

Table 1. Data Dictionary

Column	Definition
Group Theme	Risk policy themes that characterize a given factor(s); included in the risk policy matrix as grouping rows
Factor	The risk policy factor that is scored and weighted; included in the risk policy matrix
Supporting Information	Qualitative information to support the scores and weights for consideration; included in the risk policy matrix
Source Document / Information	Document or resource to find the information
Guidance	Suggestions and tips for how to present the information and specifics on what to include

Table 2. Sources and guidance to complete the risk policy matrix by group theme and factor

Group Theme	Factor	Supporting Information	Source Document / Information	Guidance
Stock Status and Uncertainty	Biomass Stock Status	Overfished? Rebuilding?	Most recent stock assessment	For stocks using an empirical approach, report data over last five years
		Overfishing?	Most recent stock assessment	Highlight data points in time series
	Recruitment	SSB Relative to SSB-Target?	Most recent stock assessment	Report point estimates
		Recent trends and how recruitment is accounted for in assessment	Depending on assessment type - Most recent stock assessment	If recruitment information is accounted for in the stock assessment model, report this
				Report any recent changes in recruitment
				When recruitment data streams are not available, state this.
				Note any highlights that the PDT feels relevant
	Assessment Type and Uncertainty			State the timing of last assessment, and consider reporting other data
				For stocks using an empirical approach, other options may be available as time allows (e.g. Age-1 or length frequency plots from surveys)
				Include the start of time series for awareness and in cases where only a data update has been provided since the last assessment
		Assessment model, type, terminal year	Most recent stock assessment AOP Meeting Report FMP	State if the assessment is analytical or empirical. If need be If need be
Availability of biological data/missing years of data?		Most recent stock assessment	Comment if there is missing data. For empirical approaches, note if there is missing survey data in the most recent three years.	
Climate and Ecosystem	Climate Vulnerability	Retrospective pattern?	Most recent stock assessment	When reporting on retrospective patterns, state if a rho adjustment was made. If applicable, state if the retrospective pattern was described as "major" or "minor" in the assessment report.
		Major sources of assessment uncertainty	Most recent stock assessment	
		Climate impacts and incorporation into assessment	Hare et. al 2016	State the climate vulnerability and directional effect of each stock. Point SSC to the information that may be available in the model/assessment reports
	Fish Condition	Trends in fish condition	EFH Prey Analysis Shiny App State of the Ecosystem Reports and Guidelines	Upward and downward forcing
				Is the stock/species specialized or not? Number of prey categories
Economic and Community Importance	Commercial Fishery Characterization	Commercial fishery trends (e.g. landings, revenue, LPUE, DAS usage, price)	Leverage existing data sets and reports	For a stock that just occurs in one region (e.g. GOM), use the three most recent boxes of data. If all three years are a different fishcondition score, select the most recent score. For stocks that extend into multiple regions (GOM, GB, MAB), look at the three most recent boxes in each region and see which fishcondition is most common. If two conditions states are equally common, pick whichever is more common in the most recent year of data. If fish condition is not reported for the stock in the SOE report, a proxy can be used (e.g. meat-weight anomaly) by the PDT if available.
			Human Communities: Landings and revenue section of GF actions	Focus on most recent 3 yrs (or less) of data and describing data points not developing trends
		Management uncertainty in comm fishery	See FMP and/or Regs	Report total groundfish landings
			Appendix II: Calculation of ACLs of the most recent GF action	Report stock-specific ex-vessel prices
			Does the fishery rely on quota of another species?	Report total catch (landings+discards) and commercial GF catch
			Staff & PDT input	Report the management uncertainty buffer applied in the previous fishing year
		Vessels, permits, dealers, processors	Staff/PDT leverage existing reports	
				Focus on data points and most recent 3 years
			Human Communities: Fishery Overview, Fleet Characteristics and Dealer Activity sections of GF actions	Report at the FMP level How much latent effort still available is main question/concern
			Commercial fishing communities	Leverage existing data sets and reports
	Recreational Fishery Characterization	Recreational fishery trends (e.g. catch, angler trips)	Leverage existing data sets and reports	Report top commercial fishing ports at the FMP level
Management uncertainty in rec fishery		See FMP and/or Regs Appendix II: Calculation of ACLs of the most recent GF action	Report last 5 years and their point estimates Report the management uncertainty buffer applied in the previous fishing year	
Recreational fishing communities		Staff / PDT leverage existing information that may be available	Report top recreational fishing ports at the FMP level	
Other Economic/Social Considerations	What key things might be missing from the existing supporting information.	Staff and PDT discretion	Look at past matrices. Not intended to be a place for substantial additional analyses	
		Staff and PDT discretion	Identify any other economies/industries that may be dependent on the resource (other than directed fishery); Describe the potential impacts of variability and size composition of resource/catch on market share and prices.	
Additional Information	Reference Points	numerical estimates of Status Determination Criteria	Most recent stock assessment	Focus on the HCR that is currently being applied, along with any reference points
	OFLs	Overfishing limits	See FMP and/or Regs	
	Harvest Control Rule		See FMP and/or Regs	Focus on the HCR that is currently being applied, along with any reference points
			SSC reports	HCR that was applied for most recent fishing year
			Year end catch accounting reports	Summarize utilization of available yield (% of total ACL harvested)
	ABCs	Acceptable Biological Catch	See FMP and/or Regs	Previous FY ABC's
	AMs	Accountability measures	See FMP and/or Regs	High level description of AMs
	Significant source of catch outside the directed federal fishery?	Year end catch accounting reports (Catch by FMP tab)		Identify any overlapping fisheries with significant interactions
		Any catches from other sources that are greater than 5% of the ACL in the most recent year? Identify if/when there are sources of catch in other fisheries	Most recent stock assessment NEFOP reports CAMS system	Report by gear type Look at landings and discards for a fishery group

Group Theme	Factor	Supporting Information	
Stock Status and Uncertainty	Biomass Stock Status	Overfished? Rebuilding?	Unknown for both stocks
		Overfishing?	Unknown for both stocks
		SSB Relative to SSB-Target?	Unknown for both stocks
	Recruitment	Recent trends and how recruitment is accounted for in assessment	Recruitment trends not accounted for in the assessment (no analytical assessment available due to a lack of reliable aging methodology) and not part of 2025 data update; 2022 Management Track Assessment states that indices of recruitment suggest increasing and above recruitment in the North in recent years but continued low or decreasing recruitment in the South (see Figures 8-15 of 2022 Assessment Report)
	Assessment Type and Uncertainty	Assessment model, type, terminal year	Index-based, Ismooth (proportional change in the trawl survey indices), 2022 terminal year; 2025 Data update in lieu of assessment
		Availability of biological data/missing years of data?	No biological reference points available; survey length frequencies and indices of recruitment available (2022 Monkfish Assessment report; indices of length available through 2025 as part of 2025 data update); indices of biomass from NMFS spring & fall trawl surveys and catch & discards data (all updated via 2025 data update); indices of biomass from an ASMFC summer survey & a scallop survey but not used directly in Ismooth assessment (based on 2022 Management Track Assessment); biomass trawl survey incomplete in Fall 2020, Spring 2020, and Spring 2023 (2025 Data Update)
		Retrospective pattern?	n/a, index-based assessment
		Major sources of assessment uncertainty	Lack of analytical assessment; Based on 2022 Monkfish assessment: questions remain on stock structure given recent genetics research suggests different stock structure than current but this hasn't been incorporated into any monkfish assessment yet; uncertainty conveyed in the LOESS smooth confidence intervals only include uncertainty introduced by the smoothing function and now the uncertainties in the underlying indices (uncertainties from tow-by-tow catch variability, survey design, changes in gear/vessels over time including switch to RV Bigelow, which is known to catch significantly more monkfish than Albatross); concern when considering recent trends and what the Ismooth approach would have advised at several time periods; recent catches are a function of many factors (biomass, world fish markets, fishing costs, effort controls, and dynamics of other fisheries that incidentally catch monkfish)
	Climate and Ecosystem	Climate Vulnerability	Climate impacts and incorporation into assessment
			Hare et al (2016) indicated that monkfish have high climate exposure, and low biological sensitivity, with moderate certainty. Hare et al also report that monkfish could be expected to have a neutral directional effect in response to climate change, and have a high potential for a change in species distribution, with moderate certainty.
		Trophic interactions	Need further analysis of predator/prey relationships; monkfish accounts for up to 6% of total consumption by all finfish in the ecosystem (from 2022 risk policy matrix, no literature cited); based on Food Habits shinyapp (https://fishmaps.shinyapps.io/prey/), goosefish prey by weight include unidentified fish, shrimp, and Great northern tilefish (each accounting for at least 19% proportion by weight of each prey species in the diet of goosefish; this is across all seasons and regions from 2000-2022 for all size categories of goosefish)
	Fish Condition		Over 2022-2024 - GOM: poor condition (range of poor condition to below avg), GB: below avg (range of below avg to neutral), Mid-Atl: below avg (range of below avg to neutral); New England & Mid-Atlantic SOE 2025 reports
		Trends in fish condition	
		Commercial fishery trends (e.g. landings, revenue, LPUE, DAS usage, price)	Landings (based on 2025 Data Update): in the North, monkfish landings were 4,998 mt in 2024, 5,687 mt in 2023, 4,900 mt in 2022; in the South, monkfish landings were 961 mt in 2024, 1,364 mt in 2023, 1,818 mt in 2022. Total Monkfish DAS used were 1,682 in FY 2023, 2,060 in FY 2022, and 1,145 in FY 2021. TAL use in the north was 100.9% in FY 2024, 99.9% in FY 2023, and 78.3% in FY 2022; TAL use in the south was 23% in FY 2024, 29% in FY 2023, 30% in FY 2022. Monkfish revenue per trip (for trips landing > 1 lb monkfish or skate) was 13% in FY 2023, 15% in FY 2022, and 12% in FY 2021 (Monkfish PDT March 2025 document). Average monkfish price was ~\$2/lb in 2023 and 2021 and ~\$2.30/lb in 2022 (Other Fishery Background Data PDT document Feb. 2025).

Economic and Community Importance	Commercial Fishery Characterization	Management uncertainty in comm fishery	Management uncertainty is set at 3% of ACL; some uncertainty whether current discard method or other methods would accurately predict realized discards in any given year; latent fishing effort remains an issue; unclear how to define targeted monkfish fishing because groundfish catches monkfish as part of a portfolio of species and scallops primarily discards monkfish in dredge gear
		Vessels, permits, dealers, processors	From Monkfish/Skate PDT Coordinated Analysis March 2025 & August 2025 memos: Monkfish limited access permits (A, B, C, D permits) totaled 525 in FY 2023, 520 in FY 2022, & 542 in FY 2021. For limited access vessels that landed > 1 lb monkfish: 226 limited access permits in FY 2023, 232 permits in FY 2022, and 258 permits in FY 2021. For limited access vessels that landed > 10,000 lb monkfish, 106 permits in FY 2023, 108 permits in FY 2022, and 127 permits in FY 2021. There are currently 211 permits in CPH (cannot be broken down by individual fishing year)
		Commercial fishing communities	6 primary ports in monkfish fishery: Gloucester, Boston, New Bedford, Point Judith, Montauk, Barnegat Light
	Recreational Fishery Characterization	Does the fishery rely on quota of another species?	No for monkfish only fishing (there are monkfish trip limits and Monkfish DAS) BUT most fishermen catch skates as well (in SNE; open access fishery) and as part of groundfish fishery (GOM)
		Recreational fishery trends (e.g. catch, angler trips)	From year-end catch reporting (from FY2024 report and 2024 Monkfish Fishery Performance Report): Recreational catch: in the North: ~3,000 lb in FY2024 (0% ACL), 33,500 lb in FY2023 (0.2% ACL), 495 lb in FY2022 (0% ACL); in the South: 21,558 lb in FY 2024 (0.2% ACL), ~72,000 lb in FY2023 (1.4% ACL), and ~1,100 lb in FY2022 (0% ACL)
		Management uncertainty in rec fishery	Recreational catch derived from MRIP database with discard mortality assumed to be 100%
		Recreational fishing communities	No primary ports identified
	Other Economic/Social Considerations		From 2024 Monkfish Fishery Performance Report: Many external factors contribute to catch levels unrelated to management (interaction with skate and groundfish fisheries, bycatch in scallop dredge fishery, low price, low demand, higher transportation costs, fish availability in the fall)
Additional Information	Status Determination Criteria	OFLs	AMs
	Biological reference points no longer relevant due to invalidation of growth model (estimation of absolute biomass cannot be calculated)	unknown for both north and south	Specification of annual catch target (ACT) set below the ACL to account for management uncertainty and to prevent the ACL from being exceeded. If an ACL is exceeded, there is an overage deduction on a pound-for-pound basis from the applicable ACT in the second year following the year in which the overage occurred; FY2024 shows a 1.1% overage of ACL in the North (no overage in South) so an AM will be triggered in FY26 to account for this overage
	Harvest Control Rule <i>Note: not currently being applied because there is no analytical assessment for monkfish; OFLs and ABCs were last set for FY2014-2016 following this approach but OFLs are now undetermined and ABCs are now based on Ismooth because aging methods were invalidated in 2016 --> index-based assessment has been used since to provide catch advice on interim basis.</i>	ABCs (=ACLs)	Significant source of catch outside the directed federal fishery?
	BCURRENT x Avg expl. rate	North ABC for FY2023-2025: 6,224 mt South ABC for FY2023-2025: 5,861 mt	Directed federal monkfish gillnet fishery includes harvesting monkfish primarily using a MNK DAS (targeting monkfish and skates) and monkfish are also caught as part of the groundfish trawl fishery as part of portfolio of species. There are also vessels that primarily discard monkfish when scallop dredge fishing - in the North: ~815,000 lb in FY2023 in scallop dredge, ~584,000 lb in FY 2022, ~713,000 lb in FY 2021. In the South: ~2.364 M lb in FY 2023, 2.8 M lb in FY 2022, and 4.2 M lb in FY 2021. Estimated dead discards was 15.2% of ACL in FY 2024 in the North, 13.1% of ACL in FY 2023, & 11.2% of ACL in FY 2022; 26.5% of ACL in FY 2024 in the South, 21.2% in FY 2023, 13.4% in FY 2022. Minor amounts in other gear types. (from 2024 Monkfish Fishery Performance Report). Discards from all gear types (2025 Data Update) - North: 886 mt in 2024, 914 mt in 2023, 947 mt in 2022; South: 2,134 mt in 2024, 1,634 mt in 2023, and 1,758 mt in 2022.

Group Theme	Factor	Supporting Information	
Stock Status and Uncertainty	Biomass Stock Status	Overfished? Rebuilding?	Thorny is overfished, rebuilding period 2003-2028. Currently at ~5% of Bmsy proxy.
		Overfishing?	Formal stock status is no overfishing on any skate. 2023 assessment indicated winter and little skate had overfishing, but no overfishing in 2025 data update.
		SSB Relative to SSB-Target?	As of 2025 data update, barndoor and winter > Btarget; thorny < Bthreshold; others in-between Btarget and Bthreshold.
	Recruitment	Recent trends and how recruitment is accounted for in assessment	Unknown. Not accounted for in assessment, aging work could be done in a RTA. Stratified mean indices at length provided in 2025 data update; some cohort tracking for winter skate, difficult to determine for other species.
	Assessment Type and Uncertainty	Assessment model, type, terminal year	Index-based, skate method, no terminal year.
		Availability of biological data/missing years of data?	Spring 2023 survey missing; impacts little skate survey biomass index. Spring and fall 2020 data missing due to COVID-19 survey interruptions.
		Retrospective pattern?	n/a because index-based assessment.
		Major sources of assessment uncertainty	Species composition of the catch. Discard mortality is assumed for the majority of species and gear types. Some recent work has been done to provide estimates, e.g. winter skate discard mortality was reduced from 50% in trawl gear to 9%. The overfishing definitions are not based on fishing activity but solely on changes in trawl survey indices. Distribution shifts may influence trawl survey biomass. There are life history gaps for some species in the complex.
Climate and Ecosystem	Climate Vulnerability	Climate impacts and incorporation into assessment	Assessment based on species' presence in trawl survey; no explicit environmental variable. Hare et al (2016) indicated all skates have high climate exposure; biological sensitivity is high (thorny), moderate (barndoor, smooth, rosette), and low (clearnose, little, winter). Directional effects of climate change are expected to be neutral (clearnose, rosette) to negative (smooth, thorny, barndoor, little, winter).
		Trophic interactions	Trophic work could be done in a RTA. Skates are important meso-consumers on the northeast continental shelf. They prey on numerous species of demersal invertebrates and fish, and are prey for a variety of larger predatory fish (e.g., monkfish, sharks) and mammals (e.g., seals).
	Fish Condition	Trends in fish condition	Barndoor = good to poor; Clearnose = good to neutral; Little = good to poor; Rosette = neutral to below avg; Smooth = above average to poor; Thorny = good to poor; Winter = above average to poor.
		Commercial fishery trends (e.g. landings, revenue, LPUE, DAS usage, price)	Skate permits are open access. Landings in the bait fishery are relatively stable because this fishery is more directed and based on need/orders of bait companies. The wing landings are more variable. Total skate revenue has increased from \$5.9-7.3 million from FY 2022-2024. Trends in total revenues are mainly influenced by the changes in wing landings. *note: FY2024 data are preliminary.

Economic and Community Importance	Commercial Fishery Characterization	Management uncertainty in comm fishery	ACL is 90% of ABC. Effort in the skate fishery is variable and driven by changes in groundfish and monkfish DAS effort. Discards are decreasing but comperable to landings. Recreational catch is low but poorly characterized and highly uncertain. Recent 3-year avg. state landings deducted from ACL (not allocated). Research landings have been 0.1% of the ACL recently and are included within the buffer.
		Does the fishery rely on quota of another species?	Skate fishing is largely on groundfish and monkfish DAS, so dependent on the state of those fisheries.
		Vessels, permits, dealers, processors	Total active skate vessels (with federal skate permits) declined from 266 in 2022 to 242 in 2024, of which 9% were bait-only vessels, 13% were bait and wing, and 77% were wing only. Skates landed in broad range of fisheries, and skate dealers are active from Maine to North Carolina, with 86 federal dealers active in 2024 (slight decline from 88 dealers in FY2022). Skate wings are landed and processed primarily in Chatham, New Bedford and Point Judith. *note: FY2024 data are preliminary.
		Commercial fishing communities	There are 8 primary ports in the skate fishery and 20 secondary ports from Massachusetts to North Carolina, with over 480 communities that have skate landings or are a homeport for active skate vessels since 2012. Chatham, Point Judith, and New Bedford have the highest average annual skate landings.
	Recreational Fishery Characterization	Recreational fishery trends (e.g. catch, angler trips)	Rec catch is small, 1-1.7% of the ACL from FY 2020-2023, mostly from private/ for-hire vessels. Increased to 7.5% in FY2024. Most rec catch occurs <u>May - October</u> .
		Management uncertainty in rec fishery	Rec catch is not allocated; recent 3-year avg. deducted from ACT.
		Recreational fishing communities	Rec skate catch from ME to VA. NJ has the largest rec catch over time. For most states, catch is largely occurring nearshore (within 3 mi) or inland waters (<u>bays/estuaries/sounds</u>).
	Other Economic/Social Considerations		Wing TAL 42-45% landed FY21-23, 71% in FY24. Bait TAL 45-54% landed FY21-23, 62% in FY24. AP cites multiple logistical reasons for low TAL use. Wing TAL is 66.5% of the total TAL, Bait TAL is <u>33.5%</u> .
Additional Information	Reference Points	OFLs	AMs
	Overfished = If 3-year moving average of survey biomass index < B _{threshold} Overfishing = If % change in 3-year moving average of survey biomass index > average coefficient of variation of the survey time series.	Unknown	In-season: if TALs exceeded >5%, in-season possession limit trigger point (85% wing fishery; bait fishery: 90% in seasons 1 & 2, 80% in season 3) is decreased proportional to the overage. Year-end: if ACL exceeded, buffer between ACL and ACT is increased proportional to the overage for the following year. AMs have not been triggered in <u>FY2018-present</u> .
	Harvest Control Rule	ABCs	Significant source of catch outside the directed federal fishery?
	Long-term median catch of each species adjusted by ratio of its short-term (3-year) over long-term survey biomass, summed across the complex.	FY2023-25 ABC = 32,155 mt	Discards are primarily from scallop dredge and otter trawl gear. Discards are 26-42% of ACL, 38-52% of catch since FY2018. Recreational catch was 7.5% of ACL in FY 2024.

Stock:

Ocean Pout

Factor	Supporting Information
Stock Status and Uncertainty	
Biomass Stock Status	Overfished; Rebuilding target: 2029
	Overfishing is not occurring
	Biomass proxy = 0.263 kg/tow (5% of SSBMSY proxy = 4.94 kg/tow)
Recruitment	Assessment does not account for recruitment due to its empirical nature
Assessment Type and Uncertainty	Exploitation ratio, empirical, 2021
	The 2020 spring NEFSC survey year was treated as missing.
	Exploitation ratio does not allow estimation of a retrospective pattern
	In spite of the no possession limit, stock size has not responded to low levels of catch.
	Additional assessment uncertainty will occur as only a data update will be provided for the stock in 2025.
Climate and Ecosystem	
Climate Vulnerability	high climate exposure + high biological sensitivity = high climate vulnerability negative directional effect of climate change
	13 prey categories of marine invertebrates such as sea stars, brittle stars, sea urchins, snails, mollusks, crabs, scallops, and marine worms
Fish Condition	Good fish condition based on the most frequent condition reported over the past three years for Ocean pout sampled in MAB, GOM and GB
Economic and Community Importance	
Commercial Fishery Characterization	Overall decline in landed groundfish pounds, groundfish revenue, and groundfish ex-vessel prices: <i>Total groundfish landings:</i> 36.88 million pounds in FY2021; 33.26 million pounds in FY2022; 32.53 million pounds in FY2023 <i>Average groundfish ex-vessel prices:</i> \$1.38/lb in FY2021; \$1.34/lb in FY2022; \$1.28/lbs in FY2023
	Ocean pout is managed as a zero-possession stock; there is no commercial groundfish revenue or ex-vessel price data available.🔒
	<i>Total catch of Ocean Pout:</i> 44.9 mt in FY2021; 55.5 mt in FY2022; 41.9 mt in FY2023
	<i>Commerical groundfish fishery catch of Ocean Pout:</i> 24.6 mt in FY2021; 32.4 mt in FY2022; 33.7 mt in FY2023
	A management uncertainty buffer of 7% was applied to the commercial groundfish fishery in FY2025.
	Overall downward trend in FY2023: 811 commercial groundfish permitted vessels (33% inactive); 533 reported landings (active vessels landing any revenue across common pool and sectors); 46 dealers reported buying groundfish, and 79 dealers reported buying any species on groundfish trips.

Stock:

Ocean Pout

Factor	Supporting Information
Commercial Fishery Characterization	The top 5 ports based on the Groundfish-Specific Commercial Engagement Indicator (2004-2023) are Gloucester, MA; New Bedford, MA; Boston, MA; Narragansett, RI; and Portland, ME.
	Ocean pout is a non-allocated stock and possession is not permitted; there is not a commercial fishery specific to ocean pout. The groundfish fishery on a whole relies on quota within the multispecies complex.
Recreational Fishery Characterization	Ocean pout is managed as a zero possession stock; there is no recreational fishery trend data available.
	The default management uncertainty buffer of 5% is applied to stocks with a recreational component in the groundfish fishery.
	Most of the top communities in recreational engagement in the Northeast are in the Mid-Atlantic region, except for Narragansett/Point Judith, RI. Recreational fishermen in these communities are unlikely to rely on Northeast Multispecies.
Other Economic/Social Considerations	<i>No other considerations to present.</i>
Additional Information	
Reference Points	SSBMSY: External Biomass Threshold: 1/2B _{target} Max. Fishing Mortality Threshold: Rel F at replacement
OFLs	125 mt in FY2025
ABCs	87 mt in FY2025
AMs	If ACL and buffer for an unallocated stock is exceeded, groundfish vessels (common pool & sector) are subject to an area closure/ gear restriction in a future year.
Harvest Control Rule	Option 4 of the GF ABC CR in FY2025 The commercial groundfish fishery utilized 69% of its FY2023 ACL; state fisheries utilized 221% of their FY2023 subcomponent; and other fisheries utilized 21% of their FY2023 subcomponents.
Significant source of catch outside the directed federal fishery?	Scallop fishery catch of Ocean pout: 3.3 mt in FY2021, 4.1 mt in FY2022; 3.3 mt in FY2023 Summer flounder fishery catch of Ocean pout: 0.4 mt in FY2021, 3.1 mt in FY2022; 0.5 mt in FY2023 Squid fishery catch of Ocean pout: 13.6 mt in FY2021, 7.0 mt in FY2022; 1.5 mt in FY2023

Stock:

White Hake

Factor	Supporting Information
Stock Status and Uncertainty	
Biomass Stock Status	Rebuilding target: 2031
	<i>Awaiting updated assessment information</i>
	<i>Awaiting updated assessment information</i>
Recruitment	<i>Awaiting updated assessment information</i>
Assessment Type and Uncertainty	Analytical, ASAP, 2024
	<i>Awaiting updated assessment information</i>
	<i>Awaiting updated assessment information</i>
	<i>Awaiting updated assessment information</i>
Climate and Ecosystem	
Climate Vulnerability	high climate exposure + moderate biological sensitivity = moderate climate vulnerability negative directional effect of climate change
	22 prey categories: species in the gadidae family which could include pollock; silver hake; Atlantic cod; Atlantic mackerel; haddock; atlantic hagfish; Acadian redfish; species in the hake family; Atlantic herring and other fish in the clupeidae family; four beard rockling fish; squid; and 6 families of marine crustaceans.
Fish Condition	Poor fish condition based on the most frequent condition reported over the past three years for White hake sampled in GOM and GB
Economic and Community Importance	
Commercial Fishery Characterization	<u>Overall decline in landed groundfish pounds, groundfish revenue, and groundfish ex-vessel prices:</u> <i>Total groundfish landings:</i> 36.88 million pounds in FY2021; 33.26 million pounds in FY2022; 32.53 million pounds in FY2023 <i>Average groundfish ex-vessel prices:</i> \$1.38/lb in FY2021; \$1.34/lb in FY2022; \$1.28/lbs in FY2023
	<i>Commercial Groundfish Revenue for White Hake (2023\$):</i> \$6.2 million in FY2021; \$5.5 million in FY2022; \$4.8 million in FY2023; \$5.3 million 5-year average
	<i>Ex-vessel price/lb for White Hake (2023\$/lb):</i> \$1.98/lb in FY2021; \$1.82/lb in FY2022; \$1.68/lb in FY2023; \$1.72/lb 5-year average
	<i>Total catch of White Hake:</i> 1,941.6 mt in FY2021; 1,850.2 mt in FY2022; 1,765.9 mt in FY2023
	<i>Commerical groundfish fishery catch of White Hake:</i> 1,930.1 mt in FY2021; 1,843.4 mt in FY2022; 1,760.3 mt in FY2023
	The default management uncertainty buffer of 5% was applied to the commercial groundfish fishery in FY2025.
	<u>Overall downward trend in FY2023:</u> 811 commercial groundfish permitted vessels (33% inactive); 533 reported landings (active vessels landing any revenue across common pool and sectors); 46 dealers reported buying groundfish, and 79 dealers reported buying any species on groundfish trips.

Stock:

White Hake

Factor	Supporting Information
Commercial Fishery Characterization	The top 5 ports based on the Groundfish-Specific Commercial Engagement Indicator (2004-2023) are Gloucester, MA; New Bedford, MA; Boston, MA; Narragansett, RI; and Portland, ME.
	White hake is a constraining stock to the commercial groundfish fishery with over 90% utilization of its ACL in the most recent 3 years. The groundfish fishery on a whole relies on quota within the multispecies complex.
Recreational Fishery Characterization	White hake does not have a recreational fishery component; no recreational fishery trend data is available.
	The default management uncertainty buffer of 5% is applied to stocks with a recreational component in the groundfish fishery, but is not relevant for White hake as there is no recreational fishery component.
	Most of the top communities in recreational engagement in the Northeast are in the Mid-Atlantic region, except for Narragansett/Point Judith, RI. Recreational fishermen in these communities are unlikely to rely on Northeast Multispecies.
Other Economic/Social Considerations	<i>ACE lease prices modeled using a hedonic price model from inter-sector leases for FY2018-2023</i> In recent years, inter-sector ACE lease trades for white hake are not associated with prices greater than \$0.80.
Additional Information	
Reference Points	SSBMSY: SSB/R (40% MSP) Biomass Threshold: 1/2Btarget Max. Fishing Mortality Threshold: F40% MSP
OFLs	2,591 in FY2025
ABCs	1,921 mt in FY2025
AMs	In-season closures and lb-lb for commercial groundfish fishery
Harvest Control Rule	Rebuild of 70% FMSY in FY2025
	The commercial groundfish fishery utilized 96% of its FY2023 ACL and other fisheries utilized 29% of their FY2023 subcomponents.
Significant source of catch outside the directed federal fishery?	No significant catch outside the groundfish fishery.