

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

Status Determination Criteria and Stock Assessment Citation Table

This table contains: 1) overfishing and overfished status determination criteria for each stock/stock complex; 2) year and citation of stock assessment that supports the most recent overfishing and/or overfished status; and 3) year of catch/overfishing limit (OFL) for stocks that use catch/OFL to support overfishing status. Wherever "N/A" is indicated, a stock assessment or catch/OFL was not used (some stocks have an unknown overfishing and/or overfished status).

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
American Samoa Archipelago Ecosystem	American Samoa Bottomfish Multi-species Complex	Overfishing occurs when F is greater than FMSY B / c BMSY if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) or 0.5. Standardized values of fishing effort (E) and catch-per-unit-effort (CPUE) are used as proxies for F and B, respectively.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) or 0.5. CPUE is used as a proxy for B.	2015	N/A	https://pifsc-www.irc.noaa.gov/library/pubs/tech/NOAA_Tech_Memo_PIFSC_51.pdf
Atlantic Herring	Atlantic herring - Northwestern Atlantic Coast	If the stock biomass is equal to or greater than BMSY, overfishing occurs when F exceeds FMSY. If the stock biomass is less than BMSY, overfishing occurs when F exceeds the level that has a 50-percent probability of rebuilding the stock biomass to BMSY in 5 years (FTHRESHOLD).	The stock is overfished when stock biomass is less than 1/2 BMSY.	2018	N/A	65th Northeast Regional SAW Assessment Summary Report. NEFSC CRD#18-08 (2018)
Atlantic Mackerel, Squid and Butterfish	Atlantic mackerel - Gulf of Maine / Cape Hatteras	Overfishing will be defined to occur when the fishing mortality rate exceeds Fthreshold.	The stock is overfished when the spawning stock biomass is less than 1/2 SSBmsy.	2018	N/A	64th Northeast Regional Stock Assessment Workshop (64th SAW) Assessment Summary Report. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 18-03
Atlantic Mackerel, Squid and Butterfish	Butterfish - Gulf of Maine / Cape Hatteras	Overfishing will be defined to occur when the catch associated with a threshold fishing mortality rate of FMSY is exceeded.	The stock is overfished when the biomass is less than the biomass threshold of 1/2BMSY.	2017	N/A	Butterfish 2017 Stock Assessment Update, Charles Adams
Atlantic Mackerel, Squid and Butterfish	Longfin inshore squid - Georges Bank / Cape Hatteras& Status	Overfishing occurs when fishing mortality exceeds FThreshold	The stock is overfished when the biomass is less than the biomass threshold of 1/2BMSY.	2018	N/A	Longfin Inshore Squid (<i>Doryteuthis (Amerigo) pealeii</i>) Stock Assessment Update for 2017. By L. Hendrickson, NEFSC PopDy. To MAFMC 4-25-2017

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Atlantic Mackerel, Squid and Butterfish	Northern shortfin squid - Northwestern Atlantic Coast	Overfishing will be defined to occur when the catch associated with a threshold fishing mortality rate of FMSY is exceeded.	The stock is overfished when the biomass is less than the biomass threshold of $\frac{1}{2}$ BMSY.	2005	N/A	SARC 42 Report (2006)
Atlantic Salmon	Atlantic salmon - Gulf of Maine	Overfishing occurs if fishing exceeds the fishing mortality rate threshold, set at zero, or as close as possible when taking into account discard mortality.	This stock is overfished and currently listed as endangered under the Endangered Species Act.	2017	N/A	Annual Report of the U.S. Atlantic Salmon Assessment Committee. Report N.o. 29 - 2016 Activities. Prepared for the U.S. Section to NASCO
Atlantic Sea Scallop	Sea scallop - Northwestern Atlantic Coast	If stock biomass is equal or greater than Bmsy as measured by an absolute value of scallop meat (mt), overfishing occurs when fishing mortality exceeds Fmsy. If the total stock biomass is below Bmsy, overfishing occurs when fishing mortality exceeds the level that has a 50 percent probability to rebuild stock biomass to Bmsy in 10 years.	A scallop stock is in an overfished condition when stock biomass is below $\frac{1}{2}$ Bmsy.	2018	N/A	65th Northeast Regional SAW Assessment Summary Report. NEFSC CRD#18-08 (2018)
Atlantic Surfclam and Ocean Quahog	Atlantic surfclam - Mid-Atlantic Coast	Overfishing occurs when F exceeds FMSY or FMSY proxy.	The stock is overfished when the stock size is less than $\frac{1}{2}$ of the BMSY or BMSY proxy.	2016	N/A	61st Stock Assessment Workshop, Atlantic surfclam, NEFSC CRD 16-13
Atlantic Surfclam and Ocean Quahog	Ocean quahog - Atlantic Coast	Overfishing occurs when F exceeds FMSY or FMSY proxy.	The stock is overfished when the stock size is less than $\frac{1}{2}$ of the BMSY or BMSY proxy.	2017	N/A	63rd Stock Assessment Workshop Assessment Summary Report Ocean quahog, NEFSC CRD17-09
Bering Sea/Aleutian Islands King and Tanner Crabs	Blue king crab - Pribilof Islands	A stock is subject to overfishing if the catch from the previous fishing year exceeds the previous year's OFL.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as $\frac{1}{2}$ BMSY.	2019	2018	https://www.npfmc.org/fishery-management-plan-team/bsai-crab-plan-team/#currentcrab
Bering Sea/Aleutian Islands King and Tanner Crabs	Blue king crab - Saint Matthew Island	A stock is subject to overfishing if the catch from the previous fishing year exceeds the previous year's OFL.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as $\frac{1}{2}$ BMSY.	2018	2018	https://www.npfmc.org/fishery-management-plan-team/bsai-crab-plan-team/#currentcrab
Bering Sea/Aleutian Islands King and Tanner Crabs	Golden king crab - Aleutian Islands	A stock is subject to overfishing if the catch from the previous fishing year exceeds the previous year's OFL.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as $\frac{1}{2}$ BMSY.	2019	2018	https://www.npfmc.org/fishery-management-plan-team/bsai-crab-plan-team/#currentcrab
Bering Sea/Aleutian Islands King and Tanner Crabs	Golden king crab - Pribilof Islands	A stock is subject to overfishing if the catch from the previous fishing year exceeds the previous year's OFL.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as $\frac{1}{2}$ BMSY.	2017	2018	https://www.npfmc.org/fishery-management-plan-team/bsai-crab-plan-team/#currentcrab

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Bering Sea/Aleutian Islands King and Tanner Crabs	Red king crab - Bristol Bay	A stock is subject to overfishing if the catch from the previous fishing year exceeds the previous year's OFL.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as 1/2 BMSY.	2018	2018	https://www.npfmc.org/fishery-management-plan-team/bsai-crab-plan-team/#currentcrab
Bering Sea/Aleutian Islands King and Tanner Crabs	Red king crab - Norton Sound	A stock is subject to overfishing if the catch from the previous fishing year exceeds the previous year's OFL.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as 1/2 BMSY.	2019	2018	https://www.npfmc.org/fishery-management-plan-team/bsai-crab-plan-team/#currentcrab
Bering Sea/Aleutian Islands King and Tanner Crabs	Red king crab - Pribilof Islands	A stock is subject to overfishing if the catch from the previous fishing year exceeds the previous year's OFL.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as 1/2 BMSY.	2017	2018	https://www.npfmc.org/fishery-management-plan-team/bsai-crab-plan-team/#currentcrab
Bering Sea/Aleutian Islands King and Tanner Crabs	Red king crab - Western Aleutian Islands	A stock is subject to overfishing if the catch from the previous fishing year exceeds the previous year's OFL.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as 1/2 BMSY.	2017	2018	https://www.npfmc.org/fishery-management-plan-team/bsai-crab-plan-team/#currentcrab
Bering Sea/Aleutian Islands King and Tanner Crabs	Snow crab - Bering Sea	A stock is subject to overfishing if the catch from the previous fishing year exceeds the previous year's OFL.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as 1/2 BMSY.	2018	2018	https://www.npfmc.org/fishery-management-plan-team/bsai-crab-plan-team/#currentcrab
Bering Sea/Aleutian Islands King and Tanner Crabs	Southern Tanner crab - Bering Sea	A stock is subject to overfishing if the catch from the previous fishing year exceeds the previous year's OFL.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as 1/2 BMSY.	2018	2018	https://www.npfmc.org/fishery-management-plan-team/bsai-crab-plan-team/#currentcrab
Bluefish	Bluefish - Atlantic Coast	Overfishing occurs when F exceeds the threshold FMSY, defined as F40%.	The stock is overfished when the minimum biomass is less than 1/2BMSY.	2019	N/A	https://www.fisheries.noaa.gov/new-england-mid-atlantic/northeast-stock-assessment-documents
Coastal Migratory Pelagic Resources of the Gulf of Mexico and South Atlantic	Cobia - Gulf of Mexico	Overfishing is defined as an F that exceeds MFMT = FMSY where FMSY = F30%SPR.	A stock is overfished when the stock size is less than the minimum stock size threshold, where MSST = (1-M)*BMSY.	2013	N/A	http://www.sefsc.noaa.gov/sedar/Sedar_Workshops.jsp?WorkshopNum=28
Coastal Migratory Pelagic Resources of the Gulf of Mexico and South Atlantic	King mackerel - Gulf of Mexico	Overfishing is defined as an F that exceeds MFMT = FMSY where FMSY = F30%SPR.	A stock is overfished when the stock size is less than the minimum stock size threshold, where MSST = (1-M)*BMSY.	2014	N/A	SEDAR 38 Gulf of Mexico King Mackerel Final Stock Assessment Report
Coastal Migratory Pelagic Resources of the Gulf of Mexico and South Atlantic	King mackerel - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = FMSY where FMSY = F30%SPR.	A stock is overfished when the stock size is less than the minimum stock size threshold, where MSST = (1-M)*BMSY.	2014	N/A	SEDAR 38 South Atlantic and Gulf of Mexico King Mackerel. http://www.sefsc.noaa.gov/sedar/Sedar_Workshops.jsp?WorkshopNum=38
Coastal Migratory Pelagic Resources of the Gulf of Mexico and South Atlantic	Spanish mackerel - Gulf of Mexico	Overfishing is defined as an F that exceeds MFMT = FMSY where FMSY = F30%SPR.	A stock is overfished when the stock size is less than the minimum stock size threshold, where MSST = (1-M)*BMSY.	2013	N/A	SEDAR Southeast Data, Assessment, and Review SEDAR 28 Gulf of Mexico Spanish Mackerel Stock Assessment Report April 2013

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Coastal Migratory Pelagic Resources of the Gulf of Mexico and South Atlantic	Spanish mackerel - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = FMSY where FMSY = $F30\%SPR$.	A stock is overfished when the stock size is less than the minimum stock size threshold, where $MSST = (1-M)*BMSY$.	2013	N/A	SEDAR 28 Stock Assessment Report. South Atlantic Spanish Mackerel. October, 2012 (http://www.sefsc.noaa.gov/sedar/download/S28_SAR_SASpMack_Final_1.3.2013.pdf?pid=DOCUMENT)
Coastal Pelagic Species	Jack mackerel - Pacific Coast	Overfishing occurs in a fishery whenever fishing occurs over a period of one year or more at a rate that is high enough to jeopardize the capacity of the stock to produce MSY on a continuing basis if applied in the long term. In operational terms, overfishing occurs in the CPS fishery whenever catch exceeds OFL.	A stock is overfished when the biomass level is low enough to jeopardize the capacity of the stock to produce MSY on a continuing basis.	N/A	2018	N/A
Coastal Pelagic Species	Krill (Euphausiacea) - Pacific Coast	Undefined	Undefined	N/A	N/A	N/A
Coastal Pelagic Species	Northern anchovy - Northern Pacific Coast	Overfishing occurs in a fishery whenever fishing occurs over a period of one year or more at a rate that is high enough to jeopardize the capacity of the stock to produce MSY on a continuing basis if applied in the long term. In operational terms, overfishing occurs in the CPS fishery whenever catch exceeds OFL.	A stock is overfished when the biomass level is low enough to jeopardize the capacity of the stock to produce MSY on a continuing basis.	N/A	N/A	N/A
Coastal Pelagic Species	Northern anchovy - Southern Pacific Coast	Overfishing occurs in a fishery whenever fishing occurs over a period of one year or more at a rate that is high enough to jeopardize the capacity of the stock to produce MSY on a continuing basis if applied in the long term. In operational terms, overfishing occurs in the CPS fishery whenever catch exceeds OFL.	A stock is overfished when the biomass level is low enough to jeopardize the capacity of the stock to produce MSY on a continuing basis.	N/A	2018	N/A
Coastal Pelagic Species	Opalescent inshore squid - Pacific Coast	Overfishing occurs in the fishery if the FMSY proxy resulting in egg escapement $\geq 30\%$.	Undefined	N/A	N/A	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Coastal Pelagic Species	Pacific chub mackerel - Pacific Coast	Overfishing occurs in a fishery whenever fishing occurs over a period of one year or more at a rate that is high enough to jeopardize the capacity of the stock to produce MSY on a continuing basis if applied in the long term. In operational terms, overfishing occurs in the CPS fishery whenever catch exceeds OFL.	A stock is overfished when the biomass level is low enough to jeopardize the capacity of the stock to produce MSY on a continuing basis.	2017	2018	Crone, P.R., and K.T. Hill. 2017. PACIFIC MACKEREL BIOMASS PROJECTION ESTIMATE; http://www.pcouncil.org/wp-content/uploads/2015/05/G2a_PMac_kerel_Assmt_Full_E-Only_JUN2015BB.pdf
Coastal Pelagic Species	Pacific sardine - Northern Subpopulation	Overfishing occurs in a fishery whenever fishing occurs over a period of one year or more at a rate that is high enough to jeopardize the capacity of the stock to produce MSY on a continuing basis if applied in the long term. In operational terms, overfishing occurs in the CPS fishery whenever catch exceeds OFL.	A stock is overfished when the biomass level is low enough to jeopardize the capacity of the stock to produce MSY on a continuing basis.	2019	2018	https://www.pcouncil.org/wp-content/uploads/2018/03/C5_Att_1_FullElectricOnly_Sardine_Assessment_Apr2018BB.pdf
Consolidated Atlantic Highly Migratory Species	Albacore - North Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at $F_{limit} = F_{MSY}$.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	2016	N/A	http://iccat.es/Documents/Meetings/Docs/2016_ALB_REPORT_ENG.pdf
Consolidated Atlantic Highly Migratory Species	Atlantic sharpnose shark - Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at $F_{limit} = F_{MSY}$.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)SSFMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5SSFMSY$ when $M \geq 0.5$.	2013	N/A	SEDAR 34 Stock Assessment Report: HMS Atlantic sharpnose shark . DOC/NOAA/NMFS SEDAR. Available at http://www.sefsc.noaa.gov/sedar/download/S34_ATSH_SAR.pdf?id=DOCUMENT
Consolidated Atlantic Highly Migratory Species	Atlantic sharpnose shark - Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at $F_{limit} = F_{MSY}$.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)SSFMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5SSFMSY$ when $M \geq 0.5$.	2013	N/A	SEDAR 34 Stock Assessment Report: HMS Atlantic sharpnose shark . DOC/NOAA/NMFS SEDAR. Available at http://www.sefsc.noaa.gov/sedar/download/S34_ATSH_SAR.pdf?id=DOCUMENT

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Consolidated Atlantic Highly Migratory Species	Bigeye tuna - Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	2018	N/A	https://www.iccat.int/Documents/SCRS/DetRep/BET_SA_ENG.pdf
Consolidated Atlantic Highly Migratory Species	Blacknose shark - Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	2011	N/A	SEDAR 21 Stock Assessment Report for HMS Atlantic Blacknose Shark. September 2011. http://www.sefsc.noaa.gov/sedar/download/Atl_Blacknose_SAR.pdf?id=DOCUMENT
Consolidated Atlantic Highly Migratory Species	Blacknose shark - Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	2011	N/A	SEDAR 21 Stock Assessment Report for HMS Gulf of Mexico Blacknose Shark. September 2011. http://www.sefsc.noaa.gov/sedar/download/GoM_Blacknose_SAR.pdf?id=DOCUMENT
Consolidated Atlantic Highly Migratory Species	Blacktip shark - Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	N/A	N/A	N/A
Consolidated Atlantic Highly Migratory Species	Blacktip shark - Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	2018	N/A	Update Assessment to SEDAR 29 HMS Gulf of Mexico Blacktip Shark; Addendum and Post-Review Updates. DOC/NOAA/NMFS SEDAR. Available at http://sedarweb.org/addendum-2018-update-sedar-29-hms-gulf-mexico-blacktip-shark Last accessed 3/11/2019)
Consolidated Atlantic Highly Migratory Species	Blue marlin - Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is $0.9BMSY$ for blue marlin	2018	N/A	https://www.iccat.int/Documents/Meetings/Docs/2018/REPORTS/2018_BUM_SA_ENG.pdf

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Consolidated Atlantic Highly Migratory Species	Blue shark - North Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	2015	N/A	ICCAT 2015 Assessment Report: http://www.iccat.int/Documents/Meetings/Docs/2015_BSH%20ASSESS_REPORT_ENG.pdf ; ICCAT SCRS 2015 Annual Report http://www.iccat.int/Documents/Meetings/SCRS2015/SCRS_PROV_ENG.pdf
Consolidated Atlantic Highly Migratory Species	Bluefin tuna - Western Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	2017	N/A	http://www.iccat.int/Documents/Meetings/Docs/2017_SCRS_REP_ENG.pdf
Consolidated Atlantic Highly Migratory Species	Bonnethead - Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	2013	N/A	NMFS (2013). SEDAR 34 Stock Assessment Report: HMS bonnet head shark. DOC/NOAA/NMFS SEDAR. Available at http://www.sefsc.noaa.gov/sedar/download/S34_Bonnethead_SAR.pdf?id=DOCUMENT
Consolidated Atlantic Highly Migratory Species	Bonnethead - Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	2013	N/A	NMFS (2013). SEDAR 34 Stock Assessment Report: HMS bonnet head shark. DOC/NOAA/NMFS SEDAR. Available at http://www.sefsc.noaa.gov/sedar/download/S34_Bonnethead_SAR.pdf?id=DOCUMENT
Consolidated Atlantic Highly Migratory Species	Bull shark - Atlantic and Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	N/A	N/A	N/A
Consolidated Atlantic Highly Migratory Species	Dusky shark - Atlantic and Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)SSFMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5SSFMSY$ when $M \geq 0.5$.	2016	N/A	2016 Update, SEDAR 21 HMS dusky shark. Available: http://sedarweb.org/sedar-21 (September 2016)

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Consolidated Atlantic Highly Migratory Species	Finetooth shark - Atlantic and Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	2007	N/A	SEDAR 13 Stock assessment report. Small Coastal Shark complex, Atlantic sharpnose, blacknose, bonnethead and finetooth shark. NOAA/NMFS Highly Migratory Species Division. (web site: http://www.sefsc.noaa.gov/sedar/Sedar_Workshops.jsp?WorkshopNum=13).
Consolidated Atlantic Highly Migratory Species	Great hammerhead - Atlantic and Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	N/A	N/A	N/A
Consolidated Atlantic Highly Migratory Species	Gulf Smoothhound Complex	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	2015	N/A	SEDAR 39: Stock Assessment Report HMS Gulf of Mexico Smoothhound Sharks. March, 2015. SEDAR, 4055 Faber Place Drive, Suite 201, North Charleston, SC 29405. Available at http://sedarweb.org/docs/sar/S39_Gulf_Smoothhound_Complex_SAR.pdf
Consolidated Atlantic Highly Migratory Species	Lemon shark - Atlantic and Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	N/A	N/A	N/A
Consolidated Atlantic Highly Migratory Species	Longbill spearfish - Western Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	1997	N/A	ICCAT Standing Committee on Research and Statistics
Consolidated Atlantic Highly Migratory Species	Nurse shark - Atlantic and Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	N/A	N/A	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Consolidated Atlantic Highly Migratory Species	Oceanic whitetip shark - Atlantic and Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at MSST = BLIMIT = (1-M)BMSY when M < 0.5; MSST = BLIMIT = 0.5BMSY when M >= 0.5.	N/A	N/A	N/A
Consolidated Atlantic Highly Migratory Species	Porbeagle - Northwestern Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at MSST = BLIMIT = (1-M)BMSY when M < 0.5; MSST = BLIMIT = 0.5BMSY when M >= 0.5.	2009	N/A	http://www.iccat.int/Documents/SCRS/ExecSum/SHK_EN.pdf and http://www.iccat.int/Documents/Meetings/Docs/2009_POR_ASSESS_ENG.pdf
Consolidated Atlantic Highly Migratory Species	Prohibited Species	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at MSST = BLIMIT = (1-M)BMSY when M < 0.5; MSST = BLIMIT = 0.5BMSY when M >= 0.5.	N/A	N/A	N/A
Consolidated Atlantic Highly Migratory Species	Roundscale spearfish - Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at MSST = BLIMIT = (1-M)BMSY when M < 0.5; MSST = BLIMIT = 0.5BMSY when M >= 0.5.	N/A	N/A	N/A
Consolidated Atlantic Highly Migratory Species	Sailfish - Western Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is 0.75BMSY for Atlantic sailfish	2016	N/A	http://iccat.es/Documents/Meetings/Docs/2016_SCRS_ENG.pdf
Consolidated Atlantic Highly Migratory Species	Sandbar shark - Atlantic and Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at MSST = BLIMIT = (1-M)BMSY when M < 0.5; MSST = BLIMIT = 0.5BMSY when M >= 0.5.	2018	N/A	Anon. 2017. SEDAR 54 Stock Assessment Report for HMS Sandbar Shark. Southeast Data Assessment and Review (SEDAR). Available: http://sedarweb.org/docs/sar/S54_Final_SAR.pdf ; Anon. 2018. SEDAR 54 HMS Sandbar Shark Post - Review Updates February 2018. SEDAR. Available: http://sedarweb.org/sedar-54-post-review-update

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Consolidated Atlantic Highly Migratory Species	Scalloped hammerhead - Atlantic and Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	2009	N/A	Hayes et al. 2009. http://www.tandfonline.com/doi/full/10.1577/M08-026.1
Consolidated Atlantic Highly Migratory Species	Shortfin mako - North Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	2017	N/A	1) ICCAT shark species working group Atlantic shortfin mako stock assessment meeting report (June, 2017): https://www.iccat.int/en/Documents/Meetings/Docs/2017_SMA_ASS_REP_ENG.pdf
Consolidated Atlantic Highly Migratory Species	Silky shark - Atlantic and Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	N/A	N/A	N/A
Consolidated Atlantic Highly Migratory Species	Skipjack tuna - Western Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	2014	N/A	https://www.iccat.int/Documents/Meetings/Docs/2014_SKJ_ASSESS_ENG.pdf
Consolidated Atlantic Highly Migratory Species	Smooth dogfish - Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	2015	N/A	SEDAR 39 Stock Assessment Report HMS Atlantic Smooth Dogfish Shark. March, 2015. SEDAR. Available at http://sedarweb.org/docs/sar/S39_At1_smooth_dog_SAR.pdf (Last accessed 3/30/2015)
Consolidated Atlantic Highly Migratory Species	Smooth hammerhead - Atlantic and Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at $MSST = BLIMIT = (1-M)BMSY$ when $M < 0.5$; $MSST = BLIMIT = 0.5BMSY$ when $M \geq 0.5$.	N/A	N/A	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Consolidated Atlantic Highly Migratory Species	Spinner shark - Atlantic and Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at MSST = BLIMIT = (1-M)BMSY when M < 0.5; MSST = BLIMIT = 0.5BMSY when M >= 0.5.	N/A	N/A	N/A
Consolidated Atlantic Highly Migratory Species	Swordfish - North Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at MSST = BLIMIT = (1-M)BMSY when M < 0.5; MSST = BLIMIT = 0.5BMSY when M >= 0.5.	2017	N/A	http://www.iccat.int/Documents/Meetings/Docs/2017_SCRS_REP_ENG.pdf
Consolidated Atlantic Highly Migratory Species	Thresher shark - Atlantic and Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at MSST = BLIMIT = (1-M)BMSY when M < 0.5; MSST = BLIMIT = 0.5BMSY when M >= 0.5.	N/A	N/A	N/A
Consolidated Atlantic Highly Migratory Species	Tiger shark - Atlantic and Gulf of Mexico	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at MSST = BLIMIT = (1-M)BMSY when M < 0.5; MSST = BLIMIT = 0.5BMSY when M >= 0.5.	N/A	N/A	N/A
Consolidated Atlantic Highly Migratory Species	White marlin - Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is 0.85BMSY for white marlin	2019	N/A	http://www.iccat.int/Documents/Meetings/Docs/2012_WHM_ASSESS_ENG.pdf
Consolidated Atlantic Highly Migratory Species	Yellowfin tuna - Atlantic	Overfishing occurs when the MFMT is exceeded, which is set at Flimit = FMSY.	A stock is overfished when the stock level biomass falls below MSST, which is set at MSST = BLIMIT = (1-M)BMSY when M < 0.5; MSST = BLIMIT = 0.5BMSY when M >= 0.5.	2016	N/A	http://iccat.es/Documents/Meetings/Docs/2016_YFT_ASSESSMENT_ENG.pdf

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Coral and Coral Reefs of the Gulf of Mexico	Black corals (Antipatharia) - Gulf of Mexico	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	Undefined	N/A	N/A	N/A
Coral and Coral Reefs of the Gulf of Mexico	Fire corals (Milleporidae) - Gulf of Mexico	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	Undefined	N/A	N/A	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Coral and Coral Reefs of the Gulf of Mexico	Hydrocorals (Stylasteridae) - Gulf of Mexico	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	Undefined	N/A	N/A	N/A
Coral and Coral Reefs of the Gulf of Mexico	Sea fans (Gorgonia spp.) - Gulf of Mexico	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	Undefined	N/A	N/A	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Coral and Coral Reefs of the Gulf of Mexico	Stony corals (Scleractinia) - Gulf of Mexico	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	Undefined	N/A	N/A	N/A
Coral, Coral Reefs and Live/Hard Bottom Habitats of the South Atlantic Region	Black corals (Antipatharia) - Southern Atlantic Coast	Overfishing is defined as an annual level of harvest that exceeds optimum yield (OY). OY for coral reefs, stony corals, hydrocorals, black corals, seafans, and live rock is zero, except as may be authorized for scientific and educational purposes.	Undefined	N/A	N/A	N/A
Coral, Coral Reefs and Live/Hard Bottom Habitats of the South Atlantic Region	Fire corals (Milleporidae) - Southern Atlantic Coast	Overfishing is defined as an annual level of harvest that exceeds optimum yield (OY). OY for coral reefs, stony corals, hydrocorals, black corals, seafans, and live rock is zero, except as may be authorized for scientific and educational purposes.	Undefined	N/A	N/A	N/A
Coral, Coral Reefs and Live/Hard Bottom Habitats of the South Atlantic Region	Hydrocorals (Stylasteridae) - Southern Atlantic Coast	Overfishing is defined as an annual level of harvest that exceeds optimum yield (OY). OY for coral reefs, stony corals, hydrocorals, black corals, seafans, and live rock is zero, except as may be authorized for scientific and educational purposes.	Undefined	N/A	N/A	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Coral, Coral Reefs and Live/Hard Bottom Habitats of the South Atlantic Region	Soft corals (Octocorallia) - Southern Atlantic Coast	Overfishing is defined as an annual level of harvest that exceeds optimum yield (OY). OY for coral reefs, stony corals, hydrocorals, black corals, seafans, and live rock is zero, except as may be authorized for scientific and educational purposes.	Undefined	N/A	N/A	N/A
Coral, Coral Reefs and Live/Hard Bottom Habitats of the South Atlantic Region	Stony corals (Scleractinia) - Southern Atlantic Coast	Overfishing is defined as an annual level of harvest that exceeds optimum yield (OY). OY for coral reefs, stony corals, hydrocorals, black corals, seafans, and live rock is zero, except as may be authorized for scientific and educational purposes.	Undefined	N/A	N/A	N/A
Corals and Reef Associated Plants and Invertebrates of Puerto Rico and the United States Virgin Islands	Caribbean Aquarium Trade Plants and Invertebrates Species Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017.1	N/A
Deep-Sea Red Crab	Red deepsea crab - Northwestern Atlantic	Overfishing is defined as any rate of exploitation such that the ratio of current exploitation to an idealized exploitation under MSY conditions exceeds a value of 1.0 (the actual measure of exploitation used is determined by the availability of suitable data).	The stock is overfished if current biomass is below $\frac{1}{2}$ Bmsy, annual fleet average CPUE continues to decline below a baseline level for three or more consecutive years, or annual fleet average CPUE falls below a minimum threshold level in any single year.	2006	N/A	NEFSC CRD 06-14 (2006)
Dolphin and Wahoo Fishery of the Atlantic	Dolphinfish - Southern Atlantic Coast	Overfishing is defined as a fishing mortality rate (F) in the excess of FMSY (F30% Static SPR).	A stock is overfished if current biomass (B_{curr}) is less than MSST and would be recovered when current biomass was equal or greater than the biomass at MSY. MSST is defined $(1-M)*BMSY$, where $1-M$ should never be less than 0.5.	2000	N/A	Prager, M. H. 2000. Exploratory Assessment of Dolphinfish, <i>Coryphaena hippurus</i> , based on U.S. landings from the Atlantic Ocean and Gulf of Mexico. NMFS, SEFSC 18pp.

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Dolphin and Wahoo Fishery of the Atlantic	Wahoo - Southern Atlantic Coast	Overfishing is defined as a fishing mortality rate (F) in the excess of FMSY (F30% Static SPR).	A stock is overfished if current biomass (Bcurr) is less than MSST and would be recovered when current biomass was equal or greater than the biomass at MSY. MSST is defined $(1-M)*BMSY$, where 1-M should never be less than 0.5.	N/A	N/A	N/A
Fish Resources of the Arctic Management Area	Arctic cod - Arctic Management Area	If the annual catch exceeds the annual OFL for one year or more, the stock will be determined to be subjected to overfishing.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as $\frac{1}{2}$ BMSY.	N/A	N/A	N/A
Fish Resources of the Arctic Management Area	Saffron cod - Arctic Management Area	If the annual catch exceeds the annual OFL for one year or more, the stock will be determined to be subjected to overfishing.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as $\frac{1}{2}$ BMSY.	N/A	N/A	N/A
Fish Resources of the Arctic Management Area	Snow crab - Arctic Management Area	If the annual catch exceeds the annual OFL for one year or more, the stock will be determined to be subjected to overfishing.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as $\frac{1}{2}$ BMSY.	N/A	N/A	N/A
Golden Crab Fishery of the South Atlantic Region	Golden deepsea crab - Southern Atlantic Coast	Overfishing is defined as fishing in excess of FMSY.	Undefined	2000	N/A	Updated Golden Crab Fishery Trends and Population Model Analysis Based on Trip Report Logbook and Trip Interview Data Collection Programs, PRD-99/00-12 (Harper et al.)
Groundfish of the Bering Sea and Aleutian Islands Management Area	Alaska plaice - Bering Sea / Aleutian Islands	If the annual catch exceeds the annual OFL for one year or more, the stock will be determined to be subjected to overfishing.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as $\frac{1}{2}$ BMSY.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Arrowtooth flounder - Bering Sea / Aleutian Islands	If the annual catch exceeds the annual OFL for one year or more, the stock will be determined to be subjected to overfishing.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as $\frac{1}{2}$ BMSY.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Atka mackerel - Bering Sea / Aleutian Islands	If the annual catch exceeds the annual OFL for one year or more, the stock will be determined to be subjected to overfishing.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as $\frac{1}{2}$ BMSY.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Bering Sea / Aleutian Islands Blackspotted and Rougheye Rockfish Complex	If the annual catch exceeds the annual OFL for one year or more, the stock will be determined to be subjected to overfishing.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as ½ BMSY.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Bering Sea / Aleutian Islands Flathead Sole Complex	If the annual catch exceeds the annual OFL for one year or more, the stock will be determined to be subjected to overfishing.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as ½ BMSY.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Bering Sea / Aleutian Islands Octopus Complex	If the annual catch exceeds the annual OFL for one year or more, the stock will be determined to be subjected to overfishing.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as ½ BMSY.	2016	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Bering Sea / Aleutian Islands Other Flatfish Complex	If the annual catch exceeds the annual OFL for one year or more, the stock will be determined to be subjected to overfishing.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as ½ BMSY.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Bering Sea / Aleutian Islands Other Rockfish Complex	If the annual catch exceeds the annual OFL for one year or more, the stock will be determined to be subjected to overfishing.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as ½ BMSY.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Bering Sea / Aleutian Islands Rock Sole Complex	If the annual catch exceeds the annual OFL for one year or more, the stock will be determined to be subjected to overfishing.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as ½ BMSY.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Bering Sea / Aleutian Islands Sculpin Complex	If the annual catch exceeds the annual OFL for one year or more, the stock will be determined to be subjected to overfishing.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as ½ BMSY.	2016	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Bering Sea / Aleutian Islands Shark Complex	If the annual catch exceeds the annual OFL for one year or more, the stock will be determined to be subjected to overfishing.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as ½ BMSY.	2016	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Bering Sea / Aleutian Islands Skate Complex	If the annual catch exceeds the annual OFL for one year or more, the stock will be determined to be subjected to overfishing.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as ½ BMSY.	2017	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Greenland halibut - Bering Sea / Aleutian Islands	If the annual catch exceeds the annual OFL for one year or more, the stock will be determined to be subjected to overfishing.	A stock is overfished if the annual biomass estimate is less than the established MSST, defined as ½ BMSY.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Kamchatka flounder - Bering Sea / Aleutian Islands	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Northern rockfish - Bering Sea / Aleutian Islands	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Pacific cod - Aleutian Islands	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Pacific cod - Bering Sea	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Pacific ocean perch - Bering Sea / Aleutian Islands	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Shortraker rockfish - Bering Sea / Aleutian Islands	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Walleye pollock - Aleutian Islands	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Walleye pollock - Bogoslof	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Walleye pollock - Eastern Bering Sea	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area	Yellowfin sole - Bering Sea / Aleutian Islands	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Bering Sea and Aleutian Islands Management Area / Groundfish of the Gulf of Alaska	Sablefish - Eastern Bering Sea / Aleutian Islands / Gulf of Alaska	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Groundfish of the Gulf of Alaska	Arrowtooth flounder - Gulf of Alaska	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Gulf of Alaska	Atka mackerel - Gulf of Alaska	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2016	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Gulf of Alaska	Big skate - Gulf of Alaska	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2016	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Gulf of Alaska	Dusky rockfish - Gulf of Alaska	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Gulf of Alaska	Flathead sole - Gulf of Alaska	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Gulf of Alaska	Gulf of Alaska Blackspotted and Rougheye Rockfish Complex	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Groundfish of the Gulf of Alaska	Gulf of Alaska Deepwater Flatfish Complex	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Gulf of Alaska	Gulf of Alaska Demersal Shelf Rockfish Complex	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2018	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Gulf of Alaska	Gulf of Alaska Octopus Complex	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2017	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Gulf of Alaska	Gulf of Alaska Other Rockfish Complex	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2017	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Gulf of Alaska	Gulf of Alaska Sculpin Complex	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2017	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Gulf of Alaska	Gulf of Alaska Shallow Water Flatfish Complex	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2017	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Groundfish of the Gulf of Alaska	Gulf of Alaska Shark Complex	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2016	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Gulf of Alaska	Gulf of Alaska Skate Complex	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2017	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Gulf of Alaska	Gulf of Alaska Thornyhead Rockfish Complex	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2017	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Gulf of Alaska	Longnose skate - Gulf of Alaska	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	N/A	2018	N/A
Groundfish of the Gulf of Alaska	Northern rockfish - Western / Central Gulf of Alaska	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2017	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Gulf of Alaska	Pacific cod - Gulf of Alaska	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2017	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Groundfish of the Gulf of Alaska	Pacific ocean perch - Gulf of Alaska	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2017	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Gulf of Alaska	Rex sole - Gulf of Alaska	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2017	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Gulf of Alaska	Shortraker rockfish - Gulf of Alaska	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2017	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Gulf of Alaska	Walleye pollock - Southeast Gulf of Alaska	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2017	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Groundfish of the Gulf of Alaska	Walleye pollock - Western / Central / West Yakutat Gulf of Alaska	If the catch taken during the most recent calendar year exceeded the OFL that was specified for that year, then overfishing occurred during that year.	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2017	2018	https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessment-and-fishery-evaluation
Hawaii Archipelago Ecosystem	180 Fathom Bank Precious Coral Complex	Undefined	Undefined	N/A	N/A	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Hawaii Archipelago Ecosystem	Au'Au Bed Black Coral Complex	The definition of overfishing for all species of precious corals is when the total spawning biomass is less than or equal to 20 percent of its unfished condition (SPR \leq 20 percent), based on cohort analysis of pink coral, <i>Corallium secundum</i> .	The definition of overfished for all species of precious corals is when the total spawning biomass is less than or equal to 30 percent of its unfished condition (SPR \leq 30 percent).	N/A	N/A	N/A
Hawaii Archipelago Ecosystem	Brooks Bank Precious Coral Complex	Undefined	Undefined	N/A	N/A	N/A
Hawaii Archipelago Ecosystem	Deepwater shrimps (<i>Heterocarpus</i> spp.) - Main Hawaiian Islands	Undefined	Undefined	N/A	N/A	N/A
Hawaii Archipelago Ecosystem	Green jobfish - Main Hawaiian Islands	Overfishing occurs when F is greater than $FMSY \cdot B / c \cdot BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. Effort (E) is used as a proxy for F.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. CPUE is used as a proxy for B.	N/A	N/A	N/A
Hawaii Archipelago Ecosystem	Hancock Seamount Groundfish Complex	Overfishing occurs when F is greater than $FMSY \cdot B / c \cdot BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. Effort (E) is used as a proxy for F.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. CPUE is used as a proxy for B.	N/A	N/A	N/A
Hawaii Archipelago Ecosystem	Hawaiian Archipelago Exploratory Area Precious Coral Complex	Undefined	Undefined	N/A	N/A	N/A
Hawaii Archipelago Ecosystem	Kaena Point Bed Precious Coral Complex	Undefined	Undefined	N/A	N/A	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Hawaii Archipelago Ecosystem	Keahole Bed Precious Coral Complex	Undefined	Undefined	N/A	N/A	N/A
Hawaii Archipelago Ecosystem	Main Hawaiian Islands Deep 7 Bottomfish Multi-species Complex	Overfishing occurs when F is greater than FMSY B / c BMSY if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. Effort (E) is used as a proxy for F.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. CPUE is used as a proxy for B.	2018	N/A	Langseth, B., J. Syslo, A. Yau, M. Kapur, and J. Brodziak. 2018. Stock Assessment for the Main Hawaiian Islands Deep 7 Bottomfish Complex in 2018, with Catch Projections Through 2022. NOAA Tech. Memo. NMFS-PIFSC-69,218 p.
Hawaii Archipelago Ecosystem	Makapu'u Bed Precious Corals Multi-species Complex	The definition of overfishing for all species of precious corals is when the total spawning biomass is less than or equal to 20 percent of its unfished condition (SPR <= 20 percent), based on cohort analysis of pink coral, <i>Corallium secundum</i> .	The definition of overfished for all species of precious corals is when the total spawning biomass is less than or equal to 30 percent of its unfished condition (SPR <= 30 percent).	N/A	N/A	N/A
Hawaii Archipelago Ecosystem	Northwestern Hawaiian Islands Bottomfish Multi-species Complex	Overfishing occurs when F is greater than FMSY B / c BMSY if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. Effort (E) is used as a proxy for F.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. CPUE is used as a proxy for B.	N/A	N/A	N/A
Hawaii Archipelago Ecosystem	Northwestern Hawaiian Islands Crustacean Complex	Undefined	Undefined	N/A	N/A	N/A
Hawaii Archipelago Ecosystem	Spanner crab - Main Hawaiian Islands	Undefined	Undefined	N/A	N/A	N/A
Hawaii Archipelago Ecosystem	Westpac Bed Refugium-Precious Corals Complex	Undefined	Undefined	N/A	N/A	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Mariana Archipelago Ecosystem	Guam Bottomfish Multi-species Complex	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. Effort (E) is used as a proxy for F.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. CPUE is used as a proxy for B.	2015	N/A	https://pifsc-www.irc.noaa.gov/library/pubs/tech/NOAA_Tech_Memo_PIFSC_51.pdf
Mariana Archipelago Ecosystem	Northern Mariana Islands Bottomfish Multi-species Complex	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. Effort (E) is used as a proxy for F.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5. CPUE is used as a proxy for B.	2015	N/A	https://pifsc-www.irc.noaa.gov/library/pubs/tech/NOAA_Tech_Memo_PIFSC_51.pdf
Monkfish	Goosefish - Gulf of Maine / Northern Georges Bank	Overfishing occurs when F exceeds $F_{THRESHOLD}$, which is set equal to F_{MAX} .	The stock is overfished when total stock biomass is less than $1/2 B_{max}$.	2013	N/A	"2013 Monkfish Operational Assessment" A. Richards and P. Nitschke; NEFSC CRD13-23 (2013)
Monkfish	Goosefish - Southern Georges Bank / Mid-Atlantic	Overfishing occurs when F exceeds $F_{THRESHOLD}$, which is set equal to F_{MAX} .	The stock is overfished when total stock biomass is less than $1/2 B_{max}$.	2013	N/A	"2013 Monkfish Operational Assessment" A. Richards and P. Nitschke; NEFSC CRD13-23 (2013)
Northeast Multispecies	Acadian redfish - Gulf of Maine / Georges Bank	Overfishing occurs when F exceeds F at 50% maximum spawning potential.	Overfished is defined as spawning stock biomass less than $1/2 B_{target}$; B_{target} is defined as 50% MSP	2017	N/A	Northeast Fisheries Science Center. 2017. Operational Assessment of 19 Northeast Groundfish Stocks, Updated Through 2016. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 17-17.
Northeast Multispecies	American plaice - Gulf of Maine / Georges Bank	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	Overfished is defined as spawning stock biomass less than $1/2 B_{target}$; B_{target} is defined as 40% MSP	2019	N/A	2019 Assessment Update of American Plaice
Northeast Multispecies	Atlantic cod - Georges Bank	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	Overfished is defined as spawning stock biomass less than $1/2 B_{target}$; B_{target} is defined as 40% MSP	2013	N/A	NEFSC CRD 13-01 (SARC55)

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Northeast Multispecies	Atlantic cod - Gulf of Maine	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	Overfished is defined as spawning stock biomass less than ½ Btarget; Btarget is defined as 40% MSP	2019	N/A	2019 Assessment Update of Gulf of Maine Atlantic Cod
Northeast Multispecies	Atlantic halibut - Northwestern Atlantic Coast	Overfishing occurs when F exceeds F0.1.	The stock is overfished when the total stock biomass is less than ½ Btarget.	2012	N/A	NEFSC CRD 12-06 (2012)
Northeast Multispecies	Atlantic wolffish - Gulf of Maine / Georges Bank	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	Overfished is defined as spawning stock biomass less than ½ Btarget; Btarget is defined as 40% MSP	2017	N/A	Northeast Fisheries Science Center. 2017. Operational Assessment of 19 Northeast Groundfish Stocks, Updated Through 2016. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 17-17.
Northeast Multispecies	Haddock - Georges Bank	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	Overfished is defined as spawning stock biomass less than ½ Btarget; Btarget is defined as 40% MSP	2019	N/A	2019 Assessment Update of Georges Bank Haddock
Northeast Multispecies	Haddock - Gulf of Maine	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	Overfished is defined as spawning stock biomass less than ½ Btarget; Btarget is defined as 40% MSP	2019	N/A	2019 Assessment Update of Gulf of Maine Haddock
Northeast Multispecies	Ocean pout - Northwestern Atlantic Coast	Overfishing occurs when the exploitation ratio is less than the median exploitation ratio from 1977-1985.	The stock is overfished when the 3-year moving average of the NEFSC spring survey is less than ½ BMSY proxy; where BMSY proxy = average observed 1977-1985.	2017	N/A	NEFSC CRD 15-24 (Operational Assessment)
Northeast Multispecies	Offshore hake - Northwestern Atlantic Coast & Status	Undefined	Undefined	N/A	N/A	N/A
Northeast Multispecies	Pollock - Gulf of Maine / Georges Bank	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	Overfished is defined as spawning stock biomass less than ½ Btarget; Btarget is defined as 40% MSP	2019	N/A	2019 Assessment Update of Pollock
Northeast Multispecies	Red hake - Gulf of Maine / Northern Georges Bank	Overfishing occurs when the ratio between catch and spring survey biomass exceeds 0.163 kt/kg, derived from AIM analyses from 1980-2009.	Red hake is overfished when the three-year moving arithmetic average of the spring survey weight per tow (i.e., the biomass threshold) is less than one half of the BMSY proxy, where the BMSY proxy is defined as the average observed from 1980 – 2010.	2017	N/A	2017 Northern and Southern Silver hake and Red hake Stock Assessment Update Report. L. Alade and M. Traver (2018, NEFSC CRD18-02

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Northeast Multispecies	Red hake - Southern Georges Bank / Mid-Atlantic	Overfishing occurs when the ratio between catch and spring survey biomass exceeds 3.038 kt/kg, derived from AIM analyses from 1980-2009.	Red hake is overfished when the three-year moving arithmetic average of the spring survey weight per tow (i.e., the biomass threshold) is less than one half of the BMSY proxy, where the BMSY proxy is defined as the average observed from 1980 – 2010.	2017	N/A	2017 Northern and Southern Silver hake and Red hake Stock Assessment Update Report. L. Alade and M. Traver (2018, NEFSC CRD18-02)
Northeast Multispecies	Silver hake - Gulf of Maine / Northern Georges Bank	Overfishing occurs when the ratio between catch and the arithmetic fall survey biomass index from the most recent three years exceeds the overfishing threshold	The stock is overfished when the 3-year moving average of the fall survey < 1/2 BMSY proxy; where BMSY proxy = average observed 1973-1982	2017	N/A	2017 Northern and Southern Silver hake and Red hake Stock Assessment Update Report. L. Alade and M. Traver (2018, NEFSC CRD18-02)
Northeast Multispecies	Silver hake - Southern Georges Bank / Mid-Atlantic & Status	Overfishing occurs when the ratio between catch and the arithmetic fall survey biomass index from the most recent three years exceeds the overfishing threshold	The stock is overfished when the 3-year moving average of the fall survey < 1/2 BMSY proxy; where BMSY proxy = average observed 1973-1982	2017	N/A	2017 Northern and Southern Silver hake and Red hake Stock Assessment Update Report. L. Alade and M. Traver (2018, NEFSC CRD18-02)
Northeast Multispecies	White hake - Gulf of Maine / Georges Bank	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	Overfished is defined as spawning stock biomass less than 1/2 Btarget; Btarget is defined as 40% MSP	2019	N/A	2019 Assesment Update of White Hake
Northeast Multispecies	Windowpane - Gulf of Maine / Georges Bank	Overfishing occurs when the exploitation ratio is less than the median exploitation ratio from 1975-2014.	The stock is overfished when the 3-year moving average of the fall survey is less than 1/2 BMSY proxy; where BMSY proxy = average observed 1975-2014.	2019	N/A	2019 Assesment Update of Gulf of Maine/Georges Bank Windowpane
Northeast Multispecies	Windowpane - Southern New England / Mid-Atlantic	Overfishing occurs when the exploitation ratio is less than the median exploitation ratio from 1975-2014.	The stock is overfished when the 3-year moving average of the fall survey is less than 1/2 BMSY proxy; where BMSY proxy = average observed 1975-2014.	2019	N/A	2019 Assesment Update of Southern New England/Mid-Atlantic Windowpane
Northeast Multispecies	Winter flounder - Georges Bank	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	Overfished is defined as spawning stock biomass less than 1/2 Btarget; Btarget is defined as 40% MSP	2019	N/A	2019 Assesment Update of Georges Bank Winter Flounder
Northeast Multispecies	Winter flounder - Gulf of Maine	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	Overfished is defined as spawning stock biomass less than 1/2 Btarget; Btarget is defined as 40% MSP	2017	N/A	Northeast Fisheries Science Center. 2017. Operational Assessment of 19 Northeast Groundfish Stocks, Updated Through 2016. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 17-17.

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Northeast Multispecies	Winter flounder - Southern New England / Mid-Atlantic	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	Overfished is defined as spawning stock biomass less than 1/2 Btarget; Btarget is defined as 40% MSP	2017	N/A	Northeast Fisheries Science Center. 2017. Operational Assessment of 19 Northeast Groundfish Stocks, Updated Through 2016. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 17-17.
Northeast Multispecies	Witch flounder - Northwestern Atlantic Coast	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	Overfished is defined as spawning stock biomass less than 1/2 Btarget; Btarget is defined as 40% MSP	2019	N/A	2019 Assessment Update of Witch Flounder
Northeast Multispecies	Yellowtail flounder - Cape Cod / Gulf of Maine	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	Overfished is defined as spawning stock biomass less than 1/2 Btarget; Btarget is defined as 40% MSP	2019	N/A	2019 Assessment Update of Cape Cod/Gulf of Maine Yellowtail Flounder
Northeast Multispecies	Yellowtail flounder - Georges Bank	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	Overfished is defined as spawning stock biomass less than 1/2 Btarget; Btarget is defined as 40% MSP	2013	N/A	TRAC Status Report 2013/01
Northeast Multispecies	Yellowtail flounder - Southern New England / Mid-Atlantic	Overfishing occurs when F exceeds F at 40% maximum spawning potential.	Overfished is defined as spawning stock biomass less than 1/2 Btarget; Btarget is defined as 40% MSP	2019	N/A	2019 Assessment Update of Southern New England/Mid-Atlantic Yellowtail Flounder
Northeast Skate Complex	Barndoor skate - Georges Bank / Southern New England& Status	Overfishing occurs when the 3-year moving average of the autumn survey mean weight per tow declines 30% or more, or if the survey biomass declines for 3 consecutive years..	The stock is in an overfished condition when the 3-year moving average of the autumn survey mean weight per tow is less than one-half of the mean weight per tow observed in the autumn trawl survey from 1967-2007.	2019	N/A	2018 NE Skate Stock Status Update
Northeast Skate Complex	Clearnose skate - Southern New England / Mid-Atlantic& Status	Overfishing occurs when the 3-year moving average of the autumn survey mean weight per tow declines 20% or more, or if the survey biomass declines for 3 consecutive years..	The stock is in an overfished condition when the 3-year moving average of the autumn survey mean weight per tow is less than one-half of the mean weight per tow observed in the autumn trawl survey from 1963-2007.	2019	N/A	2018 NE Skate Stock Status Update
Northeast Skate Complex	Little skate - Georges Bank / Southern New England& Status	Overfishing occurs when the 3-year moving average of the autumn survey mean weight per tow declines 20% or more, or if the survey biomass declines for 3 consecutive years.	The stock is in an overfished condition when the 3-year moving average of the spring survey mean weight per tow is less than one-half of the mean weight per tow observed in the spring trawl survey from 1982-2008.	2019	N/A	2018 NE Skate Stock Status Update

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Northeast Skate Complex	Rosette skate - Southern New England / Mid-Atlantic & Status	Overfishing occurs when the 3-year moving average of the autumn survey mean weight per tow declines 20% or more, or if the survey biomass declines for 3 consecutive years.	The stock is in an overfished condition when the 3-year moving average of the autumn survey mean weight per tow is less than one-half of the mean weight per tow observed in the autumn trawl survey from 1963-1966.	2019	N/A	2018 NE Skate Stock Status Update
Northeast Skate Complex	Smooth skate - Gulf of Maine & Status	Overfishing occurs when the 3-year moving average of the autumn survey mean weight per tow declines 20% or more, or if the survey biomass declines for 3 consecutive years.	The stock is in an overfished condition when the 3-year moving average of the autumn survey mean weight per tow is less than one-half of the mean weight per tow observed in the autumn trawl survey from 1963-2007.	2019	N/A	2018 NE Skate Stock Status Update
Northeast Skate Complex	Thorny skate - Gulf of Maine & Status	Overfishing occurs when the 3-year moving average of the autumn survey mean weight per tow declines 20% or more.	The stock is in an overfished condition when the 3-year moving average of the autumn survey mean weight per tow is less than one-half of the mean weight per tow observed in the autumn trawl survey from 1975-2007.	2019	N/A	2018 NE Skate Stock Status Update
Northeast Skate Complex	Winter skate - Georges Bank / Southern New England & Status	Overfishing occurs when the 3-year moving average of the autumn survey mean weight per tow declines 20% or more.	The stock is in an overfished condition when the 3-year moving average of the autumn survey mean weight per tow is less than one-half of the mean weight per tow observed in the autumn trawl survey from 1967-2007.	2019	N/A	2018 NE Skate Stock Status Update
Pacific Coast Groundfish	Arrowtooth flounder - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if the current estimated spawning biomass (or spawning output) is less than 12.5% of the unfished level.	2017	2018	Sampson, D.B., Hamel, O.S., Bosley, K., Budrick, J., Cronin-Fine, L., Hillier, L.K., Hinton, K.E., Krigbaum, M.J., Miller, S., Privitera-Johnson, K.M., Ramey, K., Rodomsky, B.T., Solinger, L.K., Whitman, A.D. 2017. 2017 Assessment Update for the US West Coast Stock of Arrowtooth Flounder. Pacific Fishery Management Council, Portland, OR. Available from http://www.pcouncil.org/groundfish/stock-assessments/

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Groundfish	Aurora rockfish - Pacific Coast	Undefined	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2013	N/A	Hamel, O., Cope, J., and Matson, S. 2013. Stock Assessment of Aurora Rockfish in 2013. SAFE.
Pacific Coast Groundfish	Big skate - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if the current estimated spawning biomass (or spawning output) is less than 12.5% of the unfished level.	2019	2018	Gertseva, V. Matson, S., Taylor, I. Bizzarro, J, Wallace, J. 2019. Stock assessment of the Longnose Skate (<i>Beringraja rhina</i>) in state and Federal waters off California, Oregon and Washington. Pacific Fishery Management Council, Portland, OR. Available from http://www.pccouncil.org/groundfish/stock-assessments/
Pacific Coast Groundfish	Black rockfish - California	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2015	2018	Cope, Jason M.; Sampson, David; Stephens, Andi; Key, Meisha; Mirick, Patrick P.; Stachura, Megan; Tsou, Tien-Shui; Weyland, Phillip; Berger, Aaron; Buell, Troy; Council, Elizabeth; Dick, E.J.; Fenske, Kari H.; Monk, Melissa, Rodomsky, Brett T. 2015. Assessments of Black Rockfish (<i>Sebastes melanops</i>) Stocks in California, Oregon and Washington Coastal Waters. In: Status of the Pacific Coast Groundfish Fishery SAFE: Stock Assessments and Rebuilding Analyses Portland, OR: PFMC

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Groundfish	Black rockfish - Oregon	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2015	2018	Cope, Jason M.; Sampson, David; Stephens, Andi; Key, Meisha; Mirick, Patrick P.; Stachura, Megan; Tsou, Tien-Shui; Weyland, Phillip; Berger, Aaron; Buell, Troy; Council, Elizabeth; Dick, E.J.; Fenske, Kari H.; Monk, Melissa, Rodomsky, Brett T. 2015. Assessments of Black Rockfish (<i>Sebastes melanops</i>) Stocks in California, Oregon and Washington Coastal Waters. In: Status of the Pacific Coast Groundfish Fishery SAFE: Stock Assessments and Rebuilding Analyses Portland, OR: PFMC
Pacific Coast Groundfish	Black rockfish - Washington	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2015	2018	Cope, Jason M.; Sampson, David; Stephens, Andi; Key, Meisha; Mirick, Patrick P.; Stachura, Megan; Tsou, Tien-Shui; Weyland, Phillip; Berger, Aaron; Buell, Troy; Council, Elizabeth; Dick, E.J.; Fenske, Kari H.; Monk, Melissa, Rodomsky, Brett T. 2015. Assessments of Black Rockfish (<i>Sebastes melanops</i>) Stocks in California, Oregon and Washington Coastal Waters. In: Status of the Pacific Coast Groundfish Fishery SAFE: Stock Assessments and Rebuilding Analyses Portland, OR: PFMC
Pacific Coast Groundfish	Blackgill rockfish - Southern California	Undefined	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2017	N/A	Field, J. and He, X. 2017. Stock assessment update of blackgill rockfish, <i>Sebastes melanostomus</i> , in the Conception and Monterey INPFC areas for 2017; IN Stock Assessment and Fishery Evaluation. Pacific Fishery Management Council. Portland, Oregon.

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Groundfish	Bocaccio - Southern Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2017	2018	He, X., and Field, J.C. 2017. Stock Assessment Update: Status of Bocaccio, <i>Sebastes paucispinis</i> , in the Conception, Monterey and Eureka INPFC areas for 2017. In Stock Assessment and Fishery Evaluation. Pacific Fishery Management Council. Portland, Oregon.
Pacific Coast Groundfish	Brown rockfish - Pacific Coast	Undefined	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2013	N/A	Cope, J., Dick, E.J., MacCall, A., Monk, M., Soper, B., and Wetzel, C. 2013. Data-moderate stock assessments for brown, China, copper, sharpchin, stripetail, and yellowtail rockfishes and English and rex soles in 2013
Pacific Coast Groundfish	Cabezon - California	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2009	2018	Cope, J. and M. Key. 2009. Status of Cabezon (<i>Scorpaenichthys marmoratus</i>) in California and Oregon waters as assessed in 2009. In SAFE. Pacific Fishery Management Council. (The results for this SIS entry are a combination of the sub-area models NCS+SCS).
Pacific Coast Groundfish	Cabezon - Oregon	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2009	2018	Cope, J. and Key, M. 2009. Status of Cabezon (<i>Scorpaenichthys marmoratus</i>) in California and Oregon Waters as Assessed in 2009. This entry relates to the area sub-model for Oregon.

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Groundfish	California Blue and Deacon Rockfish Complex	Undefined	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2017	N/A	Dick, E.J., A. Berger, J. Bizzarro, K. Bosley, J. Cope, J. Field, L. Gilbert-Horvath, N. Grunloh, M. IvensDuran, R. Miller, K. Privitera-Johnson, and B.T. Rodomsky. 2017. The Combined Status of Blue and Deacon Rockfishes in U.S. Waters off California and Oregon in 2017. Pacific Fishery Management Council, Portland, OR. Available from http://www.pcouncil.org/groundfish/stock-assessments/
Pacific Coast Groundfish	California scorpionfish - Southern California	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2017	2018	Monk, M. H. ,He, X., and Budrick, J. 2017. Status of the California Scorpionfish (<i>Scorpaena guttata</i>) Off Southern California in 2017.. Pacific Fishery Management Council, Portland, OR. Available from http://www.pcouncil.org/groundfish/stock-assessments/
Pacific Coast Groundfish	Canary rockfish - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2017	2018	Thorson, J.T., and Wallace, J. The status of canary rockfish (<i>Sebastes pinniger</i>) in the California Current in 2017: A catch-only update. PFMC 2017.
Pacific Coast Groundfish	Chilipepper - Southern Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2017	2018	Field, J.C. 2017. A catch-only update of the status of the Chilipepper Rockfish, <i>Sebastes goodei</i> , in the California Current for 2017.

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Groundfish	China rockfish - Central Pacific Coast	Undefined	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2015	N/A	Dick, E.J.; Monk, Melissa; Taylor, Ian; Haltuch, Melissa; Tsou, Tien-Shui; Mirick, Patrick. Status of China rockfish off the U.S. Pacific Coast in 2015.
Pacific Coast Groundfish	China rockfish - Northern Pacific Coast	Undefined	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2015	N/A	Dick, E.J.; Monk, Melissa; Taylor, Ian; Haltuch, Melissa; Tsou, Tien-Shui; Mirick, Patrick. Status of China rockfish off the U.S. Pacific Coast in 2015.
Pacific Coast Groundfish	China rockfish - Southern Pacific Coast	Undefined	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2015	N/A	Dick, E.J.; Monk, Melissa; Taylor, Ian; Haltuch, Melissa; Tsou, Tien-Shui; Mirick, Patrick. Status of China rockfish off the U.S. Pacific Coast in 2015.
Pacific Coast Groundfish	Copper rockfish - Pacific Coast	Undefined	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2013	N/A	Cope, J., Dick, E.J., MacCall, A., Monk, M., Soper, B., and Wetzel, C. 2013. Data-moderate stock assessments for brown, China, copper, sharpchin, striptail, and yellowtail rockfishes and English and rex soles in 2013
Pacific Coast Groundfish	Cowcod - Southern California	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2019	2018	Cope, J.M., Berger, A.M., Whitman, A.D., Budrick, J.E., Bosley, K.M., Tsou, T., Niles, C.B., Privitera-Johnson, K., Hillier, L.K., Hinton, K.E., and Wilson, M.N. 2019. Title. Pacific Fishery Management Council, Portland, OR. Available from http://www.pcouncil.org/groundfish/stock-assessments/

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Groundfish	Darkblotched rockfish - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2017	2018	Status of the darkblotched rockfish resource off the continental U.S. Pacific Coast in 2017 (Update of 2015 assessment model) by John R. Wallace and Vladlena Gertseva
Pacific Coast Groundfish	Dover sole - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if the current estimated spawning biomass (or spawning output) is less than 12.5% of the unfished level.	2011	2018	Hicks, A. and C. Wetzell. 2011. The Status of Dover Sole (<i>Microstomus pacificus</i>) along the U.S. West Coast in 2011; IN Stock Assessment and Fishery Evaluation: Stock Assessments and Rebuilding Analyses. Pacific Fishery Management Council, Portland, OR.
Pacific Coast Groundfish	English sole - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if the current estimated spawning biomass (or spawning output) is less than 12.5% of the unfished level.	2013	2018	Cope, J., Dick, E.J., MacCall, A., Monk, M., Soper, B., and Wetzell, C. 2013. Data-moderate stock assessments for brown, China, copper, sharpchin, stripetail, and yellowtail rockfishes and English and rex soles in 2013.
Pacific Coast Groundfish	Gopher and Black-and-Yellow Rockfishes Complex	Undefined	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2019	N/A	Monk, M. H. and X. He. 2019. The Combined Status of Gopher <i>Sebastes carnatus</i> and Black-and-Yellow Rockfishes <i>Sebastes chrysomelas</i> in U.S. Waters Off California in 2019. Pacific Fishery Management Council, Portland, OR. Available from http://www.pccouncil.org/groundfish/s-tock-assessments/

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Groundfish	Greenspotted rockfish - Pacific Coast	Undefined	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2011	N/A	Dick, E.J., D. Pearson, and S. Ralston. 2011. Status of Greenspotted Rockfish, <i>Sebastes chlorostictus</i> , in U.S. waters off California. IN Stock Assessment and Fishery Evaluation. Pacific Fishery Management Council. Portland, Oregon.
Pacific Coast Groundfish	Greenstriped rockfish - Pacific Coast	Undefined	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2009	N/A	Hicks, A.C, M.A.Haltuch, and C.Wetzel. Status of greenstriped rockfish (<i>Sebastes elongatus</i>) along the outer coast of California, Oregon, and Washington.
Pacific Coast Groundfish	Kelp greenling - Oregon	Undefined	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2015	N/A	Berger, A.M., Arnold, L. and Rodmonsky, B.T. 2015. Status of Kelp Greenling (<i>Hexagrammos decagrammus</i>) along the Oregon Coast in 2015 in SAFE, Pacific Fishery Management Council. Portland, OR.
Pacific Coast Groundfish	Lingcod - Northern Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2017	2018	Haltuch, M.A., Wallace, J., Akselrud, C.A., Nowlis, J., Barnett, L.A.K., Valero, J.L., Tsou, T., Lam, L. 2017. 2017 Lingcod Stock Assessment. Pacific Fishery Management Council, Portland, OR. Available from http://www.pcouncil.org/groundfish/s-tock-assessments/
Pacific Coast Groundfish	Lingcod - Southern Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2017	2018	Haltuch, M.A., Wallace, J., Akselrud, C.A., Nowlis, J., Barnett, L.A.K., Valero, J.L., Tsou, T., Lam, L. 2017. 2017 Lingcod Stock Assessment. Pacific Fishery Management Council, Portland, OR. Available from http://www.pcouncil.org/groundfish/s-tock-assessments/

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Groundfish	Longnose skate - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2019	2018	Gertseva, V.V., M.J. Schirripa. 2008. Status of the Longnose Skate (<i>Rajarhina</i>) off the continental US Pacific Coast in 2007. In: Status of the Pacific Coast Groundfish Fishery Through 2007, Stock Assessment and Fishery Evaluation: Stock Assessments and Rebuilding Analyses Portland, OR: Pacific Fishery Management Council.
Pacific Coast Groundfish	Longspine thornyhead - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2013	2018	Stephens, A. and Taylor, I.G. 2013. Stock Assessment and Status of Longspine Thornyhead (<i>Sebastolobus altivelis</i>) off California, Oregon and Washington in 2013. SAFE Report.
Pacific Coast Groundfish	Minor Nearshore Rockfish North	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	Undefined	N/A	2018	N/A
Pacific Coast Groundfish	Minor Nearshore Rockfish South	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	Undefined	N/A	2018	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Groundfish	Minor Shelf Rockfish North	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	Undefined	N/A	2018	N/A
Pacific Coast Groundfish	Minor Shelf Rockfish South	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	Undefined	N/A	2018	N/A
Pacific Coast Groundfish	Minor Slope Rockfish North	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	Undefined	N/A	2018	N/A
Pacific Coast Groundfish	Minor Slope Rockfish South	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	Undefined	N/A	2018	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Groundfish	Oregon Blue and Deacon Rockfish Complex	Undefined	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2017	N/A	Dick, E.J., A. Berger, J. Bizzarro, K. Bosley, J. Cope, J. Field, L. Gilbert-Horvath, N. Grunloh, M. IvensDuran, R. Miller, K. Privitera-Johnson, and B.T. Rodomsky. 2017. The Combined Status of Blue and Deacon Rockfishes in U.S. Waters off California and Oregon in 2017. Pacific Fishery Management Council, Portland, OR. Available from http://www.pcouncil.org/groundfish/stock-assessments/
Pacific Coast Groundfish	Other Fish	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	Undefined	N/A	2018	N/A
Pacific Coast Groundfish	Other Flatfish	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	Undefined	N/A	2018	N/A
Pacific Coast Groundfish	Pacific Coast Blackspotted and Rougheye Rockfish Complex	Undefined	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2013	N/A	Hicks, A., Wetzel, C. and Harms, J. 2013. The status of rougheye rockfish (<i>Sebastes aleutianus</i>) and blackspotted rockfish (<i>S. melanostictus</i>) as a complex along the U.S. West Coast in 2013. http://www.pcouncil.org/groundfish/stock-assessments/by-year/gf2013/

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Groundfish	Pacific cod - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	N/A	2018	N/A
Pacific Coast Groundfish	Pacific hake - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2019	2018	Edwards, A.M., I.G. Taylor, C.J. Grandin, and A.M. Berger. 2018. Status of the Pacific Hake (whiting) stock in U.S. and Canadian waters in 2018. Prepared by the Joint Technical Committee of the U.S. and Canada Pacific Hake/Whiting Agreement, National Marine Fisheries Service and Fisheries and Oceans Canada. 222 p.
Pacific Coast Groundfish	Pacific ocean perch - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2017	2018	Wetzel, C.R., Cronin-Fine, L., and Johnson, K.F. 2017. Status of Pacific ocean perch (<i>Sebastes alutus</i>) along the US west coast in 2017. Pacific Fishery Management Council, 7700 Ambassador Place NE, Suite 200, Portland, OR 97220.
Pacific Coast Groundfish	Pacific sanddab - Pacific Coast	Undefined	The stock is overfished if the current estimated spawning biomass (or spawning output) is less than 12.5% of the unfished level.	2013	N/A	He, X., Pearson, D., Field, J.C., Lefebvre, L. and Key, M. 2013. Status of the U.S. Pacific Sanddab Resource in 2013. http://www.pcouncil.org/groundfish/stock-assessments/by-year/gf2013/ .

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Groundfish	Petrale sole - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if the current estimated spawning biomass (or spawning output) is less than 12.5% of the unfished level.	2015	2018	Stawitz, C.C., F. Hurtado-Ferro, P. Kuriyama, J.T. Trochta, K.F. Johnson, M.A. Haltuch, and O.S. Hamel. 2015. Stock assessment update: Status of the U.S. petrale sole resource in 2014. Pacific Fishery Management Council, Portland, OR.
Pacific Coast Groundfish	Rex sole - Pacific Coast	Undefined	The stock is overfished if the current estimated spawning biomass (or spawning output) is less than 12.5% of the unfished level.	2013	N/A	Cope, J., Dick, E.J., MacCall, A., Monk, M., Soper, B., and Wetzel, C. 2013. Data-moderate stock assessments for brown, China, copper, sharpchin, stripetail, and yellowtail rockfishes and English and rex soles in 2013
Pacific Coast Groundfish	Sablefish - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2015	2018	Johnson, K. F., Rudd, M. B., Pons, M., Allen Akselrud, C., Lee, Q., Hurtado-Ferro, F., Haltuch, M. A., and Hamel, O. S. 2015. Status of the U.S. sablefish resource in 2015. In Stock Assessment and Fishery Evaluation. Pacific Fishery Management Council, Portland, OR.
Pacific Coast Groundfish	Sharpchin rockfish - Pacific Coast	Undefined	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2013	N/A	Cope, J., Dick, E.J., MacCall, A., Monk, M., Soper, B., and Wetzel, C. 2013. Data-moderate stock assessments for brown, China, copper, sharpchin,
Pacific Coast Groundfish	Shortbelly rockfish - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2007	2018	Field, J.C., E.J. Dick, and A.D. MacCall. Stock Assessment Model for the Shortbelly rockfish, <i>Sebastes jordani</i> , in the California Current. 2007. NOAA Technical Memorandum. NOAA-TM-NMFS-SWFSC-405.

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Groundfish	Shortspine thornyhead - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2013	2018	Taylor, I.G., And Stephens, A. 2013. Stock Assessment of Shortspine Thornyhead in 2013. SAFE.
Pacific Coast Groundfish	Spiny dogfish - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2011	2018	Gertseva, V and I. Taylor. 2011. Status of the spiny dogfish shark resource off the continental U.S. Pacific Coast in 2011. Gertseva, V and I. Taylor. 2011. Status of the spiny dogfish shark resource off the continental U.S. Pacific Coast in 2011. IN Stock Assessment and Fishery Evaluation: Stock Assessments and Rebuilding Analyses. Pacific Fishery Management Council, Portland, OR.
Pacific Coast Groundfish	Splitnose rockfish - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2009	2018	Gertseva, V., J. Cope, and D. Pearson. 2009. Status of the U.S. splitnose rockfish (<i>Sebastes diploproa</i>) resource in 2009. In: SAFE 2009
Pacific Coast Groundfish	Starry flounder - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if the current estimated spawning biomass (or spawning output) is less than 12.5% of the unfished level.	2005	2018	SAFE Report - available from http://www.pcouncil.org/groundfish/stock-assessments/

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Groundfish	Stripetail rockfish - Pacific Coast	Undefined	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2013	N/A	Cope, J., Dick, E.J., MacCall, A., Monk, M., Soper, B., and Wetzel, C. 2013. Data-moderate stock assessments for brown, China, copper, sharpchin, stripetail, and yellowtail rockfishes and English and rex soles in 2013
Pacific Coast Groundfish	Vermilion rockfish - California	Undefined	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	N/A	N/A	N/A
Pacific Coast Groundfish	Widow rockfish - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2019	2018	G. D. Adams, M. S. Kapur, K. McQuaw, S. Thurner, O.S. Hamel, A. Stephens & C. R. Wetzel. 2019. Stock Assessment Update: Status of Widow Rockfish (<i>Sebastes entomelas</i>) Along the U.S. West Coast in 2019. Pacific Fishery Management Council, Portland, Oregon.
Pacific Coast Groundfish	Yelloweye rockfish - Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2017	2018	Gertseva, V. and Cope, J.M. 2017. Stock assessment of the yelloweye rockfish (<i>Sebastes ruberrimus</i>) in state and Federal waters off California, Oregon and Washington. Pacific Fishery Management Council, Portland, OR. Available from http://www.pccouncil.org/groundfish/stock-assessments/

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Groundfish	Yellowtail rockfish - Northern Pacific Coast	Overfishing occurs when the catch exceeds the fishing mortality rate needed to produce the maximum sustainable yield (FMSY) on a continual basis. The MFMT is the value(s) of fishing mortality in the MSY control rule (varies by species), which is used to calculate the OFL.	The stock is overfished if its current estimated spawning biomass (or spawning output) is less than 25% of the unfished level, or if the current biomass is less than 50% of the biomass that would produce the maximum sustainable yield (MSY), if known.	2017	2018	Stephens, A., and Taylor, I.G. 2017. Status of Yellowtail Rockfish (<i>Sebastes flavidus</i>) Along the U.S. Pacific Coast in 2017. Pacific Fishery Management Council, 7700 Ambassador Place NE, Suite 200, Portland, OR 97220.
Pacific Coast Salmon	Chinook salmon - California Central Valley: Sacramento River Fall	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - California Central Valley: Sacramento River Spring	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - California Central Valley: Sacramento River Winter	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Columbia River Basin: Lower River Hatchery Fall	Hatchery stock - undefined	Hatchery stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Columbia River Basin: Lower River Hatchery Spring	Hatchery stock - undefined	Hatchery stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Columbia River Basin: Mid-River Bright Hatchery Fall	Hatchery stock - undefined	Hatchery stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Columbia River Basin: North Lewis River Fall	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Salmon	Chinook salmon - Columbia River Basin: Snake River Fall	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Columbia River Basin: Snake River Spring/Summer	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Columbia River Basin: Spring Creek Hatchery Fall	Hatchery stock - undefined	Hatchery stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Columbia River Basin: Upper River Bright Fall	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Columbia River Basin: Upper River Spring	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Columbia River Basin: Upper River Summer	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2019	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Columbia River Basin: Upper Willamette Spring	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Northern California Coast: California Coastal	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Salmon	Chinook salmon - Northern California Coast: Klamath River Fall	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Northern California Coast: Klamath River Spring	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2013	N/A	Review of 2012 Ocean Salmon Fisheries; Preseason Report III for 2013; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Northern California Coast: Smith River	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	N/A	N/A	N/A
Pacific Coast Salmon	Chinook salmon - Oregon Coast: Central and Northern Oregon	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Oregon Coast: Southern Oregon	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Puget Sound: Cedar River Summer/Fall	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Puget Sound: Eastern Strait of Juan de Fuca Summer/Fall	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Salmon	Chinook salmon - Puget Sound: Green River Summer/Fall	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Puget Sound: Mid Hood Canal Summer/Fall	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Puget Sound: Nisqually River Summer/Fall	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Puget Sound: Nooksack Spring Early	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Puget Sound: Puyallup Summer/Fall	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Puget Sound: Skagit Spring	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Puget Sound: Skagit Summer/Fall	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Puget Sound: Skokomish Summer/Fall	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Puget Sound: Snohomish Summer/Fall	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Puget Sound: Stillaguamish Summer/Fall	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Salmon	Chinook salmon - Puget Sound: White River Spring	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Washington Coast: Grays Harbor Fall	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Washington Coast: Grays Harbor Spring	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Washington Coast: Hoh Fall	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Washington Coast: Hoh Spring/Summer	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Washington Coast: Hoko Summer/Fall	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Salmon	Chinook salmon - Washington Coast: Queets Fall	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Washington Coast: Queets Spring/Summer	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Washington Coast: Quillayute Fall	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Washington Coast: Quillayute Spring/Summer	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Washington Coast: Quinault Fall Hatchery	Hatchery stock - undefined	Hatchery stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Washington Coast: Willapa Bay Fall Hatchery	Hatchery stock - undefined	Hatchery stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Chinook salmon - Washington Coast: Willapa Bay Fall Natural	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Salmon	Coho salmon - Oregon Production Index Area: Central California Coast	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Coho salmon - Oregon Production Index Area: Columbia River Early Hatchery	Hatchery stock - undefined	Hatchery stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Coho salmon - Oregon Production Index Area: Columbia River Late Hatchery	Hatchery stock - undefined	Hatchery stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Coho salmon - Oregon Production Index Area: Lower Columbia Natural	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Coho salmon - Oregon Production Index Area: Oregon Coast Hatchery	Hatchery stock - undefined	Hatchery stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Coho salmon - Oregon Production Index Area: Oregon Coast Natural	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Coho salmon - Oregon Production Index Area: Southern Oregon/Northern California Coast	ESA stock - undefined	ESA stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Coho salmon - Puget Sound: Hood Canal	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Salmon	Coho salmon - Puget Sound: Skagit	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Coho salmon - Puget Sound: Snohomish	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Coho salmon - Puget Sound: South Puget Sound Hatchery	Hatchery stock - undefined	Hatchery stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Coho salmon - Puget Sound: Stillaguamish	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Coho salmon - Washington Coast: Grays Harbor	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Coho salmon - Washington Coast: Hoh	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Coast Salmon	Coho salmon - Washington Coast: Queets	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Coho salmon - Washington Coast: Quillayute Fall	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Coho salmon - Washington Coast: Quillayute Summer Hatchery	Hatchery stock - undefined	Hatchery stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Coho salmon - Washington Coast: Quinault Hatchery	Hatchery stock - undefined	Hatchery stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Coho salmon - Washington Coast: Strait of Juan de Fuca	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Coho salmon - Washington Coast: Willapa Bay Hatchery	Hatchery stock - undefined	Hatchery stock - undefined	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Coho salmon - Washington Coast: Willapa Bay Natural	A stock will be considered subject to overfishing when the postseason estimate of Ft exceeds the MFMT, where the MFMT is generally defined as less than or equal to FMSY.	A stock will be considered overfished if the 3-year geometric mean of annual spawning escapements falls below the MSST, where MSST is generally defined as 0.5*SMSY or 0.75*SMSY, although there are some exceptions.	2018	N/A	Review of 2018 Ocean Salmon Fisheries; Preseason Report III for 2019; www.pcouncil.org
Pacific Coast Salmon	Pink salmon - Puget Sound	Undefined	Undefined	N/A	N/A	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Albacore - South Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	2015	N/A	Hoyle, S. , J. Hampton, and N. Davies. 2012. Stock Assessment of albacore tuna in the South Pacific Ocean. WCPFC-SC8-2012/SA-WP-04-REV1
Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Black marlin - Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	N/A	N/A	N/A
Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Blue marlin - Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	2013	N/A	STOCK ASSESSMENT OF BLUE MARLIN IN THE PACIFIC OCEAN IN 2013. International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean
Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Kawakawa - Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	N/A	N/A	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Longfin mako - North Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	N/A	N/A	N/A
Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Oceanic whitetip shark - Western and Central Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	N/A	N/A	N/A
Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Opah - Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	N/A	N/A	N/A
Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Pacific Other Tuna Relatives Complex	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	N/A	N/A	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Pomfrets (Bramidae) - Pacific	Overfishing occurs when F is greater than $FMSY \cdot B / c \cdot BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	N/A	N/A	N/A
Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Sailfish - Pacific	Overfishing occurs when F is greater than $FMSY \cdot B / c \cdot BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	N/A	N/A	N/A
Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Salmon shark - North Pacific	Overfishing occurs when F is greater than $FMSY \cdot B / c \cdot BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	N/A	N/A	N/A
Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Shortbill spearfish - Pacific	Overfishing occurs when F is greater than $FMSY \cdot B / c \cdot BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	N/A	N/A	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Silky shark - Western and Central Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	N/A	N/A	N/A
Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Snake mackerels (Gempylidae) - Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	N/A	N/A	N/A
Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Wahoo - Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	N/A	N/A	N/A
Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Western Pacific Squid Complex	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	N/A	N/A	N/A
Pacific Remote Island Areas Ecosystem	Pacific Remote Island Areas Black Precious Coral Complex	Undefined	Undefined	N/A	N/A	N/A
Pacific Remote Island Areas Ecosystem	Pacific Remote Island Areas Bottomfish Complex	Undefined	Undefined	N/A	N/A	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Pacific Remote Island Areas Ecosystem	Pacific Remote Island Areas Coral Reef Ecosystem Multi-species Complex	Undefined	Undefined	N/A	N/A	N/A
Pacific Remote Island Areas Ecosystem	Pacific Remote Island Areas Crustacean Complex	Undefined	Undefined	N/A	N/A	N/A
Pacific Remote Island Areas Ecosystem	Pacific Remote Island Areas Exploratory Area Precious Coral Complex	Undefined	Undefined	N/A	N/A	N/A
Pelagic Sargassum Habitat of the South Atlantic Region	Sargassum - Southern Atlantic Coast	Overfishing is defined as the rate of harvest which compromises the stock's ability to produce MSY	Overfished is defined a stock that falls below the MSST.	N/A	N/A	N/A
Queen Conch Resources of Puerto Rico and the United States Virgin Islands	Queen conch - Caribbean	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	2009	2017	Caribbean Fisheries Data Evaluation http://www.sefsc.noaa.gov/sedar/download/CaribData_Final.pdf?pid=DOCUMENT
Red Drum Fishery of the Gulf of Mexico	Red drum - Gulf of Mexico	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	Undefined	2000	N/A	Status of the Red Drum Stocks of the Gulf of Mexico (Goodyear)

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	Caribbean Aquarium Trade Reef Fish Species Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	Caribbean Groupers	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	Caribbean Parrotfishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	2009	2017	SEDAR. 2009. Caribbean Fisheries Data Evaluation, SEDAR Procedures Workshop 3. http://sedarweb.org/docs/sar/CaribData_Final_0.pdf
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	Caribbean Snappers	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	Caribbean Tilefishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	Goliath grouper - Caribbean	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	2005	2017	Comprehensive Amendment to the Fishery Management Plans of the U.S. Caribbean.
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	Nassau grouper - Caribbean	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	2005	2017	Comprehensive Amendment to the Fishery Management Plans of the U.S. Caribbean.
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	Puerto Rico Angelfishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	Puerto Rico Boxfishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	Puerto Rico Goatfishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	Puerto Rico Grunts Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	Puerto Rico Jacks Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	Puerto Rico Scups and Porgies Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	Puerto Rico Squirrelfishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	Puerto Rico Surgeonfishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	Puerto Rico Triggerfishes and Filefishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	Puerto Rico Wrasses Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Croix Angelfishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	N/A	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Croix Boxfishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Croix Goatfishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Croix Grunts Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Croix Jacks Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Croix Scups and Porgies Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Croix Squirrelfishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	N/A	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Croix Surgeonfishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Croix Triggerfishes and Filefishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Croix Wrasses Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Thomas / St. John Angelfishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	N/A	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Thomas / St. John Boxfishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Thomas / St. John Goatfishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Thomas / St. John Grunts Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Thomas / St. John Jacks Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Thomas / St. John Scups and Porgies Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Thomas / St. John Squirrelfishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	N/A	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Thomas / St. John Surgeonfishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Thomas / St. John Triggerfishes and Filefishes Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands	St. Thomas / St. John Wrasses Complex	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	N/A	N/A
Reef Fish Resources of the Gulf of Mexico	Cubera snapper - Gulf of Mexico	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	Undefined	N/A	2018	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Reef Fish Resources of the Gulf of Mexico	Gag - Gulf of Mexico	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	A stock is overfished if the stock biomass level is less than 0.50 Bmsy or Bmsy proxy.	2014	2018	SEDAR. 2014. SEDAR 33 – Gulf of Mexico Gag Stock Assessment Report. SEDAR, North Charleston SC. 609 pp. Available online at: http://www.sefsc.noaa.gov/sedar/Sedar_Workshops.jsp?WorkshopNum=33
Reef Fish Resources of the Gulf of Mexico	Gray snapper - Gulf of Mexico	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	Undefined	N/A	2018	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Reef Fish Resources of the Gulf of Mexico	Gray triggerfish - Gulf of Mexico	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	A stock is overfished if the stock biomass level is less than 0.50 Bmsy or Bmsy proxy.	2015	2018	SEDAR 43 Final Assessment Report: Gulf of Mexico Gray Triggerfish.
Reef Fish Resources of the Gulf of Mexico	Greater amberjack - Gulf of Mexico	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	A stock is overfished if the stock biomass level is less than 0.50 Bmsy or Bmsy proxy.	2017	2018	SEDAR 33 Update http://sedarweb.org/docs/suar/GAJ_S33_2016%20Update_Final.pdf

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Reef Fish Resources of the Gulf of Mexico	Gulf of Mexico Deep Water Grouper Complex	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	Undefined	N/A	2018	N/A
Reef Fish Resources of the Gulf of Mexico	Gulf of Mexico Jacks Complex	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	Undefined	N/A	2018	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Reef Fish Resources of the Gulf of Mexico	Gulf of Mexico Mid-Water Snapper Complex	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	Undefined	N/A	2018	N/A
Reef Fish Resources of the Gulf of Mexico	Gulf of Mexico Shallow Water Grouper Complex	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	Undefined	N/A	N/A	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Reef Fish Resources of the Gulf of Mexico	Gulf of Mexico Tilefishes Complex	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	Undefined	N/A	2018	N/A
Reef Fish Resources of the Gulf of Mexico	Hogfish - Eastern Gulf of Mexico & Status	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing. MFMT is based on F30% SPR.	A stock is overfished if the stock biomass level is less than 0.50 Bmsy or Bmsy proxy.	2018	2018	SEDAR. 2018. Stock Assessment of Hogfish in the West Florida shelf stock 1986-2016. SEDAR 37 Update Assessment. North Charleston SC. 211 pp. available online at: http://sedarweb.org/sedar-37u

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Reef Fish Resources of the Gulf of Mexico	Lane snapper - Gulf of Mexico	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing. MFMT is based on F30% SPR.	Undefined	N/A	2018	N/A
Reef Fish Resources of the Gulf of Mexico	Red grouper - Gulf of Mexico	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	A stock is overfished if the stock biomass level is less than 0.50 Bmsy or Bmsy proxy.	2019	N/A	http://sedarweb.org/sedar-61-gulf-mexico-red-grouper-final-stock-assessment-report

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Reef Fish Resources of the Gulf of Mexico	Red snapper - Gulf of Mexico	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	A stock is overfished if the stock biomass level is less than 0.50 Bmsy or Bmsy proxy.	2018	2018	http://sedarweb.org/docs/sar/S52_Final_SAR_v2.pdf
Reef Fish Resources of the Gulf of Mexico	Tilefish - Gulf of Mexico	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	Undefined	2011	N/A	SEDAR 22 Stock Assessment Report Gulf of Mexico Tilefish http://www.sefsc.noaa.gov/sedar/download/tilefish_SAR_FINAL.pdf?id=DOCUMENT

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Reef Fish Resources of the Gulf of Mexico	Vermilion snapper - Gulf of Mexico	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	A stock is overfished if the stock biomass level is less than 0.50 Bmsy or Bmsy proxy.	2016	2018	Goethel and Smith. 2016. Sedar 45 stock assessment: Gulf of Mexico vermilion snapper.
Reef Fish Resources of the Gulf of Mexico	Yellowedge grouper - Gulf of Mexico	The MFMT method will be used to determine overfishing for stocks or stock complexes which have stock assessments and estimates of current fishing mortality rates and maximum fishing mortality threshold only in years in which a stock assessment is conducted. For other years, and for stocks or stock complexes without stock assessments or without estimates of fishing mortality and maximum fishing mortality threshold, the OFL method will be used to determine overfishing.	Undefined	2010	N/A	http://sedarweb.org/docs/sar/YEG_final_SAR.pdf
Salmon Fisheries in the EEZ off the Coast of Alaska	Alaska Coho Salmon Assemblage	The Alaska coho salmon assemblage is subject to overfishing when the exploitation rate of any of the 4 indicator stocks is exceeded: Coho salmon - Auke Creeke Coho salmon - Berners River Coho salmon - Ford Arm Lake Coho salmon - Hugh Smith Lake	The Alaska coho salmon assemblage is overfished when adult spawner escapement (natural only) of any of the 4 indicator stocks is below the 50% MSY escapement goal from the most recent Tcoho years: Coho salmon - Auke Creeke Coho salmon - Berners River Coho salmon - Ford Arm Lake Coho salmon - Hugh Smith Lake	2017	N/A	Status of Salmon Stocks Under the FMP (Fisheries Management Plan for the Salmon Fisheries in the EEZ off the Coast of Alaska)

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Salmon Fisheries in the EEZ off the Coast of Alaska	Chinook salmon - Eastern North Pacific Far North Migrating	The stock is subject to overfishing when catch of adult spawners (hatchery + natural) exceeds the level associated with the 50% escapement goal.	The stock is overfished when adult spawner escapement (hatchery + natural) is below the 50% escapement goal from the most recent Tchin years.	2017	N/A	Status of Salmon Stocks Under the FMP (Fisheries Management Plan for the Salmon Fisheries in the EEZ off the Coast of Alaska)
Scallop Fishery off Alaska	Weathervane scallop - Alaska	Overfishing is defined as the catch corresponding to fishing at a rate equal to the MFMT is referred to as the "sustainable yield level"	A stock is overfished when it falls below its MSST, defined as the minimum stock size at which rebuilding to the MSY level would be expected to occur within 10 years if the stock were exploited at the MFMT.	2018	N/A	https://meetings.npfmc.org/CommentReview/DownloadFile?p=b06f5893-3047-4975-8389-22d17c250143.pdf&fileName=C2%20Scallop%20SAFE%202018.pdf
Shrimp Fishery of the Gulf of Mexico	Brown shrimp - Gulf of Mexico& Status	Overfishing occurs whenever the rate of removal is too high such that is jeopardizes the capacity of a stock or stock complex to produce the MSY on a continuing basis.	A stock or stock complex is considered overfished when its biomass has declined below the capacity of the stock or stock complex to produce MSY on a continuing basis.	2018	N/A	Hart, R. A. 2017. Stock assessment Update of brown shrimp (<i>Farfantepenaeus aztecus</i>) in the US Gulf of Mexico for 2016.
Shrimp Fishery of the Gulf of Mexico	Pink shrimp - Gulf of Mexico& Status	Overfishing occurs whenever the rate of removal is too high such that is jeopardizes the capacity of a stock or stock complex to produce the MSY on a continuing basis.	A stock or stock complex is considered overfished when its biomass has declined below the capacity of the stock or stock complex to produce MSY on a continuing basis.	2018	N/A	Hart, R. A. 2017. Stock assessment update for pink shrimp (<i>Farfantepenaeus duorarum</i>) in the US Gulf of Mexico for 2016.
Shrimp Fishery of the Gulf of Mexico	Royal red shrimp - Gulf of Mexico	Overfishing occurs whenever the rate of removal is too high such that is jeopardizes the capacity of a stock or stock complex to produce the MSY on a continuing basis.	A stock or stock complex is considered overfished when its biomass has declined below the capacity of the stock or stock complex to produce MSY on a continuing basis.	2017	N/A	Hart, R.A. 2017
Shrimp Fishery of the Gulf of Mexico	White shrimp - Gulf of Mexico& Status	Overfishing occurs whenever the rate of removal is too high such that is jeopardizes the capacity of a stock or stock complex to produce the MSY on a continuing basis.	A stock or stock complex is considered overfished when its biomass has declined below the capacity of the stock or stock complex to produce MSY on a continuing basis.	2018	N/A	Hart, R. A. 2017. Stock assessment update for white shrimp (<i>Litopenaeus aztecus</i>) in the US Gulf of Mexico for 2016.
Shrimp Fishery of the South Atlantic Region	Brown rock shrimp - Southern Atlantic Coast& Status	Overfishing (MFMT) is a fishing mortality rate that diminishes the stock below the designated MSY stock abundance (BMSY) for two consecutive years.	A stock is overfished if it falls below the MSST. MSST is established with two thresholds: (1) if the stock diminishes to 1/2 MSY abundance (1/2 BMSY) in one year, or (b) if the stock is diminished below MSY abundance (BMSY) for two consecutive years.	2018	N/A	Status of Rock Shrimp in the South Atlantic, Rick Hart, 2018.

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Shrimp Fishery of the South Atlantic Region	Brown shrimp - Southern Atlantic Coast & Status	Overfishing (MFMT) is a fishing mortality rate that diminishes the stock below the designated MSY stock abundance (BMSY) for two consecutive years.	A stock is overfished if it falls below the MSST. MSST is established with two thresholds: (1) if the stock diminishes to 1/2 MSY abundance (1/2 BMSY) in one year, or (b) if the stock is diminished below MSY abundance (BMSY) for two consecutive years.	2018	N/A	Status of Brown Shrimp in the South Atlantic, Rick Hart, 2018.
Shrimp Fishery of the South Atlantic Region	Pink shrimp - Southern Atlantic Coast & Status	Overfishing (MFMT) is a fishing mortality rate that diminishes the stock below the designated MSY stock abundance (BMSY) for two consecutive years.	A stock is overfished if it falls below the MSST. MSST is established with two thresholds: (1) if the stock diminishes to 1/2 MSY abundance (1/2 BMSY) in one year, or (b) if the stock is diminished below MSY abundance (BMSY) for two consecutive years.	2018	N/A	Status of Pink Shrimp in the South Atlantic, Rick Hart, 2018.
Shrimp Fishery of the South Atlantic Region	White shrimp - Southern Atlantic Coast & Status	Overfishing (MFMT) is a fishing mortality rate that diminishes the stock below the designated MSY stock abundance (BMSY) for two consecutive years.	A stock is overfished if it falls below the MSST. MSST is established with two thresholds: (1) if the stock diminishes to 1/2 MSY abundance (1/2 BMSY) in one year, or (b) if the stock is diminished below MSY abundance (BMSY) for two consecutive years.	2018	N/A	Status of White Shrimp in the South Atlantic, Rick Hart, 2018.
Snapper-Grouper Fishery of the South Atlantic Region	Atlantic spadefish - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = FMSY.	A stock is overfished if the stock is less than the MSST, where MSST = max(0.5, 1-M)BMSY.	N/A	N/A	N/A
Snapper-Grouper Fishery of the South Atlantic Region	Bar jack - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = FMSY.	A stock is overfished if the stock is less than the MSST, where MSST = max(0.5, 1-M)BMSY.	N/A	N/A	N/A
Snapper-Grouper Fishery of the South Atlantic Region	Black sea bass - Southern Atlantic Coast	If either the MFMT (during an assessment year) or the OFL method (during a non-assessment year) is exceeded, the stock will be considered to be undergoing overfishing.	A stock is overfished if the stock is less than the MSST, where MSST = max(0.5, 1-M)BMSY.	2018	2018	SEDAR 56 Stock Assessment Report, South Atlantic Black Sea Bass, April 2018, http://sedarweb.org/docs/sar/S56_SA_BSB_SAR_FINAL_4.6.2018.pdf

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Snapper-Grouper Fishery of the South Atlantic Region	Blueline tilefish - Southern Atlantic Coast	Overfishing occurs if: a) the fishing mortality rate exceeds the Fmsy or Fmsy proxy only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed. Fmsy or Fmsy proxy are determined from the latest stock assessment.	A stock is overfished if the stock size less than MSST. $MSST = SSBMSY(0.75)$.	2017	2018	SEDAR. 2017. SEDAR 50 – Atlantic Blueline Tilefish Assessment Report. SEDAR, North Charleston SC. 542 pp. http://sedarweb.org/docs/sar/S50_AtIBLT_SAR_10.11.2017_FINALcorrected.pdf
Snapper-Grouper Fishery of the South Atlantic Region	Gag - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = FMSY.	A stock is overfished if the stock size less than MSST. $MSST = SSBMSY(0.75)$.	2014	2018	http://www.sefsc.noaa.gov/sedar/download/SA_GagUpdate2014__4.11.2014%20-%20Copy.pdf?id=DOCUMENT
Snapper-Grouper Fishery of the South Atlantic Region	Gray triggerfish - Southern Atlantic Coast	If either the MFMT (during an assessment year) or the OFL method (during a non-assessment year) is exceeded, the stock will be considered to be undergoing overfishing.	A stock is overfished if the stock is less than the MSST, where $MSST = \max(0.5, 1-M)BMSY$.	2001	N/A	Trends in Catch Data and Estimated Static SPR Values for Fifteen Species of Reef Fish Landed Along the Southeastern United States (Potts and Brennan)
Snapper-Grouper Fishery of the South Atlantic Region	Greater amberjack - Southern Atlantic Coast	If either the MFMT (during an assessment year) or the OFL method (during a non-assessment year) is exceeded, the stock will be considered to be undergoing overfishing.	A stock is overfished if the stock size less than MSST. $MSST = SSBMSY(0.75)$.	2008	2017	SEDAR 15 Stock Assessment Report 2 (SAR 2) South Atlantic Greater Amberjack Peer Review Document (to appear on SEDAR website).
Snapper-Grouper Fishery of the South Atlantic Region	Hogfish - Carolinas	Overfishing is defined as an F that exceeds FMSY or the FMSY proxy.	A stock is overfished if the stock size less than MSST. $MSST = SSBMSY(0.75)$.	2014	N/A	SEDAR 37 Final Stock Assessment Report: Southeastern U.S. Hogfish
Snapper-Grouper Fishery of the South Atlantic Region	Hogfish - Southeast Florida	If either the MFMT (during an assessment year) or the OFL method (during a non-assessment year) is exceeded, the stock will be considered to be undergoing overfishing.	A stock is overfished if the stock size less than MSST. $MSST = SSBMSY(0.75)$.	2014	2018	SEDAR 37 Final Stock Assessment Report: Southeastern U.S. Hogfish
Snapper-Grouper Fishery of the South Atlantic Region	Nassau grouper - Southern Atlantic Coast / Gulf of Mexico	Overfishing is defined as an F that exceeds MFMT = FMSY.	A stock is overfished if the stock is less than the MSST, where $MSST = \max(0.5, 1-M)BMSY$.	1999	N/A	Not available

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Snapper-Grouper Fishery of the South Atlantic Region	Red grouper - Southern Atlantic Coast	Overfishing occurs if: a) the fishing mortality rate exceeds the Fmsy or Fmsy proxy only in the year the stock is assessed; and b) catch exceeds the OFL in all other years when the stock is not assessed. Fmsy or Fmsy proxy are determined from the latest stock assessment.	A stock is overfished if the stock size less than MSST. $MSST = SSBMSY(0.75)$.	2017	2018	SEDAR. 2017. SEDAR 53 - South Atlantic Red Grouper Assessment Report. SEDAR, North Charleston SC. 159 pp, available online at: http://sedarweb.org/sedar-53 .
Snapper-Grouper Fishery of the South Atlantic Region	Red porgy - Southern Atlantic Coast	If either the MFMT (during an assessment year) or the OFL method (during a non-assessment year) is exceeded, the stock will be considered to be undergoing overfishing.	A stock is overfished if the stock size less than MSST. $MSST = SSBMSY(0.75)$.	2012	2018	Stock Assessment of Red Porgy off the Southeastern United States. Sedar Update Assessment. (http://www.sefsc.noaa.gov/sedar/download/SEDAR01_red.porgy.2012update.pdf?pid=DOCUMENT)
Snapper-Grouper Fishery of the South Atlantic Region	Red snapper - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = FMSY.	A stock is overfished if the stock size less than MSST. $MSST = SSBMSY(0.75)$.	2016	N/A	SEDAR. 2016. SEDAR 41 - South Atlantic red snapper Stock Assessment Report. SEDAR, North Charleston SC. 500 pp.: http://sedarweb.org/docs/sar/S41_SA_RS_SAR_Final_4.19.2016.pdf
Snapper-Grouper Fishery of the South Atlantic Region	Scamp - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = FMSY.	A stock is overfished if the stock is less than the MSST, where $MSST = \max(0.5, 1-M)BMSY$.	1997	N/A	Population Assessment of the Scamp, <i>Mycteroperca phenax</i> , from the Southeastern United States (Manooch et al.)
Snapper-Grouper Fishery of the South Atlantic Region	Snowy grouper - Southern Atlantic Coast	Overfishing is defined as an F that exceeds MFMT = FMSY.	A stock is overfished if the stock is less than the MSST, where $MSST = \max(0.5, 1-M)BMSY$.	2014	2018	http://www.sefsc.noaa.gov/sedar/download/S36_Std_SA_SnowyGrouper_SAR_Final_1.10.2014.pdf?pid=DOCUMENT
Snapper-Grouper Fishery of the South Atlantic Region	South Atlantic Deepwater Snapper-Grouper Complex	Undefined	A stock is overfished if the stock is less than the MSST, where $MSST = \max(0.5, 1-M)BMSY$.	N/A	N/A	N/A
Snapper-Grouper Fishery of the South Atlantic Region	South Atlantic Grunts Complex	Undefined	A stock is overfished if the stock is less than the MSST, where $MSST = \max(0.5, 1-M)BMSY$.	N/A	N/A	N/A
Snapper-Grouper Fishery of the South Atlantic Region	South Atlantic Jacks Complex	Undefined	A stock is overfished if the stock is less than the MSST, where $MSST = \max(0.5, 1-M)BMSY$.	N/A	N/A	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Snapper-Grouper Fishery of the South Atlantic Region	South Atlantic Porgy Complex	Undefined	A stock is overfished if the stock is less than the MSST, where $MSST = \max(0.5, 1-M)BMSY$.	N/A	N/A	N/A
Snapper-Grouper Fishery of the South Atlantic Region	South Atlantic Shallow Water Snapper-Grouper Complex	Undefined	A stock is overfished if the stock is less than the MSST, where $MSST = \max(0.5, 1-M)BMSY$.	N/A	N/A	N/A
Snapper-Grouper Fishery of the South Atlantic Region	South Atlantic Snappers Complex	Undefined	A stock is overfished if the stock is less than the MSST, where $MSST = \max(0.5, 1-M)BMSY$.	N/A	N/A	N/A
Snapper-Grouper Fishery of the South Atlantic Region	Speckled hind - Southern Atlantic Coast	Overfishing is defined as an F that exceeds $MFMT = FMSY$.	A stock is overfished if the stock is less than the MSST, where $MSST = \max(0.5, 1-M)BMSY$.	2001	N/A	Trends in Catch Data and Estimated Static SPR Values for Fifteen Species of Reef Fish Landed Along the Southeastern United States (Potts and Brennan)
Snapper-Grouper Fishery of the South Atlantic Region	Tilefish - Southern Atlantic Coast	If either the MFMT (during an assessment year) or the OFL method (during a non-assessment year) is exceeded, the stock will be considered to be undergoing overfishing.	A stock is overfished if the stock is less than the MSST, where $MSST = 0.75*SSBMSY$.	2016	2018	SEDAR. 2016. Stock Assessment of Golden Tilefish off the Southeastern United States: 2016 SEDAR Update Assessment. SEDAR, North Charleston SC. 112 pp.: http://sedarweb.org/docs/suar/GoldenTilefish2016UpdateFINALaltproj_4.6.2016.pdf
Snapper-Grouper Fishery of the South Atlantic Region	Vermilion snapper - Southern Atlantic Coast	If either the MFMT (during an assessment year) or the OFL method (during a non-assessment year) is exceeded, the stock will be considered to be undergoing overfishing.	A stock is overfished if the stock size less than MSST. $MSST = SSBMSY(0.75)$.	2018	2018	SEDAR 55 Stock Assessment Report - South Atlantic Vermilion Snapper. April 2018. (http://sedarweb.org/docs/sar/S55_SA_VS_SAR_FINAL_4.16.2018.pdf)
Snapper-Grouper Fishery of the South Atlantic Region	Warsaw grouper - Southern Atlantic Coast	Overfishing is defined as an F that exceeds $MFMT = FMSY$.	A stock is overfished if the stock is less than the MSST, where $MSST = \max(0.5, 1-M)BMSY$.	2001	N/A	Summary of Fishery Data and Population Status of Warsaw Grouper and Speckled Hind Landed in the U.S. South Atlantic (Potts)
Snapper-Grouper Fishery of the South Atlantic Region	Wreckfish - Southern Atlantic Coast	Overfishing is defined as an F that exceeds $MFMT = FMSY$.	A stock is overfished if the stock is less than the MSST, where $MSST = \max(0.5, 1-M)BMSY$.	2014	N/A	Rademeyer and Butterworth 2014

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Snapper-Grouper Fishery of the South Atlantic Region / Reef Fish Resources of the Gulf of Mexico	Black grouper - Southern Atlantic Coast / Gulf of Mexico & Status	If either the MFMT (during an assessment year) or the OFL method (during a non-assessment year) is exceeded, the stock will be considered to be undergoing overfishing.	A stock is overfished if the stock size less than MSST. $MSST = SSBMSY(0.75)$.	2010	N/A	SEDAR 19 Gulf of Mexico and South Atlantic Black Grouper Report March 2010. http://www.sefsc.noaa.gov/sedar/Sedar_Workshops.jsp?WorkshopNum=19
Snapper-Grouper Fishery of the South Atlantic Region / Reef Fish Resources of the Gulf of Mexico	Goliath grouper - Southern Atlantic Coast / Gulf of Mexico	Overfishing is defined as an F that exceeds MFMT = FMSY.	A stock is overfished if the stock is less than the MSST, where $MSST = \max(0.5, 1-M)BMSY$.	2004	N/A	The Goliath Grouper in Southern Florida: Assessment Review and Advisory Report (SEDAR 6: Kingsley 2004).
Snapper-Grouper Fishery of the South Atlantic Region / Reef Fish Resources of the Gulf of Mexico	Mutton snapper - Southern Atlantic Coast / Gulf of Mexico & Status	If either the MFMT (during an assessment year) or the OFL method (during a non-assessment year) is exceeded, the stock will be considered to be undergoing overfishing.	A stock is overfished if the stock is less than the MSST, where $MSST = \max(0.5, 1-M)BMSY$.	2015	N/A	2015 Update, SEDAR 15A South Atlantic and Gulf of Mexico Mutton Snapper; http://sedarweb.org/2015-update-sedar-15a-south-atlantic-and-gulf-mexico-mutton-snapper
Snapper-Grouper Fishery of the South Atlantic Region / Reef Fish Resources of the Gulf of Mexico	Yellowtail snapper - Southern Atlantic Coast / Gulf of Mexico & Status	If either the MFMT (during an assessment year) or the OFL method (during a non-assessment year) is exceeded, the stock will be considered to be undergoing overfishing.	A stock is overfished if the stock is less than the MSST, where $MSST = \max(0.5, 1-M)BMSY$.	2012	2017	http://www.sefsc.noaa.gov/sedar/download/YTS_FWC_SAR.pdf?id=DOCUMENT
Spiny Dogfish	Spiny dogfish - Atlantic Coast	Overfishing occurs when F exceeds Fmsy or a reasonable proxy thereof.	The stock is overfished when the biomass is less than $\frac{1}{2}Bmsy$ or a reasonable proxy thereof.	2018	N/A	Update on Status of Spiny Dogfish in 2015 and projected harvests at Fmsy proxy and Pstar of 40%" (by P. Rago, K. Sosebee, Aug. 26, 2015) Submitted to MAFMC SSC Sept., 2015.
Spiny Lobster Fishery of Puerto Rico and the U.S. Virgin Islands	Caribbean spiny lobster - Puerto Rico	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
Spiny Lobster Fishery of Puerto Rico and the U.S. Virgin Islands	Caribbean spiny lobster - St. Croix	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Spiny Lobster Fishery of Puerto Rico and the U.S. Virgin Islands	Caribbean spiny lobster - St. Thomas / St. John	Overfishing occurs when annual catches exceed the OFL (equal to MSY proxy), unless NMFS SEFSC (in consultation with the CFMC and its SSC) determines the overage occurred because data collection/monitoring improved, rather than because catches actually increased.	Overfished is defined as a stock size less than MSST is set = $BMSY(1-c)$; where c = the natural mortality rate (M) or 0.50, whichever is smaller.	N/A	2017	N/A
Spiny Lobster in the Gulf of Mexico and South Atlantic	Caribbean spiny lobster - Southern Atlantic Coast / Gulf of Mexico	Overfishing exist when the eggs per recruit ratio of the exploited population to the unexploited population is reduced below 5% and recruitment of small lobsters into the fishery has declined for three consecutive fishing years.	Undefined	2005	N/A	http://sedarweb.org/docs/sar/S8SAR3_SEUSlobster_Final.pdf
Summer Flounder, Scup and Black Sea Bass	Black sea bass - Mid-Atlantic Coast	Overfishing occurs when F exceeds $FMSY$ or $FMSY$ proxy.	The stock is overfished when the stock size is less than $\frac{1}{2}$ of the $BMSY$ or $BMSY$ proxy.	2019	N/A	https://www.fisheries.noaa.gov/new-england-mid-atlantic/northeast-stock-assessment-documents
Summer Flounder, Scup and Black Sea Bass	Scup - Atlantic Coast	Overfishing occurs when F exceeds $FMSY$ or $FMSY$ proxy.	The stock is overfished when the stock size is less than $\frac{1}{2}$ of the $BMSY$ or $BMSY$ proxy.	2019	N/A	https://www.fisheries.noaa.gov/new-england-mid-atlantic/northeast-stock-assessment-documents
Summer Flounder, Scup and Black Sea Bass	Summer flounder - Mid-Atlantic Coast	Overfishing occurs when F exceeds $FMSY$ or $FMSY$ proxy.	The stock is overfished when the stock size is less than $\frac{1}{2}$ of the $BMSY$ or $BMSY$ proxy.	2019	N/A	https://www.fisheries.noaa.gov/new-england-mid-atlantic/northeast-stock-assessment-documents
Tilefish	Blueline tilefish - Mid-Atlantic Coast	Undefined	Undefined	N/A	N/A	N/A
Tilefish	Tilefish - Mid-Atlantic Coast	Overfishing occurs when F exceeds $FMSY$.	The stock is overfished when the total stock biomass falls below the minimum biomass threshold ($BTHRESHOLD$) of $\frac{1}{2}BMSY$.	2017	N/A	Golden tilefish, <i>Lopholatilus chamaeleonticeps</i> , stock assessment update through 2016 in the Middle Atlantic - Southern New England Region. Paul Nitschke NEFSC. Feb. 2017

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
U.S. West Coast Fisheries for Highly Migratory Species / Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Albacore - North Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	2017	N/A	Stock assessment of albacore tuna in the North Pacific Ocean in 2017. ISC ALBWG http://isc.fra.go.jp/pdf/ISC17/ISC17_Annex12-
U.S. West Coast Fisheries for Highly Migratory Species / Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Bigeye thresher - Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	N/A	N/A	N/A
U.S. West Coast Fisheries for Highly Migratory Species / Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Bigeye tuna - Eastern Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	2017	N/A	" http://www.iattc.org/Meetings/Meetings2017/SAC08/PDFs/SAC-08-04a-BET-Assessment-of-bigeye-2016.pdf ; Status of bigeye tuna in the eastern Pacific Ocean in 2016 and outlook for the future. A. Alexandre Aires-da-Silva, C. Minte-Vera and M. N. Maunder Document SAC-08-04a, 8th meeting of the Scientific Advisory Committee of the IATTC, 2017"
U.S. West Coast Fisheries for Highly Migratory Species / Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Bigeye tuna - Western and Central Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	2017	N/A	Summary report of the thirteen regular session of the Scientific Committee of the WCPFC

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
U.S. West Coast Fisheries for Highly Migratory Species / Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Blue shark - North Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	2014	N/A	ISC Shark Working group. 2017. Stock assessment and future projections of blue shark in the North Pacific Ocean through 2015. https://www.wcpfc.int/file/154964/download?token=PzboZS9K
U.S. West Coast Fisheries for Highly Migratory Species / Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Dolphinfish - Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	N/A	N/A	N/A
U.S. West Coast Fisheries for Highly Migratory Species / Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Pacific bluefin tuna - Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	2018	N/A	ISC 2018. Stock Assessment of Pacific Bluefin Tuna 2018. PBFWG. http://isc.fra.go.jp/pdf/ISC18/ISC_18_ANNEX_14_Pacific_Bluefin_Tuna_Stock_Assessment_2018_FINAL.pdf
U.S. West Coast Fisheries for Highly Migratory Species / Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Pelagic thresher - North Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	N/A	N/A	N/A

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
U.S. West Coast Fisheries for Highly Migratory Species / Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Shortfin mako - North Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	2018	N/A	Stock Assessment of Shortfin Mako Shark in the North Pacific Ocean Through 2016. WCPFC-SC14-2018/SA-WP-11
U.S. West Coast Fisheries for Highly Migratory Species / Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Skipjack tuna - Eastern Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	2004	N/A	IATTC, Maunder & Harley 2004
U.S. West Coast Fisheries for Highly Migratory Species / Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Skipjack tuna - Western and Central Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	2014	N/A	Joel Rice, Shelton Harley, Nick Davies and John Hampton, WCPFC-SC10-2014/SA-WP-05
U.S. West Coast Fisheries for Highly Migratory Species / Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Striped marlin - Eastern Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	2010	N/A	Michael G. Hinton, Mark N. Maunder, and Alexandre Aires-da-Silva. 2010. ASSESSMENT OF STRIPED MARLIN IN THE EASTERN PACIFIC OCEAN IN 2008 AND OUTLOOK FOR THE FUTURE. IATTC document SAC-01-10

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
U.S. West Coast Fisheries for Highly Migratory Species / Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Striped marlin - Western and Central North Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	2015	N/A	ISC (2015) Stock assessment update for striped marlin (<i>Kajikia audax</i>) in the Western and Central North Pacific Ocean through 2013, Report of the Billfish Working Group Stock Assessment Workshop. 15-20, July, Kona, Hawaii. ISC/SAR/MLS/2015. Available at: http://isc.ac.affrc.go.jp/pdf/ISC15pdf/Annex%2011_WCNPO_STM_ASSESSMENT_REPORT_2015_10Aug15.pdf
U.S. West Coast Fisheries for Highly Migratory Species / Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Swordfish - Eastern Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	2014	N/A	ISC. 2014. North Pacific Swordfish (<i>Xiphias gladius</i>) Stock Assessment in 2014. Report of the Billfish Working Group. International Scientific Committee for Tuna and Tuna-Like Species in the North Pacific. ISC/14/Plenary/Annex 9.
U.S. West Coast Fisheries for Highly Migratory Species / Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Swordfish - Western and Central North Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	2018	N/A	Stock Assessment for Swordfish (<i>Xiphias gladius</i>) in the Western and Central North Pacific Ocean through 2016. WCPFC-SC14-2018/ SA-WP-07

National Marine Fisheries Service - 2019 Status of U.S. Fisheries

FMP	Stock/Stock Complex	Overfishing Criteria Definition in FMP	Overfished Criteria Definition in FMP	Asmt Year	Catch/OFL Year	Stock Assessment Citation
U.S. West Coast Fisheries for Highly Migratory Species / Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Thresher shark - North Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	2018	N/A	Teo, S., Garcia Rodriguez, E. and Sosa-Nishizaki, O. 2018. Status of Common Thresher Sharks, <i>Alopias vulpinus</i> , Along the West Coast of North America: Updated Stock Assessment Based on Alternative Life History. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SWFSC-595. https://doi.org/10.7289/V5/TM-SWFSC-595
U.S. West Coast Fisheries for Highly Migratory Species / Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Yellowfin tuna - Eastern Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	2018	N/A	Status of Yellowfin tuna in the EPO in 2017 and outlook for the future. Minte-Vera, Maunder, Aires-da-Silva. IATTC Doc SAC-09-06; http://www.iattc.org/Meetings/Meetings2018/SAC-09/PDFs/Docs/_English/SAC-09-06-EN_Yellowfin-tuna-assessment-for-2017.pdf
U.S. West Coast Fisheries for Highly Migratory Species / Pacific Pelagic Fisheries of the Western Pacific Region Ecosystem	Yellowfin tuna - Western and Central Pacific	Overfishing occurs when F is greater than $FMSY B / c BMSY$ if the stock biomass (B) is less than or equal to c BMSY, or when F is greater than FMSY if the stock biomass (B) is greater than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	A stock is overfished when stock biomass (B) is less than c BMSY, where c is equal to the greater of 1 minus the natural mortality rate (M) and 0.5.	2014	N/A	Nick Davies, Shelton Harley, John Hampton, Nick Davies, Shelton Harley, John Hampton, and Sam McKechnie, WCPFC-SC10-2014/SA-WP-04