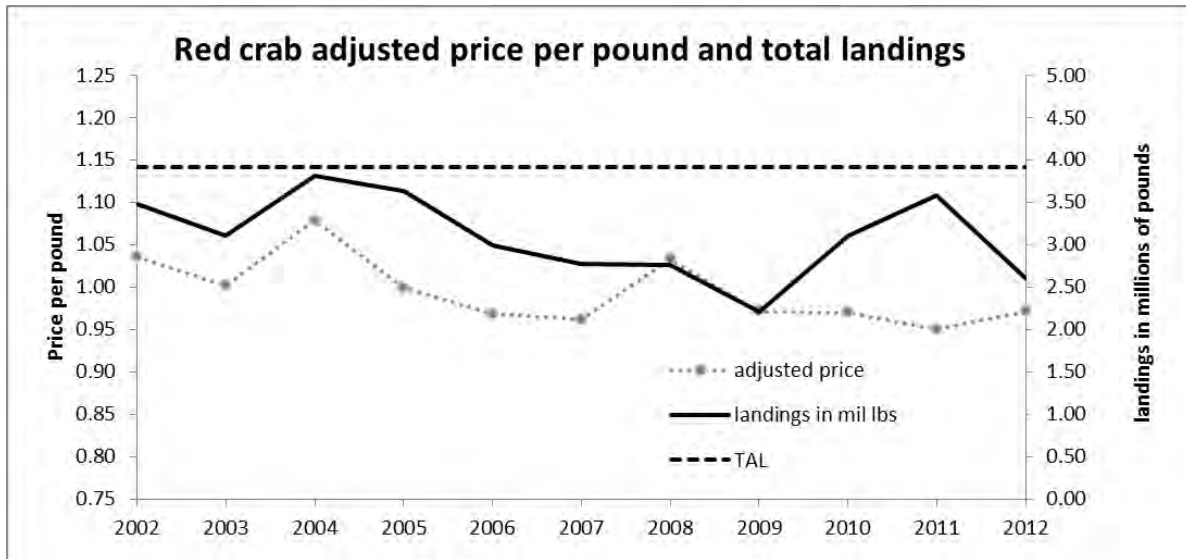


Figure 8. Inflation adjusted red crab price per pound (blue line) plotted with total landings in millions of pounds (red line) and the TAL in millions of pounds (black dashed line).

4.4 Other Valued Ecosystem Components

4.4.1 Incidental Landings and Bycatch

Red crab inhabit water depths of 400-800 meters. This depth range is beyond that in which most fishing activity with the potential for red crab bycatch takes place. The incidental catch permit landings in recent years were examined in Section 6.1.2.1 of Amendment 3 to the FMP to determine whether they were significant in relation to the TAL. In FY 2009 (from March 1, 2009 through February 29, 2010), there were three fishing vessels with incidental permits that had red crab landings in the dealer database. Their activity represents a total of 11 trips and 1,724 live pounds, as compared to 2.73 million pounds of landings by the limited access fleet. The average catch rate in live pounds for the incidental trips in FY 09 was 157 pounds per trip. There is no change to the number of incidental permits and the proposed status quo TAL is not expected to change incidental landings and bycatch.

4.4.2. Bycatch of Red Crab in Other Fisheries

Bycatch of red crab in other fisheries is detailed in Section 6.1.2.2 of Amendment 3 to the FMP. The proposed status quo TAL is not expected to change bycatch or discarding of red crab in other fisheries.

4.4.3. Bycatch of Other Species in the Red Crab Fishery

Section 6.1.2.3 of Amendment 3 to the FMP noted that there is very little bycatch of other species in the red crab fishery, and in general, the red crab fishery has little interaction with non-

target species. The proposed status quo TAL will not change the bycatch of other species since there will be no increase in effort, change in gear, or change in distribution of fishing effort.

4.4.4. Canadian Red Crab Fishery

Section 6.1.3 of Amendment 3 to the FMP indicates that the Canadian red crab fishery has not been active in recent years. There has been no evidence that the Canadian red crab fishery has become active since Amendment 3 was implemented.

4.4.5. Essential Fish Habitat

Section 3.7.4 of the FMP and Section 6.2.1.1 of Amendment 3 to the FMP describe the EFH for red crab. The EFH designation has not changed since implementation of the FMP; however the designations are being evaluated as part of the Omnibus Habitat Amendment, and there are additional recommendations that will be incorporated for red crab. The proposed status quo TAL does not impact EFH for red crab or other Northeast Region species since there will be no increase in effort, change in gear, or change in distribution of fishing effort.

4.4.6. Protected Resources

The most recent analysis of the protected species and marine mammals that may be found in the environment utilized by the red crab fishery is provided by the 2002 Biological Opinion on the Red Crab FMP (available at http://www.nero.noaa.gov/prot_res/section7/NMFS-signedBOs/RedCrab2002signedBO.pdf). There are numerous species that inhabit the environment within the red crab management unit and are afforded protection under the Endangered Species Act of 1973 (ESA; i.e., for those designated as threatened or endangered) and/or the Marine Mammal Protection Act of 1972 (MMPA). Fifteen are classified as endangered or threatened under the ESA, while the others are protected by the provisions of the MMPA.

However, since the red crab fishery is limited to the narrow shelf edge of the continental shelf and only a few vessels currently participate in the fishery, the extent of interactions between the fishery and protected species is not expected to be significant. NMFS's 2002 Biological Opinion concludes that the operation of the fishery under the Red Crab FMP may adversely affect, but is not likely to jeopardize the continued existence of right whales, humpback whales, fin whales, sei whales, sperm whales, or loggerhead and leatherback turtles. An Incidental Take Statement (ITS) along with non-discretionary Reasonable and Prudent Measures (RPMs) to minimize the impacts of incidental take of sea turtles was provided in the Opinion, which exempted the incidental take of up to one loggerhead and/or one leatherback sea turtle annually in the fishery due to entanglement in pot/trap gear. In regard to other protected species, NMFS has determined that the red crab fishery is not expected to affect roseate terns, piping plovers, blue whales, green, Kemp's ridley, and hawksbill sea turtles, shortnose sturgeon, or Atlantic salmon, nor will it destroy or adversely modify designated critical habitat for right whales.

The Atlantic Large Whale Take Reduction Plan (ALWTRP) is a program to reduce the risk of serious injury to or mortality of large whales due to incidental entanglement in U.S. commercial fishing gear. The plan is required by the MMPA and has been developed by NMFS. The ALWTRP focuses on the critically endangered North Atlantic right whale, but is also intended to reduce entanglements of endangered humpback and fin whales and to benefit non-endangered minke whales. For the purposes of ALWTRP, the red crab fishery is considered part of the Atlantic Mixed Species Trap/Pot fishery, and takes place primarily in the Offshore Trap/Pot Area. Regulations pertaining to this area, in addition to the universal requirements, include gear marking and weak links, which are designed to reduce injury should an interaction occur. The red crab fishery is considered a Category II fishery under the MMPA, which means occasional incidental interactions and serious injury may occur, however, given the small scale of the fleet and the management measures that restrict the number of traps a vessel may use, interaction with protected species is rare.

NMFS recently excluded the red crab fishery from the Biological Opinion for Continued Implementation of Management Measures for the Northeast Multispecies, Monkfish, Spiny Dogfish, Atlantic Bluefish, Northeast Skate Complex, Mackerel/Squid/Butterfish, and Summer Flounder/Scup/Black Sea Bass Fisheries because there were either no or negligible recorded interactions with Atlantic sturgeon. The May 2013 Biological Opinion (available at https://static.squarespace.com/static/511cdc7fe4b00307a2628ac6/t/519adee0e4b09ffb7ee2aac8/1369104096102/Draft_Batch.pdf) reviewed the impacts of the red crab fishery and determined that the exemption to the sinking goundline requirement for gear that is fished at depths greater than 280 fathoms is unlikely to have an adverse impact on entanglement risks for right, humpback, fin and sei whales.

5.0 New Circumstances

Section 7.9 of the EA of Amendment 3 to the FMP identified “reasonably foreseeable future actions” that may affect the environment. For this report, the Council reviewed the actions to determine if they did occur and whether they would change the analysis of impacts from the red crab specifications on the human environment contained in the EA. In addition, the Council considered whether other actions not anticipated in the EA occurred or may occur that have a bearing on the fishery or its impacts.

The reasonably foreseeable future actions in the EA were grouped into the following seven categories: cumulative effects to red crab, non-target/bycatch species, habitat, protected resources, social/economic impacts on human communities, non-fishing impacts, and deep-sea corals.

5.1 Red Crab

Red crab is a data-poor species for which there have been only two fishery-independent surveys, one in 1974 and another in 2003-2005. This lack of data makes it difficult to assess the impacts of the FMP, the specifications packages, Framework 1, the Emergency Action on the red crab resource and Amendment 3, other than eliminating the potential for the continuation of high landings that occurred with unregulated fishing effort in 2000 and 2001. The FMP and subsequent actions first capped and then reduced fishing effort and landings, and it is likely that they have had a positive effect on the resource.

Only a handful of fisheries occur in deep waters that potentially overlap with the red crab fishery, specifically tilefish, monkfish, and offshore lobster fisheries. As explained in the FMP (Section 6.6, NEFMC 2002), “due to the offshore, deep water nature of the fishery, there are very few known interactions between the fishery and other fisheries”. All these fisheries are under management plans that assess the impacts of that fishery on the red crab resource. The Tilefish, Monkfish, and Lobster FMPs have all implemented new restrictions on entry and fishing effort since the Red Crab FMP was implemented in 2002. The Monkfish FMP had the effect of reducing directed monkfish fishing in areas where red crab might be a significant bycatch. As a result, the effect of these management actions on the red crab resource and fishery has been and continues to be positive.

5.2 Non-Target/Bycatch Species

The FMP explains that initial reports from industry members indicate that there is very little, if any, bycatch of other species in the directed red crab fishery. According to the 2004 SAFE report, the only species reported to the VTR database as bycatch by the limited access red crab fleet are red crab, and on rare occasion, lobster and blue crab. Tallack (2007) provides a more quantitative, if still limited, assessment of bycatch in the red crab fishery.

Since the catch of non-target and bycatch species is already very low in the red crab fishery, past, present and reasonably foreseeable actions under the Red Crab FMP probably have had, or are expected to have positive but minimal impact on other species. On the other hand, management actions under the Lobster FMP that have constrained fishing effort have had a positive impact on the lobster resource.

5.3 Habitat

No past, present, or reasonably foreseeable future red crab fishing action has had or is expected to have an adverse impact on red crab habitat. In terms of other fishery management actions, Tilefish Amendment 1 prohibited mobile gear fishing in certain tilefish EFH, which overlaps with red crab habitat. Also effort reduction under the Monkfish FMP, particularly in offshore areas fished with mobile gear, probably has, and may continue to limit possible adverse impacts on red crab habitat. Additionally, the Council’s EFH Omnibus Amendment 2 is expected to

update, identify, and delineate information on EFH for red crab. Because there is relatively little geographical overlap between red crab and these other fisheries and because red crab traps have only minimal impacts on habitat, the combined effect of these actions is positive but minimal for red crab habitat.

5.4 Protected Resources

As stated in the FMP (Section 8.7; NEFMC 2002), the primary geographic area affected by the red crab fishery includes Northeast and Mid-Atlantic waters, and, while the red crab pots are very similar to those used in the lobster fishery, the red crab fishery is limited to the narrow shelf edge habitat. The Biological Opinion issued by NMFS in 2002 states that: “Given the limited overlap of right whales, humpback whales, and sei whales with the area where red crab gear occurs, the Deep-Sea Red crab FMP is not expected to result in takes of these ESA-listed species as a result of entanglement in trap gear.” The Biological Opinion goes on to state that: “To the extent that these species do occur in the area where red crab gear is set, the depth at which red crab gear is set, the relatively low concentration of gear in the action area, and the existing ALWTRP measures for trap gear should help to further reduce the likelihood that interactions between red crab gear and right, humpback, and sei whales will occur”. The May 2013 Biological Opinion reviewed the impacts of the red crab fishery and determined that the exemption to the sinking groundline requirement for gear that is fished at depths greater than 280 fathoms is unlikely to have an adverse impact on entanglement risks for right, humpback, fin and sei whales. Additionally, the red crab fishery was not evaluated for impacts on Atlantic sturgeon because there were either no or negligible recorded interactions with Atlantic sturgeon.

Thus past and present actions to limit red crab fishing effort have had some positive impact on the protected species identified above. Also, the Red Crab FMP can be expected to continue to limit red crab fishing effort and consequently continue to maintain this positive impact on protected species. However, red crab gear has only minimal overlap with protected species, as noted above, therefore, the effects of controlling red crab catch and effort will be positive but minimal on protected species.

Additionally, actions taken under the ESA have had some positive impact on protected resources that overlap the red crab fishery. These positive impacts will extend throughout the period when the specifications are in effect.

5.5 Social/Economic Impacts on Human Communities

Past, present, and future actions implemented under the red crab fishery all have had or are expected to have a positive impact on human communities. The FMP prevented overcapitalization of the red crab fishery and likely depletion of the red crab resource that would have either diminished the output of the fishery or required more severe regulations than were necessary under the framework created by the FMP. The 2009 Emergency Action that reduced the target TAC and DAS allocations by 40% for the vessels involved in the red crab fishery did

not directly impact the participants in the fishery because landings in the years preceding the action were below the level specified in the Emergency Action. The Emergency Action and subsequent specifications for fishing years 2011-2013 did require individuals who depend on the red crab fishery to adjust their expectations and plans that were based on the previous specifications. On the other hand, it provided additional protection to the resource because there is some scientific uncertainty about appropriate harvest levels for the fishery. The specifications that were put in place by the Emergency Action affected the potential for the red crab industry to take full advantage of the marketing opportunities provided by MSC certification, which was awarded in September 2009. Although the annual landings did not approach the previous target TAC in FY 2007 and 2008, the red crab industry has made a substantial investment in processing capacity and marketing arrangements that were expected to allow for increased landings in future years. The reduction in the TAC improved the likelihood that the red crab fishery would remain sustainable, which will have positive impacts on human communities.

Other Federal fishery management actions that affected human communities that depend on red crab are lobster management measures implemented under the Lobster FMP. These actions helped to ensure the sustainability of the lobster resource which also is economically important to some of the participants in the red crab fishery. Past, present and future actions under the Lobster FMP, therefore, have and are expected to continue to have positive impacts on the human communities that depend on the red crab resource.

5.6 Non-Fishing Impacts: Past, Present, and Reasonably Foreseeable Future Actions on Red Crab

In Section 8.2.3 of the Red Crab FMP, the primary threats to the chemical, physical, and biological ecosystem of the red crab resource were described. In summary, there are several chemical threats identified to have detrimental impacts on offshore habitats including release of oil, heavy metals, pesticides, and excessive amounts of suspended particles in the water column. Biological threats include invasion of non-indigenous species, increased levels of nutrients, and pathogens that could cause shell disease. Several physical threats identified in the FMP are sand and gravel mining, oil exploration, offshore discharging, and disposal of dredged materials. Despite all these threats to offshore habitats, red crab live very deep in the water column, so there are very few, if any, direct impacts on the red crab resource. The only non-fishing activities identified in the FMP as having potential significant concerns are offshore oil and mineral exploration, the installation of fiber optic and electrical cables, and the potential release of toxic chemicals from any activities described above. On December 1, 2010, the Obama administration announced that there would be at least a seven year moratorium on oil and natural gas exploration on the Atlantic Coast. At this time, no significant cumulative effects are expected from non-fishing actions due to the remote habitat and the lack of proposed projects (e.g., offshore oil and mineral exploration, the installation of fiber optic and electrical cables) in the area of the red crab resource.

5.7 Deep-Sea Corals

Both the Mid-Atlantic and New England Fishery Management Councils are development management measures to protect deep-sea corals. Development of the New England Council's deep-sea coral amendment has been postponed until the EFH Omnibus Amendment is completed. The Mid-Atlantic Council's Deep-Sea Coral Amendment is scheduled for implementation in XX, 2014. Both amendments are considering alternatives that would prohibit bottom tending gear, including red crab pots, deeper than 300, 400, or 500 m. The amendments are also considering exempting red crab pots from that restriction because the fishery is limited in size and the impacts on corals from the fishery are likely to be minimal.

6.0 Public Participation

The Red Crab PDT held two conference calls on July 23 and August 27, 2013, which were announced on the Council's website and included participation from red crab industry members or representatives. The SSC met to recommend an ABC for red crab fishing years 2014-2016 in Boston, MA on August 21, 2013. The Council reviewed updated information about red crab landings, LPUE port samples, discards, economic impacts, and other valued ecosystem components during the September 2013 meeting in Hyannis, MA.

7.0 Conclusion

To be completed

8.0 Compliance with Applicable Laws

8.1 Magnuson-Stevens Fishery Conservation and Management Act

8.1.1 Consistency with National Standards

Section 301 of the Magnuson-Stevens Fishery Conservation and Management Act requires that regulations implementing any fishery management plan or amendment be consistent with the ten national standards listed below.

8.1.1.1 National Standard 1

Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.

To be determined.

8.1.1.2 National Standard 2

Conservation and management measures shall be based on the best scientific information available.

To be determined.

8.1.1.3 National Standard 3

To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.

To be determined.

8.1.1.4 National Standard 4

Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be: (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such a manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

To be determined.

8.1.1.5 National Standard 5

Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.

To be determined.

8.1.1.6 National Standard 6

Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

To be determined.

8.1.1.7 National Standard 7

Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

To be determined.

8.1.1.8 National Standard 8

Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse impacts on such communities.

To be determined.

8.1.1.9 National Standard 9

Conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

To be determined.

8.1.1.10 National Standard 10

Conservation and management measures shall, to the extent practicable, promote safety of human life at sea.

To be determined.

8.1.2 Magnuson-Stevens Act FMP Requirements

To be determined.

8.1.3 EFH Assessment

To be determined.

8.2 Marine Mammal Protection Act (MMPA)

To be determined.

8.3 Endangered Species Act (ESA)

To be determined.

8.4 Coastal Zone Management Act (CZMA)

To be determined.

8.5 Administrative Procedure Act (APA)

To be determined.

8.6 Information Quality Act (IQA)

To be determined.

8.7 Paperwork Reduction Act (PRA)

To be determined.

8.8 Regulatory Flexibility Act Analysis

To be determined

9.0 Preparers and People Consulted

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