



Butterfish Fishery Information Document

April 2019

This Fishery Information Document provides a brief overview of the biology, stock condition, management system, and fishery performance for butterfish with an emphasis on 2018. Data sources for Fishery Information Documents are generally from unpublished National Marine Fisheries Service (NMFS) survey, dealer, vessel trip report (VTR), permit, and Marine Recreational Information Program (MRIP) databases and should be considered preliminary. For more resources, including previous Fishery Information Documents, please visit <http://www.mafmc.org/msb>.

Key Facts

- 2018 landings were 55% less than 2017 and have generally been variable and well below the quota in recent years.
- When last assessed the stock was not overfished or experiencing overfishing (2016 data).
- Considerable variability is expected in abundance, availability, and landings.

Basic Biology

Atlantic butterfish is a semi-pelagic/semi-demersal schooling fish species primarily distributed between Nova Scotia, Canada and Florida. They are most abundant from the Gulf of Maine to Cape Hatteras and are fast-growing, short-lived, and form loose schools. They winter near the edge of the continental shelf in the Middle Atlantic Bight and migrate inshore in the spring into Mid-Atlantic, southern New England, and Gulf of Maine waters. During the summer, butterfish occur over the entire mid-Atlantic shelf from sheltered bays and estuaries out to about 200 m. In late fall, butterfish move southward and offshore in response to falling water temperatures.

Butterfish are short-lived and grow rapidly; few individuals live beyond 3 years and most are sexually mature at 1-2 years of age. The maximum age reported is 6 years. Juvenile butterfish range from 16 mm to about 120 mm. During their first year, they grow to 76-127 mm, or about half their adult size. Early-spawned individuals are 76-102 mm in the fall; late-spawned individuals are 51-76 mm in the fall and 76-127 mm the following spring. Adult butterfish range from about 120 mm to 305mm with an average length of 150-230 mm. See <https://www.nefsc.noaa.gov/nefsc/habitat/efh/> for more life history information.

Status of the Stock

The status of butterfish is not overfished (above target biomass) with no overfishing occurring according to the last assessment update (available at <http://www.mafmc.org/ssc-meetings/2017/may-17-18>). The assessment update found that butterfish was at 141% of the target biomass in 2016. However, trawl survey information indicated recent recruitment had been poor, so biomass was expected to decline to below the target in 2017, but not below the overfished threshold. Fishing mortality appeared very low in recent years, so the decline was not a result of overfishing but rather poor recruitment. If recruitment returns to average levels, then the stock is predicted to build above the biomass target by 2020. Butterfish recruitment is variable by nature of the species.

Management System and Fishery Performance

Management

The Mid-Atlantic Fishery Management Council (the Council or MAFMC) established management of butterfish in 1978 and the management unit includes all federal East Coast waters.

Limited access permitted commercial vessels can fish year-round, subject to applicable gear requirements. Trip limits are triggered when the quota is approached. Incidental permits are limited to 600 pounds per trip. Additional summary regulatory information is available at <https://www.greateratlantic.fisheries.noaa.gov/sustainable/species/msb/index.html#el111022>.

The quota for 2019 is 20,061 metric tons (MT) and is proposed to increase to 23,752 MT in 2020 via previously-set multi-year specifications.

Recreational landings are negligible. There are no recreational regulations except for party/charter vessel permits and reporting.

Commercial Fishery

Figure 1 describes butterfish catch 1965-2017 and highlights the early foreign fishery landings before foreign fishing was phased out. Figures 2-4 describe domestic landings, revenues, and prices since 1982.

Table 1 describes 2018 butterfish landings by state, and Table 2 describes 2018 butterfish landings by gear type.

Figures 5 and 6 describe the location of recent butterfish landings 2012-2017. Table 3 provides preliminary information on butterfish landings by statistical area for 2018.

Previous input from the MSB Advisory Panel has indicated that the butterfish fishery is strongly limited by relatively low demand.

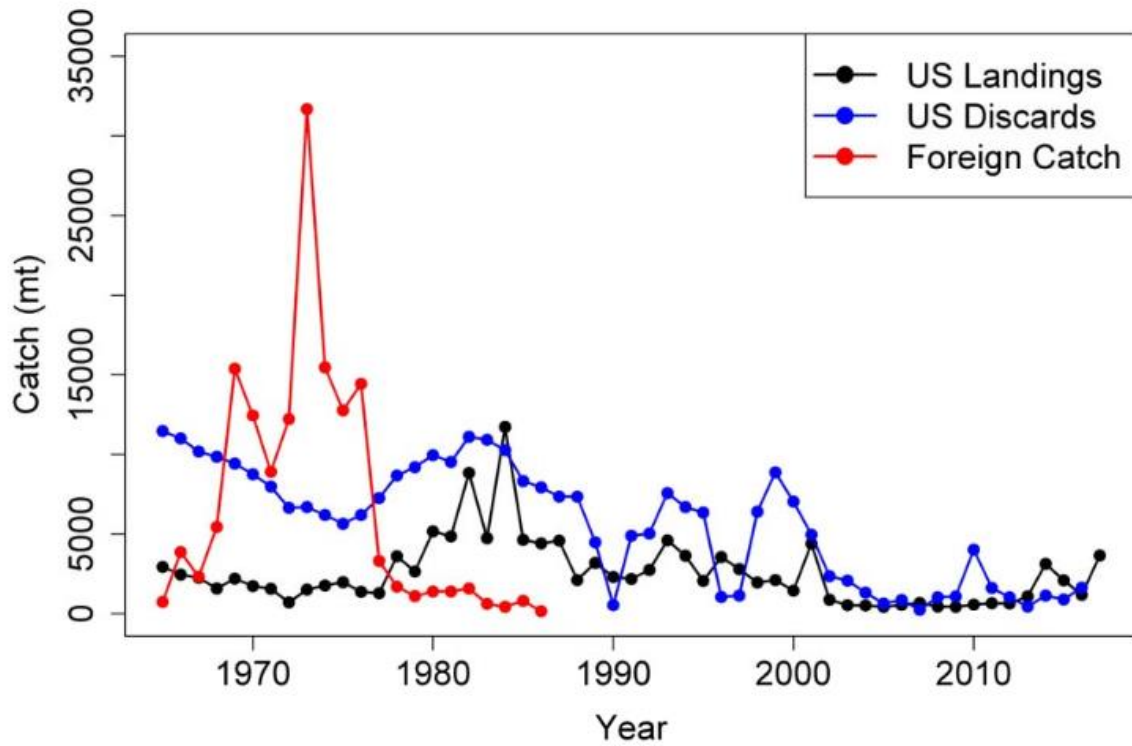


Figure 1. US landings, US discards, and foreign catch of butterfish, 1965–2017. Source: NEFSC Butterfish Data update, available at <http://www.mafmc.org/ssc-meetings/2018/may-8-9>.

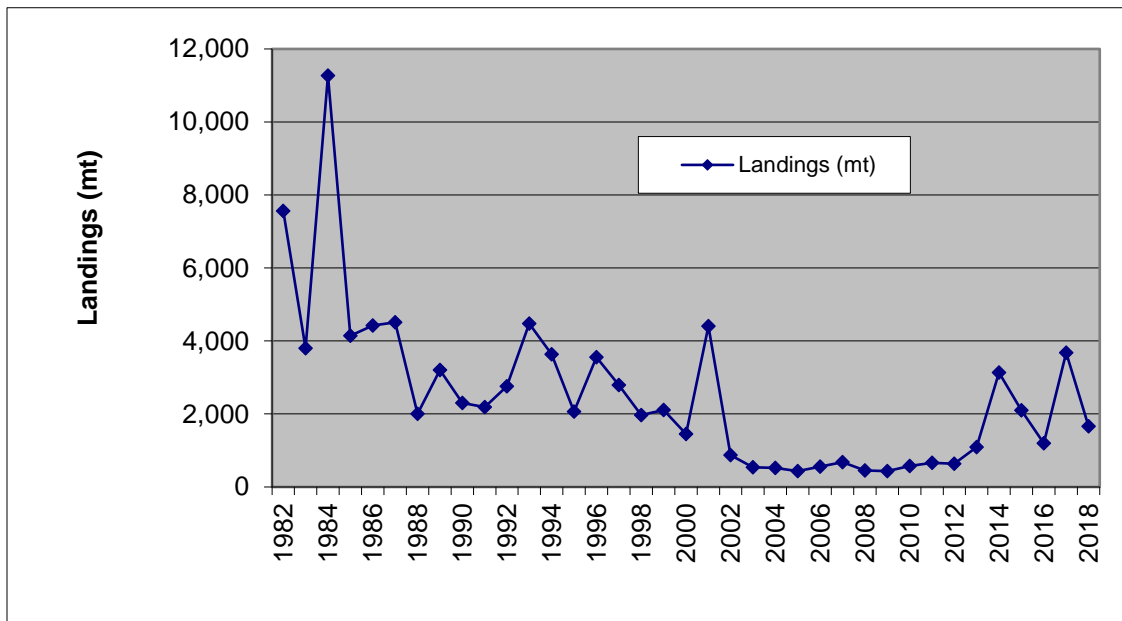


Figure 2. US butterfish landings 1982-2018. Source: NMFS unpublished dealer data.

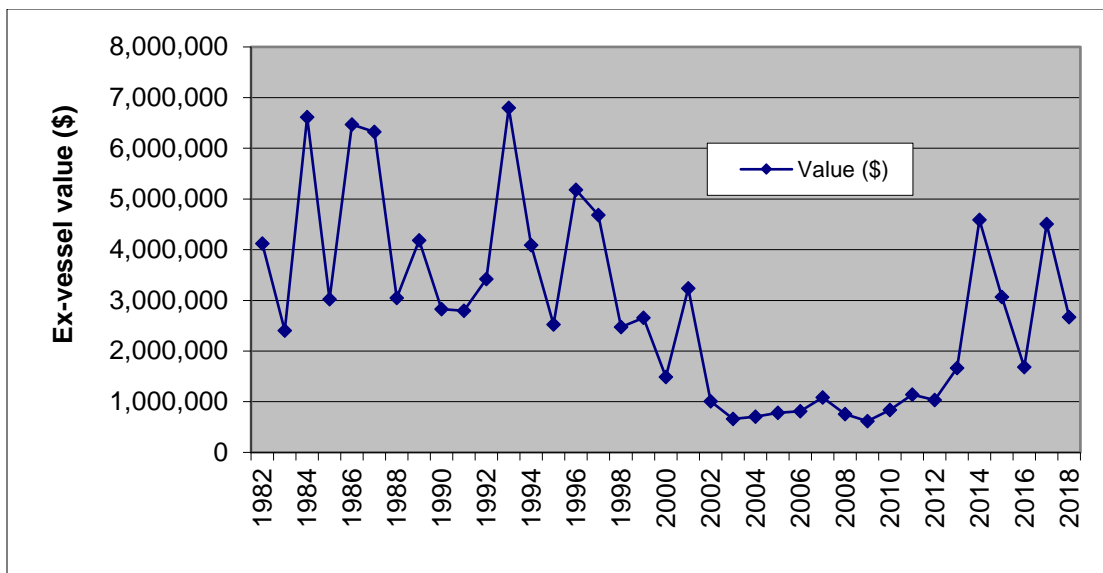


Figure 3. US butterfish landings nominal ex-vessel revenues 1982-2018. Source: NMFS unpublished dealer data.

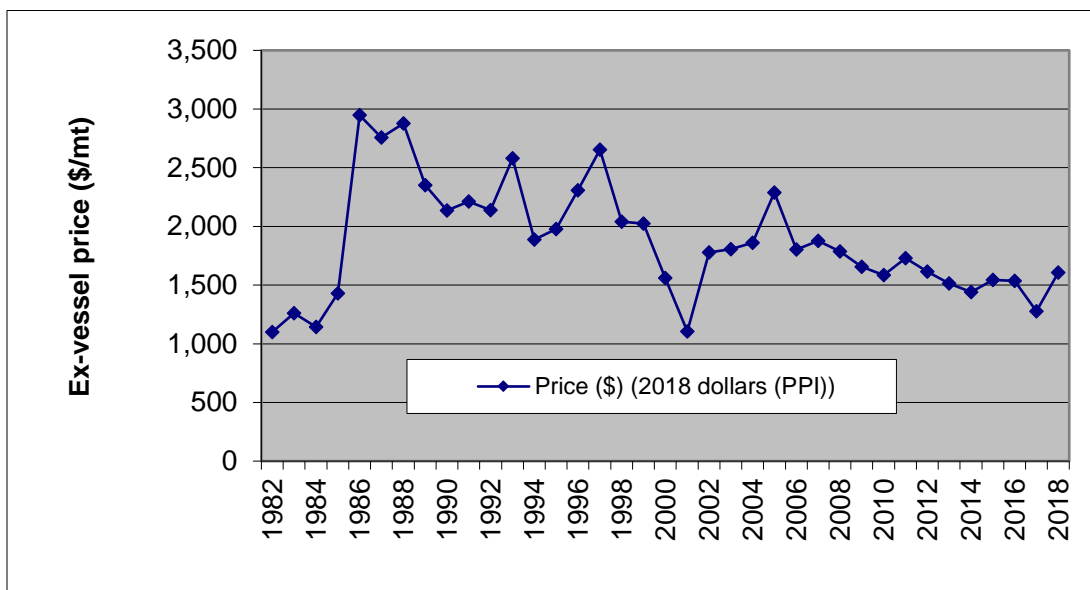


Figure 4. US butterfish landings ex-vessel prices 1982-2018 (adjusted to 2018 “real” dollars using the producer price index (PPI), Federal Reserve data). Source: NMFS unpublished dealer data.

Table 1. Commercial butterfish landings (live weight) by state in 2018. Source: NMFS unpublished dealer data.

State	Metric_Tons	Percent
RI	1,189	72%
NY	230	14%
MA	118	7%
CT	77	5%
NJ	37	2%
Other	10	1%

Table 2. Commercial butterfish landings (live weight) by gear in 2018. Source: NMFS unpublished dealer data.

GEAR	Metric Tons 2018	Percent
TRAWL,OTTER,BOTTOM,FISH	1,501	90%
UNKNOWN	126	8%
TRAWL,OTTER,BOTTOM,OTHER	22	1%
POUND NET, OTHER	5	0%
Other	7	0%

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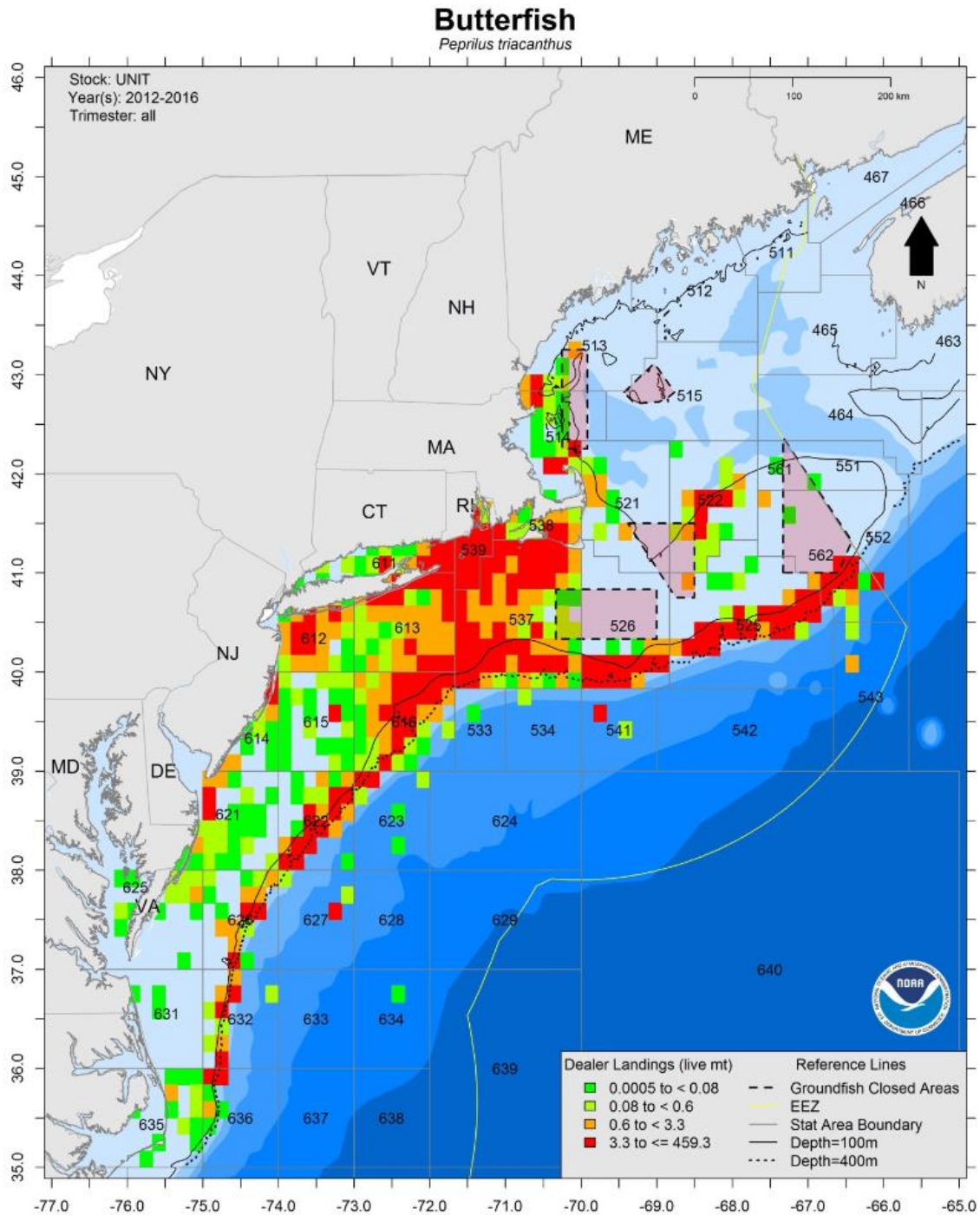


Figure 5. US Commercial landings for butterfish, 2012–2016. Landings were taken from dealer reports. Data shown are restricted to dealer trips matched to a Vessel Trip Report (ALEVEL=A) to ensure accuracy of gear and area information. Source: NEFSC Butterfish Data update, available at <http://www.mafmc.org/ssc-meetings/2018/may-8-9>.

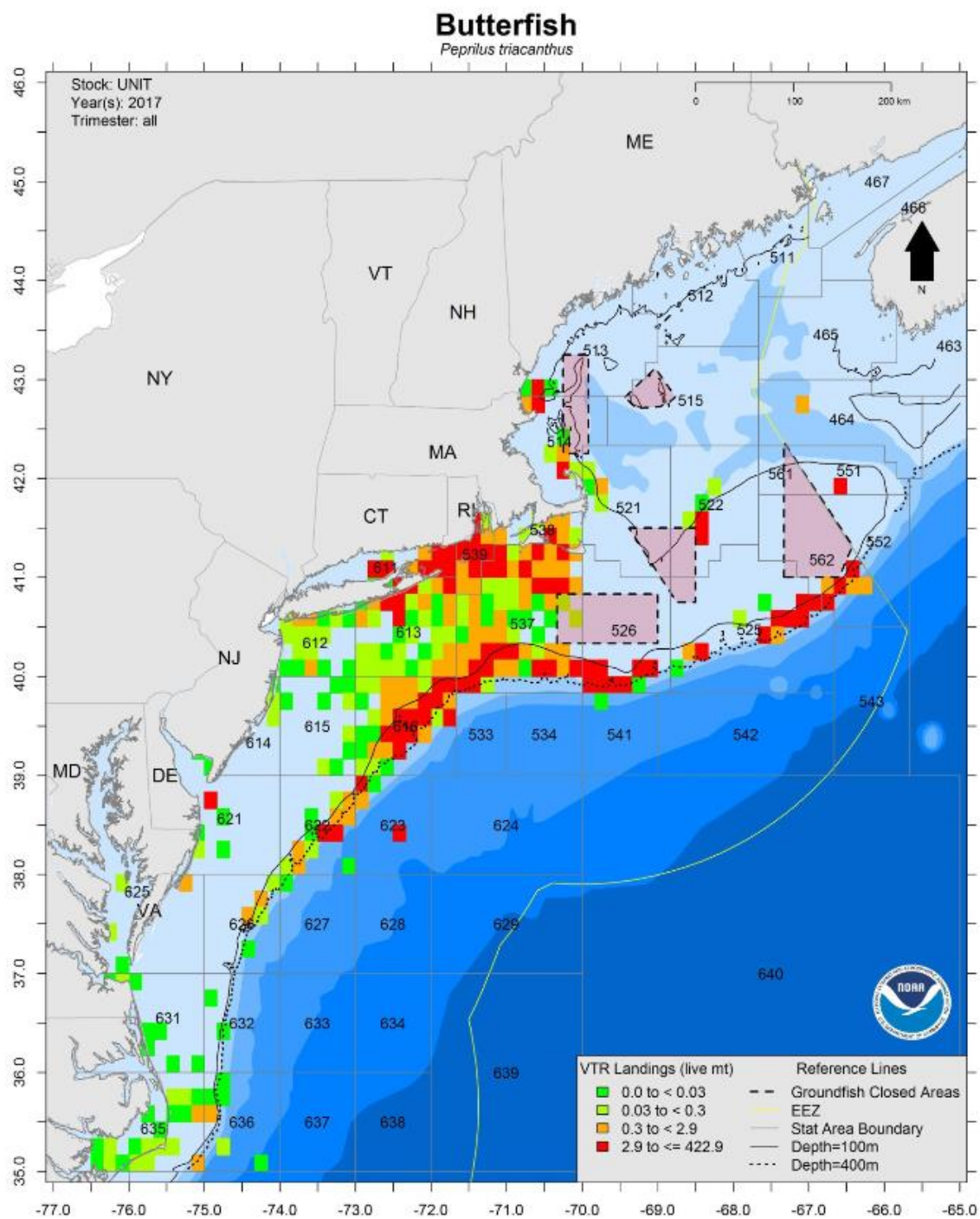


Figure 6. VTR landings for butterfish, 2017. Source: NEFSC Butterfish Data update, available at <http://www.mafmc.org/ssc-meetings/2018/may-8-9>.

Table 3. Commercial butterfish landings by statistical area in 2018. Source: NMFS unpublished VTR data.

Stat Area	Metric Tons	Percent
616	423	27%
526	291	19%
525	194	13%
537	175	11%
539	127	8%
611	66	4%
622	61	4%
Other	211	14%