

Whiting Mothership Cooperative

An Amendment 20 Mothership Catcher Vessel Cooperative

Final Report on the 2016 Pacific Whiting Fishery

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WMC Report on the 2016 Year Pacific Whiting Fishery

Introduction

In March of 2011, the owners of the thirty seven trawl limited entry catcher vessel permits (MS/CV LEPs) endorsed for operation in the Mothership sector of the Pacific whiting fishery formed a fishing cooperative to coordinate harvesting efforts. This cooperative is the Whiting Mothership Cooperative (WMC). Following transfers of MSCV catch history assignments (CHAs), there are currently 34 endorsed permits, three of which carry two MSCV CHAs. The owners of all of the current MS/CV LEPs remained members in good standing for the 2016 fishing year.

The WMC receives an allocation of whiting based on the cumulative catch histories of the members of the cooperative. The WMC operates under the WMC Membership Agreement contract which allocates whiting to members proportionate to the contribution to the cooperative's allocation made by NMFS on the basis of the whiting catch history assigned to the Cooperative by the members.

One of the primary purposes of the WMC cooperative is the management of bycatch of the four allocated overfished rockfish species and Chinook salmon. To that end the members of the WMC have all signed a WMC Bycatch Agreement that sets out the rules for modification of fishing behaviour with which members are obligated to comply.

Purpose of Report

This report is intended to disclose all information required or identified in Federal Regulations at 50 CFR 660.113(d)(3). The catch data in this report is for the 2016 fishing year beginning May 15th and ending December 31st. The catch data was provided by Sea State, Inc. and was obtained from the NMFS - At-Sea Hake Observer Program.

Reporting Requirements

The required Annual Report elements (i-v) are found in the 50 CFR 660.113(d)(3)

(3) Annual coop report. The designated coop manager for the mothership coop must submit an annual report to NMFS and the Council by March 31 each year, before a coop permit is issued for that year. The annual coop report will contain information about the previous year's fishery, including:

(i) The mothership sector's annual allocation of Pacific whiting and the permitted mothership coop allocation;

(ii) The mothership coop's actual retained and discarded catch of Pacific whiting, salmon, Pacific halibut, rockfish, groundfish, and other species on a vessel-by- vessel basis;

- (iii) A description of the method used by the mothership coop to monitor performance of coop vessels that participated in the fishery;*
- (iv) A description of any actions taken by the mothership coop in response to any vessels that exceed their allowed catch and bycatch; and*
- (v) Plans for the current year's mothership coop fishery, including the companies participating in the cooperative, the harvest agreement, and catch monitoring and reporting requirements.*

(i) Annual allocation of Pacific whiting to the WMC coop

The Mothership sector of the Pacific Whiting fishery was initially allocated 72,415 tons of whiting, followed by a re-apportionment on September 15th of 8,160 tons. 100% of the Mothership sector whiting was allocated to the Whiting Mothership Cooperative.

(ii) The Mothership coop's actual retained and discarded catch of Pacific whiting, salmon, Pacific halibut, rockfish, groundfish, and other species on a vessel-by-vessel basis

All thirty four of the current MS/CV endorsed trawl limited entry permit holders joined the Whiting Mothership Cooperative (WMC).

As of December 31st, 2016, seventeen MS/CVs had fished in the MS sector of the whiting fishery.

Data on the catch, as of December 31st 2016, of Whiting, Salmon, Halibut, Rockfish, Groundfish and Other Species, is shown in the tables attached tables 1 & 2 (a-e) (Attachment 1). The table 1 shows the aggregate fleet catch, with a breakdown of each species category. The following tables 2 (a-f) show the vessel by vessel catch for each species category. In interpreting the tables a cell with "0.000 mt" indicates at least a trace amount of this species was caught; a blank cell indicates no amount of that species was caught.

(iii) A description of the method used by the mothership coop to monitor performance of coop vessels that participated in the fishery

The WMC retains Sea State, Inc. Inc. as the Monitoring Agent for the coop. All WMC members provide NMFS and the VMS providers with the needed confidentiality waivers to allow Sea State, Inc. to access both Observer data and VMS data in real time.

The WMC provided Sea State, Inc. with a harvest schedule of each MS/CVs share of whiting and pro-rata portion of the allocated bycatch species. Sea State, Inc. queries the NORPAC observer database to obtain the Mothership observer reports on a daily basis.

Sea State, Inc. uses this data to produce daily reports which are distributed by email to all WMC members, the Coop manager, and to the Mothership processors.

The Sea State, Inc. daily report shows several tables of information, including:

- the daily catch and bycatch amounts for the fleet as a whole for most recent 10 days
- the overall YTD rates and percent of whiting quota and bycatch harvested for the fleet in aggregate
- the YTD bycatch rates for each Mothership's fleet
- the YTD bycatch rates and amounts for each vessel
- the percent and amounts of whiting quota and bycatch allocations harvested by each seasonal pool
- the balance of whiting available in each seasonal pool by vessel

As MS/CV observers are debriefed, their data is incorporated into NORPAC and Sea State, Inc. updates its accounting accordingly. On the basis of the Sea State, Inc. data, the Coop manger audits vessel harvest amounts relative to the individual members' share of the quota and transfers between members to see that the coop's allocations are not exceeded.

In addition to the email distribution of the daily report, Sea State maintains a website for the Coop where members can access this information. The website also provides GIS mapping of VMS tracks of any hauls where bycatch rates exceed a base rate. These high bycatch maps are shared with the shorebased and catcher-processor cooperatives, and provide members to identify historic and current hotspots with high resolution mapping.

A copy of a Sea State daily report from the last week of the fishery is included as Attachment 2.

(iv) A description of any actions taken by the mothership coop in response to any vessels that exceed their allowed catch and bycatch

No vessels exceeded their allowed whiting catch amounts under the Coop Agreement. The Coop makes vessel specific whiting allocations; however, the bycatch allocations are managed as a common pool resource. This is not to say that vessels are not subject to individual accountability for bycatch performance.

In 2016 one pool exceeded the pro-rata share of the bycatch allocated to its seasonal pool. The 1st pool was closed due to POP bycatch on June 8th.

The Coop agreement includes a variety of measures that serve to mitigate against the possibility of exceeding allowed catch and bycatch limits. These include:

- Precautionary closures of past bycatch hotspots.
- Night fishing restrictions
- Fleet relocation triggers and fleet to fleet reporting
- In season “hot spot” closure authority
- Seasonal apportionments (“pools”) of whiting and bycatch allowances
- Sanctions against vessels that have exceeded a bycatch rate within a seasonal pool.

Precautionary Closures of Past Bycatch Hotspots

Prior to the beginning of the 2011 whiting fishery, the WMC created a “Bycatch Committee” which met several times to develop proposed closures that would apply seasonally. The committee reviewed GIS analysis of 10 years of at-sea observer data overlaid on fine scale bathymetry. The analysis included bycatch rates and amounts as well as amounts of whiting. VMS tracklines of high bycatch tows were also incorporated in the review. Additionally, the committee reviewed logbook information from individual captains’ historic directed rockfish experience, which provided insight into habitat associations for rockfish species.

The committee ended up recommending closure of 9 areas, totaling nearly 2000 km² which were adopted by the WMC board. The board also identified several other “cautionary” areas.

The bycatch committee met again prior to the 2016 fishing season and recommended retaining the bycatch avoidance measures from the previous seasons with some modifications. The recommendations were adopted by the board. The bycatch committee met during the season to review whether to modify or maintain the closures. Additional closures were adopted by the board during the 2016 season in response to concerns that POP rockfish was extremely constraining given higher levels of POP rockfish encounters throughout the Mothership and Shorebased whiting fisheries.

Night Fishing

Based on the recommendations of the bycatch committee, the board adopted a restriction on night fishing between 10:00 PM and 5:30 AM prior to September 1st. The board modified the night fishing restriction for the fall, restricting night fishing inside 100 fathoms between 7:00 PM and 7:00 AM.

Fleet Relocation and Real Time Fleet to Fleet Reporting

The Coop established Base Rates which were based on the pro-rata amounts of bycatch allocations relative to whiting allocations to the MS sector. Each Mothership processor

maintains a spreadsheet reporting its fleet performance, measured against the Base Rates. The spreadsheet reports are shared each day between all the processing ships.

Each fleet's performance relative to the Base Rates constitutes a trigger requiring the fleet to relocate if they encounter a bycatch "hotspot". Relocation is required in the event of any of the following situations:

- If a fleet's three day rolling average rate of exceeds the Base Rate for any bycatch species, and that Fleet's cumulative year to date bycatch rate exceeds half of the Base Rate for that species,
- If a fleet's three day rolling average rate of exceeds 125% of the Base Rate for a bycatch species
- If a fleet's bycatch rate during any single day exceeds twice the Base Rate for a bycatch species,

This real time mechanism for response to bycatch encounters coupled with a requirement for test tows upon entering a new area, have served to limit bycatch.

In-season Hot Spot Closures

The WMC board delegated authority to Sea State, Inc. to impose "In-season Hot Spot Closures" if they perceive a problem. This authority was used during the 2016 season to respond to POP lightning strikes.

Seasonal Pools

The Coop agreement was modified for 2016 to provide for dividing the whiting allocation into as many as five pools with various start dates. Each pool received a share of the bycatch allocations pro-rata to whiting. The Coop Agreement provides that if a pool reaches its share of the bycatch prior to harvesting its whiting allocation, the members of the pool must cease fishing.

Sanctions Against Member Vessels

In the event that a pool closes because of bycatch, if a member of that pool has a cumulative bycatch amount exceeding their pro-rata share by 25%, that vessel is restricted from harvesting additional whiting in a subsequent seasonal pool.

During the 2016 season one pool closed due to bycatch. There were no violations of the WMC Bycatch Agreement.

(v) Plans for the next year's mothership coop fishery, including the companies participating in the cooperative, the harvest agreement, and catch monitoring and reporting requirements

The WMC provides that membership in the Coop continues in the following year unless a member provides notice of intent to withdraw before November 1st. No members filed notice of intent to withdraw. The ownership of member permits is shown in Exhibit A of the WMC Membership Agreement (Attachment 3) filed with the MS cooperative permit application NMFS for the 2017 season.

The WMC Membership Agreement for the 2017 season was amended. The Third Addendum to the Membership Agreement (Attachment 4), was adopted by the WMC Board on February 8th. The Addendum continues the division of the quota into 5 seasonal pools in 2017 and reduces the lead time for declaring quota to a pool from 15 to 5 days. The Addendum also contains additional Rockfish Bycatch Control Measures requiring that once a fleet of catchers delivering to a mothership has exceeds their pro-rata share of a bycatch species allocated to a pool they must relocate any time their fleet daily rate exceeds the Base Rate, and any catcher vessels whose deliveries during that day have bycatch in excess of the related Base Rate shall cease fishing for a 24 hour period.

There have been no other changes to the 2016 WMC Membership Agreement or the WMC Bycatch Agreement.

Attachments:

- 1- WMC's actual retained and discarded catch of Pacific whiting, salmon, Pacific halibut, rockfish, groundfish, and other species on a vessel-by- vessel basis
- 2- Sea State daily report from the last week of the fishery
- 3- Companies participating in the cooperative
- 4- 2017 Addendum to WMC Membership Agreement (the harvest agreement, and catch monitoring and reporting requirements)

Attachement 1

Table 1

Species Name		WMC FLEET TOTALS		
ROUNDFISH	Code	Retained mt	Discard mt	Total Catch mt
Whiting	112	64,613.3	421.5	65,034.8
Lingcod	130	0.113	0.063	0.176
Sablefish	710	5.486	4.146	9.632
FLATFISH	Code	Retained mt	Discard mt	Total Catch mt
Arrowtooth Flounder	121	0.438	2.500	2.937
Dover Sole	124	0.002	0.125	0.127
English Sole	128	0.000	0.001	0.001
Other Flatfish	-	0.073	0.794	0.867
ROCKFISH	Code	Retained mt	Discard mt	Total Catch mt
Canary Rockfish	146	0.334	0.085	0.419
Dark Blotched Rockfish	159	0.749	0.830	1.579
Pacific Ocean Perch	141	4.520	2.678	7.198
Widow Rockfish	156	25.953	48.451	74.404
Bocaccio	137	0.023	0.071	0.094
Shortbelly Rockfish	181	0.166	1.739	1.906
Shortspine Thornyhead	143	0.035	3.302	3.337
Yellowtail Rockfish	155	23.084	27.927	51.011
Minor Shelf Rockfish	-	0.099	1.064	1.163
Minor Slope Rockfish	-	7.267	6.492	13.759
REMAINING GROUND FISH SPECIES	Code	Retained mt	Discard mt	Total Catch mt
Longnose Skate	701	0.089	0.354	0.443
Spiny Dogfish Shark	691	10.803	47.771	58.574
Other Fish	-	2.411	13.765	16.176
PROHIBITED SPECIES	Code	Retained #'s	Discard #'s	Total Catch #'s
Chinook Salmon	410	0	367	367
Sockeye Salmon	420	0	6	6
Coho Salmon	430	0	0	0
Pink Salmon	440	0	0	0
Chum Salmon	450	1	10	11
Eulachon (MT's)	511	0.0000	0.0003	0.0003
Pacific Halibut (MT's)	200	0.000	0.123	0.123
NON-GROUND FISH SPECIES	Code	Retained mt	Discard mt	Total Catch mt
American Shad	180	0.836	5.414	6.250
Jack Mackerel	-	5.222	97.945	103.167
Pacific Herring	235	0.059	0.003	0.063
Pacific Mackerel	-	1.001	11.383	12.384
Pacific Sardine	170	0.009	0.389	0.399
Squid Unidentified	875	3.226	19.987	23.213
All Other Non-groundfish	-	1.750	62.825	64.575

Table 2a

Species Name	Arctic Fury		Lisa Melinda		Marathon	
	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
ROUND FISH						
Whiting	4,527.5	27.0	5,387.0	4.8	1,495.2	3.9
Lingcod		0.000	0.065	0.000		0.000
Sablefish		0.000	0.518	0.000	0.006	0.000
FLAT FISH	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Arrowtooth Flounder	0.000	0.010	0.208	0.137	0.000	0.000
Dover Sole		0.000		0.000	0.000	0.001
English Sole		0.000		0.000		0.000
Other Flatfish	0.000	0.000	0.042	0.005	0.000	0.000
ROCK FISH	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Canary Rockfish	0.000	0.003	0.113	0.004	0.003	0.000
Dark Blotched Rockfish	0.014	0.144	0.469	0.000	0.021	0.000
Pacific Ocean Perch	0.105	0.025	0.451	0.004	0.169	0.000
Widow Rockfish	0.107	10.864	10.253	0.673	1.745	0.053
Bocaccio		0.000	0.008	0.015		0.000
Shortbelly Rockfish		0.000	0.015	0.000		0.000
Shortspine Thornyhead	0.000	0.005	0.015	0.000		0.000
Yellowtail Rockfish	0.000	4.928	9.015	0.665	1.421	0.717
Minor Shelf Rockfish	0.000	0.019	0.022	0.001	0.012	0.000
Minor Slope Rockfish	0.832	0.019	2.504	0.002	0.208	0.000
REMAINING GROUND FISH SPECIES	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Longnose Skate		0.000	0.000	0.005		0.000
Spiny Dogfish Shark	0.000	0.365	3.558	11.063	0.000	0.052
Other Fish	0.000	1.403	0.850	0.762	0.000	0.761
PROHIBITED SPECIES	Retained #'s	Discard #'s	Retained #'s	Discard #'s	Retained #'s	Discard #'s
Chinook Salmon	0	3	0	27	0	3
Sockeye Salmon	0	0	0	0	0	0
Coho Salmon	0	0	0	0	0	0
Pink Salmon	0	0	0	0	0	0
Chum Salmon	0.000	2.000	1.000	0.000	0.000	0.000
Eulachon (MT's)		0.0000		0.0000	0.0000	0.0001
Pacific Halibut (MT's)	0.000	0.029	0.000	0.035	0.000	0.013
NON-GROUND FISH SPECIES	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
American Shad	0.000	0.051	0.267	0.359	0.007	0.000
Jack Mackerel	0.649	12.386	0.219	0.684	0.022	0.006
Pacific Herring	0.000	0.000	0.055	0.000	0.000	0.000
Pacific Mackerel	0.850	2.136	0.006	0.001	0.011	0.000
Pacific Sardine	0.000	0.055	0.008	0.000		0.000
Squid Unidentified	0.082	1.282	0.011	1.262	0.074	0.735
All Other Non-groundfish	0.031	12.872	0.308	0.362	0.003	4.096

Table 2b

Species Name	Mark I		Miss Berdie		Miss Sarah	
	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
ROUND FISH						
Whiting	5,074.1	23.9	2,051.3	53.9	1,667.0	0.5
Lingcod		0.000		0.000	0.000	0.012
Sablefish	0.947	0.012	0.000	0.081		0.000
FLAT FISH	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Arrowtooth Flounder	0.000	0.228	0.000	0.054	0.000	0.006
Dover Sole	0.000	0.002	0.000	0.007		0.000
English Sole		0.000		0.000		0.000
Other Flatfish	0.000	0.015	0.000	0.038	0.000	0.000
ROCK FISH	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Canary Rockfish	0.000	0.012	0.000	0.007	0.000	0.012
Dark Blotched Rockfish	0.028	0.024	0.000	0.034	0.000	0.034
Pacific Ocean Perch	0.010	0.035	0.000	0.323	0.000	0.054
Widow Rockfish	1.080	0.981	0.000	1.636	0.000	1.043
Bocaccio	0.000	0.002		0.000	0.000	0.005
Shortbelly Rockfish	0.000	0.003	0.000	0.001		0.000
Shortspine Thornyhead	0.000	0.042	0.000	0.958	0.000	0.000
Yellowtail Rockfish	0.006	0.224	0.000	2.029	0.000	2.257
Minor Shelf Rockfish	0.000	0.003	0.000	0.203	0.000	0.008
Minor Slope Rockfish	0.555	0.403	0.000	0.256	0.000	0.085
REMAINING GROUND FISH SPECIES	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Longnose Skate	0.000	0.027		0.000		0.000
Spiny Dogfish Shark	0.000	8.410	0.000	0.105	0.000	0.014
Other Fish	0.000	0.813	0.000	0.129	0.000	0.422
PROHIBITED SPECIES	Retained #'s	Discard #'s	Retained #'s	Discard #'s	Retained #'s	Discard #'s
Chinook Salmon	0	46	0	8	0	2
Sockeye Salmon	0	0	0	0	0	0
Coho Salmon	0	0	0	0	0	0
Pink Salmon	0	0	0	0	0	0
Chum Salmon	0.000	0.000	0.000	0.000	0.000	2.000
Eulachon (MT's)		0.0000		0.0000		0.0000
Pacific Halibut (MT's)	0.000	0.000	0.000	0.000	0.000	0.000
NON-GROUND FISH SPECIES	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
American Shad	0.000	1.238	0.000	0.128	0.000	0.079
Jack Mackerel	0.000	7.858		0.000	0.000	0.002
Pacific Herring	0.000	0.000	0.000	0.000	0.000	0.000
Pacific Mackerel	0.000	0.302		0.000	0.000	0.011
Pacific Sardine	0.000	0.002		0.000		0.000
Squid Unidentified	0.475	1.778	0.330	0.202	0.087	0.174
All Other Non-groundfish	0.072	3.037	0.002	0.445	0.000	0.318

Table 2c

	Muir Milach		Nordic Star		Pacific Challenger	
ROUND FISH	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Whiting	4,333.1	43.8	5,423.3	27.6	2,069.2	31.0
Lingcod	0.042	0.000		0.000		0.000
Sablefish	0.254	0.007	0.646	0.002	0.012	0.000
FLATFISH	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Arrowtooth Flounder	0.136	0.007	0.091	0.000	0.004	0.000
Dover Sole		0.000	0.000	0.001		0.000
English Sole		0.000		0.000		0.000
Other Flatfish	0.024	0.001	0.007	0.006	0.000	0.000
ROCKFISH	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Canary Rockfish	0.068	0.001	0.105	0.001	0.045	0.003
Dark Blotched Rockfish	0.038	0.003	0.103	0.000	0.005	0.000
Pacific Ocean Perch	1.924	0.043	1.225	0.003	0.013	0.000
Widow Rockfish	1.691	0.006	7.187	0.012	3.522	0.193
Bocaccio		0.000	0.013	0.000		0.000
Shortbelly Rockfish	0.045	0.000	0.107	0.001		0.000
Shortspine Thornyhead	0.018	0.000	0.001	0.003		0.000
Yellowtail Rockfish	4.619	0.019	5.493	0.034	2.346	0.191
Minor Shelf Rockfish	0.027	0.000	0.037	0.000	0.001	0.001
Minor Slope Rockfish	0.648	0.017	0.739	0.002	0.379	0.001
REMAINING GROUND FISH SPECIES	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Longnose Skate	0.076	0.000	0.013	0.000		0.000
Spiny Dogfish Shark	3.109	1.023	4.136	0.642	0.000	0.106
Other Fish	1.049	0.734	0.513	0.616	0.000	0.694
PROHIBITED SPECIES	Retained #'s	Discard #'s	Retained #'s	Discard #'s	Retained #'s	Discard #'s
Chinook Salmon	0	49	0	16	0	7
Sockeye Salmon	0	2	0	2	0	0
Coho Salmon	0	0	0	0	0	0
Pink Salmon	0	0	0	0	0	0
Chum Salmon	0.000	2.000	0.000	0.000	0.000	0.000
Eulachon (MT's)		0.0000		0.0000		0.0000
Pacific Halibut (MT's)	0.000	0.000	0.000	0.035	0.000	0.000
NON-GROUND FISH SPECIES	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
American Shad	0.143	0.001	0.399	0.002	0.019	0.002
Jack Mackerel	1.579	0.000	1.472	0.009	0.023	0.008
Pacific Herring	0.001	0.000	0.004	0.002	0.000	0.000
Pacific Mackerel	0.024	0.000	0.002	0.000	0.020	0.001
Pacific Sardine		0.000	0.002	0.000		0.000
Squid Unidentified	0.013	1.379	0.002	1.573	0.211	1.422
All Other Non-groundfish	0.712	0.218	0.390	0.439	0.061	6.174

Table 2d

	Pegasus		Perseverance		Raven	
ROUND FISH	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Whiting	4,285.7	46.9	3,726.4	20.9	3,597.3	10.7
Lingcod	0.006	0.000		0.000	0.000	0.006
Sablefish	0.003	0.000	0.000	0.549		0.000
FLATFISH	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Arrowtooth Flounder	0.000	0.012	0.000	0.147	0.000	0.058
Dover Sole		0.000	0.000	0.015		0.000
English Sole		0.000		0.000		0.000
Other Flatfish	0.000	0.000	0.000	0.057	0.000	0.002
ROCKFISH	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Canary Rockfish	0.000	0.003	0.000	0.007	0.000	0.012
Dark Blotched Rockfish	0.023	0.073	0.000	0.053	0.000	0.006
Pacific Ocean Perch	0.239	0.017	0.000	0.125	0.152	0.002
Widow Rockfish	0.063	9.421	0.000	1.191	0.000	0.415
Bocaccio		0.000	0.000	0.010		0.000
Shortbelly Rockfish		0.000	0.000	0.009		0.000
Shortspine Thornyhead		0.000	0.000	0.081	0.000	0.001
Yellowtail Rockfish	0.000	0.917	0.000	2.038	0.000	0.745
Minor Shelf Rockfish	0.000	0.006	0.000	0.349	0.000	0.006
Minor Slope Rockfish	0.596	0.014	0.000	0.810	0.000	0.036
REMAINING GROUND FISH SPECIES	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Longnose Skate		0.000	0.000	0.039		0.000
Spiny Dogfish Shark	0.000	0.253	0.000	1.472	0.000	7.185
Other Fish	0.000	1.019	0.000	0.928	0.000	0.239
PROHIBITED SPECIES	Retained #'s	Discard #'s	Retained #'s	Discard #'s	Retained #'s	Discard #'s
Chinook Salmon	0	10	0	10	0	11
Sockeye Salmon	0	0	0	0	0	0
Coho Salmon	0	0	0	0	0	0
Pink Salmon	0	0	0	0	0	0
Chum Salmon	0.000	2.000	0.000	0.000	0.000	0.000
Eulachon (MT's)		0.0000		0.0000		0.0000
Pacific Halibut (MT's)	0.000	0.010	0.000	0.000	0.000	0.000
NON-GROUND FISH SPECIES	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
American Shad	0.000	0.035	0.000	0.082	0.000	2.156
Jack Mackerel	1.183	16.326	0.000	0.036	0.038	14.331
Pacific Herring	0.000	0.000	0.000	0.000	0.000	0.000
Pacific Mackerel	0.028	2.116	0.000	0.005	0.059	5.776
Pacific Sardine	0.000	0.311	0.000	0.000	0.000	0.009
Squid Unidentified	0.052	0.897	0.202	0.858	0.020	0.372
All Other Non-groundfish	0.030	8.435	0.000	1.274	0.030	8.055

Table 2e

	Sea Storm		Seadawn		Seeker	
ROUND FISH	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Whiting	4,212.8	5.9	6,299.6	38.0	2,448.2	39.7
Lingcod		0.000	0.000	0.012	0.000	0.023
Sablefish	1.248	1.630	0.608	1.383	0.000	0.457
FLATFISH	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Arrowtooth Flounder	0.000	0.607	0.000	0.731	0.000	0.249
Dover Sole	0.000	0.026	0.000	0.067	0.000	0.002
English Sole		0.000	0.000	0.001		0.000
Other Flatfish	0.000	0.241	0.000	0.360	0.000	0.051
ROCKFISH	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Canary Rockfish		0.000	0.000	0.009		0.000
Dark Blotched Rockfish	0.000	0.184	0.000	0.107	0.000	0.127
Pacific Ocean Perch	0.000	0.127	0.000	0.220	0.000	1.659
Widow Rockfish	0.000	1.063	0.000	1.819	0.000	2.565
Bocaccio	0.000	0.006	0.000	0.006	0.000	0.015
Shortbelly Rockfish	0.000	0.007	0.000	0.211		0.000
Shortspine Thornyhead	0.000	0.567	0.000	1.310	0.000	0.328
Yellowtail Rockfish	0.000	0.836	0.000	3.594	0.000	6.448
Minor Shelf Rockfish	0.000	0.031	0.000	0.306	0.000	0.115
Minor Slope Rockfish	0.000	1.839	0.000	1.814	0.000	0.817
REMAINING GROUND FISH SPECIES	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Longnose Skate	0.000	0.067	0.000	0.037	0.000	0.052
Spiny Dogfish Shark	0.000	3.662	0.000	4.128	0.000	0.481
Other Fish	0.000	0.828	0.000	0.920	0.000	1.554
PROHIBITED SPECIES	Retained #'s	Discard #'s	Retained #'s	Discard #'s	Retained #'s	Discard #'s
Chinook Salmon	0	25	0	50	0	1
Sockeye Salmon	0	0	0	0	0	0
Coho Salmon	0	0	0	0	0	0
Pink Salmon	0	0	0	0	0	0
Chum Salmon	0.000	0.000	0.000	0.000	0.000	2.000
Eulachon (MT's)		0.0000		0.0000		0.0000
Pacific Halibut (MT's)	0.000	0.000	0.000	0.000	0.000	0.000
NON-GROUND FISH SPECIES	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
American Shad	0.000	0.192	0.000	0.116	0.000	0.066
Jack Mackerel	0.000	1.313	0.000	14.685	0.000	7.932
Pacific Herring	0.000	0.000	0.000	0.001	0.000	0.000
Pacific Mackerel	0.000	0.007	0.000	0.030	0.000	0.595
Pacific Sardine	0.000	0.000		0.000		0.000
Squid Unidentified	0.126	1.803	0.457	2.019	0.567	0.787
All Other Non-groundfish	0.000	3.559	0.016	4.517	0.000	1.476

Table 2f

	Traveler		Western Dawn		Grand Total	
	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
ROUND FISH						
Whiting	5,993.7	21.3	2,022.0	21.6	64,613.3	421.5
Lingcod	0.000	0.010		0.000	0.113	0.063
Sablefish	1.243	0.025	0.002	0.000	5.486	4.146
FLATFISH	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Arrowtooth Flounder	0.000	0.251	0.000	0.003	0.438	2.500
Dover Sole	0.002	0.004		0.000	0.002	0.125
English Sole		0.000		0.000	0.000	0.001
Other Flatfish	0.000	0.021	0.000	0.000	0.073	0.794
ROCKFISH	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Canary Rockfish	0.000	0.008	0.000	0.005	0.334	0.085
Dark Blotched Rockfish	0.043	0.036	0.005	0.004	0.749	0.830
Pacific Ocean Perch	0.048	0.034	0.185	0.008	4.520	2.678
Widow Rockfish	0.299	1.911	0.005	14.607	25.953	48.451
Bocaccio	0.002	0.002	0.000	0.010	0.023	0.071
Shortbelly Rockfish	0.000	1.507		0.000	0.166	1.739
Shortspine Thornyhead	0.000	0.008		0.000	0.035	3.302
Yellowtail Rockfish	0.008	0.367	0.175	1.919	23.084	27.927
Minor Shelf Rockfish	0.000	0.004	0.000	0.012	0.099	1.064
Minor Slope Rockfish	0.555	0.372	0.253	0.007	7.267	6.492
REMAINING GROUND FISH SPECIES	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
Longnose Skate	0.000	0.127		0.000	0.089	0.354
Spiny Dogfish Shark	0.000	8.591	0.000	0.219	10.803	47.771
Other Fish	0.000	1.325	0.000	0.618	2.411	13.765
PROHIBITED SPECIES	Retained #'s	Discard #'s	Retained #'s	Discard #'s	Retained #'s	Discard #'s
Chinook Salmon	0	85	0	14	0	367
Sockeye Salmon	0	0	0	2	0	6
Coho Salmon	0	0	0	0	0	0
Pink Salmon	0	0	0	0	0	0
Chum Salmon	0.000	0.000	0.000	0.000	1.000	10.000
Eulachon (MT's)	0.0000	0.0002		0.0000	0.0000	0.0003
Pacific Halibut (MT's)	0.000	0.000	0.000	0.000	0.000	0.123
NON-GROUND FISH SPECIES	Retained mt	Discard mt	Retained mt	Discard mt	Retained mt	Discard mt
American Shad	0.002	0.863	0.000	0.044	0.836	5.414
Jack Mackerel	0.037	22.336	0.002	0.033	5.222	97.945
Pacific Herring	0.000	0.000	0.000	0.000	0.059	0.003
Pacific Mackerel	0.000	0.403		0.000	1.001	11.383
Pacific Sardine	0.000	0.012		0.000	0.009	0.389
Squid Unidentified	0.492	2.828	0.024	0.618	3.226	19.987
All Other Non-groundfish	0.096	7.220	0.000	0.330	1.750	62.825

Attachment 2
Sea State Daily Report 11/7/16
Harvest Last 14 Days (MT)

Date	Pacific Hake	Canary Rockfish	Widow Rockfish	Dark Blotched Rockfish	Pacific Ocean Perch	Chinook Salmon	Rougheye Rockfish
11/7/2016	0	0.00	0.00	0.00	0.00	0	0.00
11/6/2016	0	0.00	0.00	0.00	0.00	0	0.00
11/5/2016	0	0.00	0.00	0.00	0.00	0	0.00
11/4/2016	0	0.00	0.00	0.00	0.00	0	0.00
11/3/2016	0	0.00	0.00	0.00	0.00	0	0.00
11/2/2016	0	0.00	0.00	0.00	0.00	0	0.00
11/1/2016	0	0.00	0.00	0.00	0.00	0	0.00
10/31/2016	195	0.00	0.11	0.07	0.04	5	0.04
10/30/2016	409	0.00	0.05	0.01	0.02	14	0.24
10/29/2016	153	0.00	0.01	0.01	0.01	0	0.30
10/28/2016	317	0.00	0.00	0.01	0.00	0	0.08
10/27/2016	366	0.00	0.25	0.02	0.05	2	0.01
10/26/2016	265	0.00	2.00	0.01	0.00	7	0.01
10/25/2016	255	0.00	0.64	0.00	0.01	2	0.00

Allocation and Harvest Totals (MT)

	Pacific Hake	Canary Rockfish	Widow Rockfish	Dark Blotched Rockfish	Pacific Ocean Perch	Chinook Salmon	Rougheye Rockfish
2016 Allocation for Motherships	80,575	5.80	120.00	6.70	10.20	2,166	0.00
Total Catch YTD	64,975	0.42	74.37	1.58	7.19	367	7.20
Remaining	15,600	5.38	45.63	5.12	3.01	1,799	-7.20
Percentage Taken	80.6 %	7.2 %	62.0 %	23.6 %	70.5 %	17.0 %	0.0 %
Rate YTD	0	0.01	1.15	0.02	0.11	0	0.11

Allocation and Harvest By Seasonal Pool (MT)

	Pacific Hake	Canary Rockfish	Widow Rockfish	Dark Blotched Rockfish	Pacific Ocean Perch	Chinook Salmon	Rougheye Rockfish
2016 Pool 1							
Allocation	21,887	2.20	45.58	2.54	3.87	823	0.00
Catch	21,195	0.30	39.51	0.41	4.41	52	2.20
Remaining	692	1.90	6.06	2.14	-0.54	771	-2.20
Percentage Taken	96.8 %	13.6 %	86.7 %	16.1 %	113.9 %	6.3 %	0.0 %
2016 Pool 2							
Allocation	29,712	1.51	31.27	1.75	2.44	564	0.00
Catch	23,581	0.04	21.36	0.43	1.08	117	3.16
Remaining	6,130	1.47	9.91	1.32	1.36	447	-3.16
Percentage Taken	79.4 %	2.9 %	68.3 %	24.5 %	44.2 %	20.8 %	0.0 %
2016 Pool 3							
Allocation	15,966	1.15	23.78	1.33	1.86	429	0.00
Catch	14,261	0.05	3.22	0.07	0.57	152	0.70
Remaining	1,705	1.10	20.55	1.26	1.29	277	-0.70
Percentage Taken	89.3 %	4.7 %	13.6 %	5.3 %	30.7 %	35.4 %	0.0 %
2016 Pool 4							
Allocation	11,618	0.84	17.30	0.97	1.35	312	0.00
Catch	5,931	0.02	10.28	0.67	1.13	46	1.15
Remaining	5,687	0.82	7.03	0.29	0.22	266	-1.15
Percentage Taken	51.0 %	2.5 %	59.4 %	69.5 %	83.7 %	14.8 %	0.0 %
2016 Pool 5							
Allocation	1,392	0.10	2.07	0.12	0.16	37	0.00
Catch	0	0.00	0.00	0.00	0.00	0	0.00
Remaining	1,392	0.10	2.07	0.12	0.16	37	0.00
Percentage Taken	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %

Pro-rata Base Rates

	Canary Rockfish	Widow Rockfish	Dark Blotched Rockfish	Pacific Ocean Perch	Chinook Salmon
100%	0.08	1.66	0.09	0.10	0.04
150%	0.12	2.49	0.14	0.15	0.06
200%	0.16	3.31	0.19	0.20	0.08

Vessel Rates YTD (KG/MT)

Harvesting Vessel	Canary Rockfish	Widow Rockfish	Dark Blotched Rockfish	Pacific Ocean Perch	Chinook Salmon	Rougheye Rockfish
Arctic Fury	0.001	2.409	0.035	0.028	0.001	0.186
Lisa Melinda	0.022	2.026	0.087	0.084	0.005	0.209
Marathon	0.002	1.199	0.014	0.113	0.002	0.139
Mark I	0.002	0.404	0.01	0.009	0.009	0.099
Miss Berdie	0.003	0.777	0.016	0.154	0.004	0.067
Miss Sarah	0.007	0.626	0.021	0.032	0.001	0.05
Muir Milach	0.016	0.389	0.009	0.45	0.011	0.099
Nordic Star	0.019	1.322	0.019	0.225	0.003	0.132
Pacific Challenger	0.023	1.769	0.003	0.006	0.003	0.174
Pegasus	0.001	2.19	0.022	0.059	0.002	0.141
Perseverance	0.002	0.318	0.014	0.033	0.003	0.031
Raven	0.003	0.115	0.002	0.043	0.003	0
Sea Storm	0	0.252	0.044	0.03	0.006	0.085
Seadawn	0.001	0.287	0.017	0.034	0.008	0.104
Seeker	0	1.033	0.051	0.668	0	0.073
Traveler	0.001	0.364	0.013	0.014	0.014	0.1
Western Dawn	0.003	7.15	0.005	0.095	0.007	0.124

Fleet Rates YTD (KG/MT)

Processing Vessel	Canary Rockfish	Widow Rockfish	Dark Blotched Rockfish	Pacific Ocean Perch	Chinook Salmon	Rougheye Rockfish
Arctic Fjord	0.004	0.69	0.024	0.034	0.001	0.061
Arctic Storm	0.001	0.4	0.027	0.142	0.006	0.078
Excellence	0.002	1.55	0.016	0.033	0.007	0.11
Golden Alaska	0.014	1.532	0.007	0.051	0.003	0.159
Katie Ann	0.012	0.855	0	0.003	0.005	0
Ocean Rover	0.02	1.33	0.043	0.254	0.006	0.159

Yellow indicates test i part 2 failure (move may be required if 3 day rate fails also)

Fleet Rates Last 3 Days (KG/MT)

Begin Date	End Date	Processing Vessel	Predominant Pool	Canary Rockfish	Widow Rockfish	Dark Blotched Rockfish	Pacific Ocean Perch	Chinook Salmon	Rougheye Rockfish
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Yellow indicates test i failure, orange indicates test ii failure (either color indicates that a move is required)

Fleet Daily Rates (KG/MT)

Date	Processing Vessel	Predominant Pool	Canary Rockfish	Widow Rockfish	Dark Blotched Rockfish	Pacific Ocean Perch	Chinook Salmon	Rougheye Rockfish
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Yellow indicates test iii failure (move required)

4.3 Relocation of Fishing Effort.

If (i) a Fleet's three (3) day rolling average bycatch rate of Overfished Species or Chinook salmon exceeds the Base Rate for any such species (i part 1), and that Fleet's cumulative annual bycatch rate for such species exceeds fifty percent (50%) of the Base Rate for such species (i part 2),

or

(ii) a Fleet's three (3) day rolling average bycatch rate for any of such species exceeds one-hundred twenty-five percent (125%) of the Base Rate for such species,

or

(iii) a Fleet's bycatch rate during any single day exceeds two-hundred percent (200%) of the Base Rate for such species, then that Fleet and the Mothership to which it delivers shall relocate their fishing effort to an area where that Fleet could reasonably expect to achieve a lower Overfished Species and Chinook salmon bycatch rate.

Note: No fleet is required to relocate until 50% of the pro-rata share of Chinook for that seasonal pool has been taken. At that point, the Chinook base rate has two stages:

- a) 0.04 Chinook/mt is the base rate for fleets that have taken more than their pro-rata share Chinook relative to whiting harvested, and,
- b) 0.06 Chinook/mt is the base rate for fleets that have taken less than their pro-rata share of Chinook relative to whiting harvested.

Vessel Allocation and Catch YTD (MT)

Pool	Harvesting Vessel	Pacific Hake Allocation	Pacific Hake Remaining	Pacific Hake	Canary Rockfish	Widow Rockfish	Dark Blotched Rockfish	Pacific Ocean Perch	Chinook Salmon	Rougheye Rockfish
1	Arctic Fury	1,484	0	1484	0.002	1.571	0.016	0.065	3	0.282
1	Bay Islander	11	11	0	0	0	0	0	0	0
1	Lisa Melinda	1,666	-3	1670	0.067	1.618	0.023	0.091	6	0.185
1	Marathon	1,208	-7	1215	0.003	1.798	0.021	0.169	3	0.208
1	Miss Berdie	1,941	0	1942	0.007	1.633	0.034	0.318	6	0.122
1	Miss Sarah	1,315	15	1300	0.012	0.956	0.022	0.02	2	0.046
1	Muir Milach	1,601	222	1379	0.042	0.952	0.031	1.145	6	0.09
1	Nordic Star	2,479	226	2253	0.099	5.495	0.099	0.474	8	0.277
1	Pacific Challenger	1,608	-9	1617	0.048	3.582	0.005	0.013	7	0.366
1	Pegasus	1,082	0	1082	0.003	3.259	0.03	0.22	0	0.284
1	Perseverance	1,361	0	1361	0.007	0.835	0.026	0.05	2	0.042
1	Sea Storm	687	0	687	0	0.251	0.004	0.012	0	0.038
1	Seadawn	1,984	-6	1991	0.005	0.861	0.024	0.016	2	0.1
1	Seeker	1,982	243	1739	0	2.229	0.067	1.636	0	0.095
1	Western Dawn	1,476	0	1476	0.005	14.47	0.01	0.185	7	0.069
2	Arctic Fury	3,569	506	3063	0	9.4	0.142	0.064	0	0.565
2	Bay Islander	323	323	0	0	0	0	0	0	0
2	Lisa Melinda	1,137	0	1137	0.014	0.369	0	0.036	1	0.651
2	Marathon	1,362	1,078	284	0	0	0	0	0	0
2	Mark I	400	400	0	0	0	0	0	0	0
2	Miss Berdie	752	588	163	0	0.003	0	0.005	2	0.019
2	Miss Sarah	536	168	368	0	0.088	0.013	0.034	0	0.038
2	Muir Milach	1,897	0	1897	0.021	0.696	0.002	0.515	2	0.093
2	Nordic Star	928	0	928	0	1.448	0.003	0.052	2	0.273
2	Pacific Challenger	812	328	484	0	0.133	0.001	0	0	0
2	Pegasus	3,759	511	3248	0	6.225	0.066	0.035	10	0.326
2	Perseverance	2,383	0	2383	0	0.354	0.027	0.075	8	0.073
2	Raven	1,815	184	1631	0	0.006	0	0	0	0
2	Sea Storm	2,177	0	2177	0	0.285	0.014	0.017	15	0.056
2	Seadawn	3,579	0	3579	0.004	0.37	0.046	0.157	42	0.406
2	Seeker	1,769	1,025	743	0	0.335	0.061	0.023	1	0.086
2	Traveler	931	1	930	0.005	1.506	0.052	0.055	27	0.386
2	Western Dawn	1,585	1,018	568	0	0.141	0	0.009	7	0.184
3	Lisa Melinda	1,113	0	1113	0.016	0.68	0	0.003	8	0
3	Mark I	4,009	0	4009	0.012	1.187	0.031	0.021	32	0.237
3	Muir Milach	2,521	1,434	1087	0.007	0.048	0.007	0.304	41	0.246
3	Nordic Star	1,000	0	1000	0.005	0.22	0	0.063	2	0
3	Raven	2,105	129	1976	0.012	0.409	0.006	0.154	11	0
3	Traveler	5,219	142	5076	0.003	0.681	0.026	0.026	58	0.213
4	Bay Islander	73	73	0	0	0	0	0	0	0
4	Lisa Melinda	2,048	577	1471	0.019	8.257	0.446	0.324	12	0.292
4	Marathon	111	111	0	0	0	0	0	0	0
4	Mark I	1,113	33	1080	0	0.871	0.022	0.024	14	0.267
4	Muir Milach	1,000	1,000	0	0	0	0	0	0	0
4	Nordic Star	3,118	1,854	1264	0.002	0.035	0.001	0.639	4	0.169
4	Sea Storm	3,171	1,818	1353	0	0.527	0.166	0.098	10	0.264
4	Seadawn	983	222	761	0	0.586	0.036	0.045	6	0.155
5	Marathon	1,392	1,392	0	0	0	0	0	0	0

Hauls Partially or Completely Unassignable to a Pool

Harvesting Vessel	Processing Vessel	Haul Date	Haul Number	Haul Pacific Hake (MT)	Assigned Pacific Hake (MT)	Unassigned Pacific Hake (MT)
Arctic Fury	Excellence	7/25/2016	520	51.76	44.33	7.43
Perseverance	Arctic Storm	10/11/2016	268	51.05	51.00	0.05

Exhibit A**WHITING MOTHERSHIP COOPERATIVE**

Members as of March 13, 2017

<i>Permit Owner and Contact</i>	<i>Permit Number</i>	<i>Mailing Address</i>
American Seafoods Company LLC Mike Hyde Jan Jacobs	GF0351	2025 First Avenue West Suite 900 Seattle, WA 98121
Bay Islander Fisheries Inc. Kurt Cochran Kimberlee Cochran	GF0320	P.O. Box 290 Siletz, OR 97380
Calamari LLC Mike Okoniewski	GF0272	P.O. Box 5583 Charleston, OR 97420
Cooper, Mark E. Mark Cooper	GF0254	P.O. Box 428 Newport, OR 97365
EX-1 Corporation Michael Retherford	GF0810	880 N.E. Sturdevant Road Toledo, OR 97391
Fury Group, Inc. Michael Stone	GF0051 GF0675	4005 20 th Avenue West Suite 207 Seattle, WA 98199
F/V Leslie Lee, Inc. Raymond Hall Danny Hall Skip Woodard	GF0144	P.O. Box 2276 Newport, OR 97365
F/V Neahkahnie LLC Dale Myer Donna Parker	GF0374	2727 Alaskan Way, Pier 69 Seattle, WA 98121
Miss Sue Fisheries Inc. Jim Seavers	GF0017	P.O. Box 1010 Newport, OR 97365

<i>Permit Owner and Contact</i>	<i>Permit Number</i>	<i>Mailing Address</i>
F/V Seeker, Inc. Jim Seavers	GF0109	P.O. Box 1010 Newport, OR 97365
FY Fisheries, Inc. Blue Dawn Fisheries, Inc. Harvest Moon Fisheries, Inc. Yaquina Sea Dawn, Inc. Jincks, Inc. Bristol Fisheries LLC Fred Yeck	GF0572	P.O. Box 352 Newport, OR 97365
Larkin, Marion Jean	GF0136	19737 Trophy Lane Mount Vernon, WA 98274
Lisa Melinda Fisheries, Inc. David Smith Jerry Bates	GF0010	P.O. Box 1650 Newport, OR 97365
Marathon Fisheries, Inc. Kurt Cochran Kimberlee Cochran	GF0105	P.O. Box 290 Siletz, OR 97380
MAR-GUN Fisheries, Inc. Gunnar Ildhuso, Jr.	GF0438	101 Nickerson Street Suite 340 Seattle, WA 98109
Mark I, Inc. J. Christopher Garbrick	GF0043	4225 23 rd Avenue West Suite 103 Seattle, WA 98199
Miss Berdie, Inc. TS Fisheries, Inc. Stan Schones Tom Stam	GF0517	1483 Old River Road N.E. Siletz, OR 97380
Muir Milach, Inc. Dave Fraser Dave Willmore	GF0795	P.O. Box 954 Mercer Island, WA 98040

<i>Permit Owner and Contact</i>	<i>Permit Number</i>	<i>Mailing Address</i>
New Life Fisheries, Inc. Kurt Cochran Kimberlee Cochran	GF0321	P.O. Box 290 Siletz, OR 97380
Nicole Fisheries LLC David Lethin	GF0052	112 Harrison Avenue Centralia, WA 98531
North Sea, Inc. Bryan North Mike Storey	GF0132	5331 SW Macadam Avenue #320 Portland, OR 97239
Pacific Dawn LLC Burt Parker Chris Peterson	GF0273	2324 N.W. 90 th Street Seattle, WA 98117
Patience Fisheries, Inc. Mark E. Cooper	GF0256	P.O. Box 428 Newport, OR 97365
Phoenix Processor Limited Partnership Joe Bersch	GF0362	333 First Ave. West, Seattle, WA 98119
Retherford, Michael or Kelley	GF0515	880 N.E. Sturdevant Road Toledo, OR 97391
Sea Clipper LLC (Ocean Gold) Greg Shaughnessy	GF0433	P.O. Box 1104 Westport , WA 98595

<i>Permit Owner and Contact</i>	<i>Permit Number</i>	<i>Mailing Address</i>
Sea Storm Fisheries, Inc. Arctic Storm, Inc. Sarah Nyani Donna Parker	GF0210	2727 Alaskan Way, Pier 69 Seattle, WA 98121
Traveler Fisheries LLC J. Christopher Garbrick	GF0111	4225 23 rd Avenue West Suite 103 Seattle, WA 98199
Trident Seafoods Corporation Christian Asay	GF0205	5303 Shilshole Ave. NW Seattle, WA 98117
West Coast Fishery Investments LLC (Aleutian Spray) Craig Cross	GF0154 GF0904 GF0971	5470 Shilshole Avenue N.W. Suite 300 Seattle, WA 98107
Whaley, Todd L.	GF0220	PO Box 6235 Brookings, OR 97415
Yaquina Trawlers, Inc. Raven Enterprises, Inc. DASL, Inc. Lyle Yeck Robert Smith	GF0124	1676 N.E. Yaquina Heights Drive Newport, OR 97365

Exhibit B

WHITING MOTHERSHIP COOPERATIVE

Harvest Schedule as of March 13, 2017

1. Members/Permit Owners and Allocation Percentages

<i>Members/Permit Owners & Contact Persons</i>	<i>Percentage Allocation</i>
American Seafoods Company LLC Mike Hyde Jan Jacobs	GF0351 9.945747%
Bay Islander Fisheries Inc. Kurt Cochran Kimberlee Cochran	GF0320 0.505995%
Calamari LLC Mike Okoniewski	GF0272 0.611940%
Cooper, Mark E. Mark Cooper Chris Cooper	GF0254 1.919750%
EX-1 Corporation Michael Retherford	GF0810 0.542467%
F/V Leslie Lee, Inc. Raymond Hall Danny Hall	GF0144 4.113516%
F/V/ Neahkahnie LLC Dale Myer Donna Parker	GF0374 3.944061%
F/V Seeker, Inc. Jim Seavers	GF0109 4.858447%
Fury Group, Inc. Michael Stone	GF0675 2.537205% (MSCV0675) 1.761004% (MSCV0051)

<i>Members/Permit Owners</i>	<i>Percentage Allocation</i>
FY Fisheries, Inc. and Blue Dawn Fisheries, Inc. and Harvest Moon Fisheries, Inc. and Yaquina Sea Dawn, Inc. and Jincks, Inc., and Bristol Fisheries LLC. Fred Yeck	GF0572 4.982793% (MSCV0572) 3.141636% (MSCV0090)
Miss Sue Fisheries Inc. Jim Seavers	GF0017 0.374698%
Larkin, Marion	GF0136 0.152638%
Lisa Melinda Fisheries, Inc. David Smith Jerry Bates	GF0010 4.523843%
Marathon Fisheries, Inc. Kurt Cochran Kimberlee Cochran	GF0105 4.903333%
MAR-GUN Fisheries, Inc. Gunnar Ildhuso, Jr.	GF0438 4.355232%
Mark I, Inc. J. Christopher Garbrick	GF0043 5.115294%
Miss Berdie, Inc. and TS Fisheries, Inc. Stan Schones Tom Stam	GF0517 4.558887%
Muir Milach, Inc. Dave Fraser Dave Willmore	GF0795 1.688707%
New Life Fisheries, Inc. Kurt Cochran Kimberlee Cochran	GF0321 0.151646%
Nicole Fisheries LLC David Lethin	GF0052 0.125453% (MSCV0052) 1.074783% (MSCV0708)

<i>Members/Permit Owners</i>	<i>Percentage Allocation</i>
North Sea, Inc. Bryan North	GF0132 5.387414%
Pacific Dawn LLC Burt Parker Chris Peterson	GF0273 3.002765%
Patience Fisheries, Inc. Mark E. Cooper Chris Cooper	GF0256 0.931501%
Phoenix Processor Limited Partnership Joe Bersch	GF0362 1.527815%
Retherford, Michael or Kelley	GF0515 0.955006%
Sea Clipper LLC Greg Shaughnessy	GF0433 0.156388%
Sea Storm Fisheries, Inc. and Arctic Storm, Inc. Dale Myer Donna Parker	GF0210 3.443703%
Traveler Fisheries LLC J. Christopher Garbrick	GF0111 3.970116%
Trident Seafoods Corporation Christian Asay	GF0205 1.207269%

<i>Members/Permit Owners</i>	<i>Percentage Allocation</i>
West Coast Fishery Investments LLC (Aleutian Spray) Craig Cross	GF0154 5.116051% GF0904 2.159780% GF0971 2.209872%
Whaley, Todd L.	GF0220 1.040567%
Yaquina Trawlers, Inc. and Raven Enterprises, Inc. and DASL, Inc. Lyle Yeck Robert Smith	GF0124 3.002675%

2. List of Vessels Harvesting 2017 Allocations

<i>Vessel Name and Official Number</i>	<i>Vessel Name and Official Number</i>	<i>Vessel Name and Official Number</i>
ARCTIC FURY O.N. 996920	BAY ISLANDER O.N. 521200	CALAMARI O.N. 968968
	LESLIE LEE O.N. 584873	LISA MELINDA O.N. 584360
MARATHON O.N. 596156	MAR-GUN O.N. 525608	MARK I O.N. 509552
MESSIAH O.N. 610150	MISS BERDIE O.N. 913277	MISS SARAH O.N. 921578
MISS SUE O.N. 580055	MUIR MILACH O.N. 611524	NEAHKAHNIE O.N. 599534
NEW LIFE O.N. 504299	NICOLE O.N. 923632	NORDIC FURY.. O.N. 542651

<i>Vessel Name and Official Number</i>	<i>Vessel Name and Official Number</i>	<i>Vessel Name and Official Number</i>
NORDIC STAR O.N. 584684	NORTHERN RAM O.N. 979437	OCEAN HUNTER O.N. 926699
PACIFIC CHALLENGER O.N. 518937	PACIFIC FURY O.N. 561934	PACIFIC RAM O.N. 589115
PEGASUS O.N. 565120	PERSEVERANCE O.N. 536873	PREDATOR O.N. 547390
RAVEN O.N. 629499	SEA CLIPPER O.N. 553396	SEADAWN O.N. 548685
SEA STORM O.N. 628959	SEEKER O.N. 924585	STARWARD O.N. 617807
TRAVELER O.N. 929356	WESTERN DAWN O.N. 524423	

**WHITING MOTHERSHIP COOPERATIVE
THIRD ADDENDUM TO
THIRD AMENDED AND RESTATED MEMBERSHIP AGREEMENT**

This THIRD ADDENDUM TO THIRD AMENDED AND RESTATED MEMBERSHIP AGREEMENT (“Addendum”) is adopted by the WHITING MOTHERSHIP COOPERATIVE, a Washington Fish Marketing Act nonprofit corporation (the “Cooperative”) as of February 8th, 2017.

RECITALS

A. Amendment 20 to the Pacific Coast Groundfish Fishery Management Plan (“Amendment 20”) adopts a cooperative-based rationalization system for the mothership sector of the Pacific whiting fishery.

B. The Members have formed a fishery cooperative that qualifies to receive annual mothership whiting allocations under the regulations implementing Amendment 20.

C. The Members have executed that certain Membership Agreement dated as of March 8, 2011, that certain Amended and Restated Membership Agreement dated as of March 1, 2012 and the Second Amended and Restated Membership Agreement dated March 1, 2013, and that certain Third Amended and Restated Membership Agreement dated as of _____, 2014 (as amended, the “Membership Agreement”).

D. Pursuant to Section 11 of the Membership Agreement, the Cooperative Board of Directors has the authority to modify the fishing activity restrictions set forth therein. The Cooperative’s Board of Directors has determined that it is in the best interests of the Cooperative to continue to operate with five seasonal pools, to shorten the period prior to each seasonal pool start date by which a Member must notify the Cooperative’s Manager if the Member chooses to participate in a seasonal pool, and to adopt a new bycatch avoidance program.

ADDENDUM

1. Defined Terms. Unless otherwise defined herein, the capitalized terms in this Addendum have the meaning they are given in the Membership Agreement.

2. Modification of Section 11. The provisions of Section 11 of the Membership Agreement are hereby amended to read as follows.

“11. Responsible Fishing Practices. The Members acknowledge that an objective of the Cooperative is to reduce the incidental catch of Non-Whiting Species. The Members further acknowledge that fishing practices can affect the rates and amounts of incidental catch of Non-Whiting Species. The Members therefore agree to exercise all reasonable efforts to conduct their fishing practices in a manner that reduces their incidental catch of Non-Whiting Species to the lowest commercially reasonable levels, through the methods and means adopted by the Cooperative’s Board of Directors from time to time in accordance with the terms of this Section 11. Such methods and means may include time and area closures, using or not using specific types of gear in specific areas or during specific times, and requiring Members to participate in overfished species risk pools that provide appropriate incentives and disincentives. Restrictions on Member fishing activity may be modified by the Cooperative’s Board of Directors from time to time, provided that no such modification to the provisions of subsections 11.a, 11.b.i through 11.b.viii, and 11.d, shall take effect until the immediately following February 15.

a. Whiting Bycatch Agreement. Each Member shall sign, be bound by the terms and conditions of, and exercise all commercially reasonable efforts to comply with the Whiting Bycatch Agreement, as amended and renewed from time to time. In addition, each Member shall cause the owner and operator of each vessel harvesting any of such Member’s Pacific whiting allocation to do so. Notwithstanding any provisions of this Section 11 to the contrary, amendments to the Whiting Bycatch Agreement shall take effect as of the effective date of such amendments.

b. Seasonal Pool Management Measures. The seasonal pool fishing restrictions in effect as of February 15, 2017 are as follows:

i. Each Member agrees that the Cooperative’s mothership sector Pacific whiting allocation shall be divided into five seasonal pools for the year 2017, the first pool being available for harvest on May 15, the second pool being available on June 1, the third pool being available on July 1, the fourth pool being available on September 15, and the fifth seasonal pool being available on October 15. Unless the Cooperative’s Board of Directors takes action otherwise, for the year 2018 and thereafter, the Cooperative shall have five seasonal pools, becoming available May 15, June 1, July 1, September 15 and October 15, respectively.

ii. Each seasonal pool shall be constituted by Member election. Each Member shall be entitled to apportion their Harvest Share among the seasonal pools in each Member's sole discretion. Not less than five (5) days prior to the start date for each seasonal pool, each Member shall notify the Manager in writing regarding the amount of such Member's initial Pacific whiting allocation to be apportioned to such seasonal pool, shall identify the vessel or vessels that will harvest such Member's Harvest Share from such seasonal pool, and shall state the amount of tonnage to be harvested by each such vessel from such pool.

iii. Upon the Manager having received the Members' pool apportionment notices, the Manager shall apportion the initial Non-Whiting Species set-asides and allocations established pursuant to Section 3.b, above, to the seasonal pools, pro rata according to the proportion of Pacific whiting tonnage that the Members have declared their intention to harvest from such seasonal pool. Such initial Non-Whiting Species set-asides and allocations shall be managed as a common pool resource available to the vessels harvesting the Members' Pacific whiting allocations from such seasonal pool, under the terms and conditions of this Section 11, as amended from time to time, the Whiting Bycatch Agreement as amended from time to time, and such additional management measures that the Cooperative's Board of Directors adopts from time to time.

iv. The Manager shall apportion any Pacific whiting allocations the Cooperative may receive in addition to its initial allocation (including, but not limited to, any rollovers of tribal Pacific whiting allocations) among the seasonal pools pro rata, according to the proportion of initial Pacific whiting tonnage that the Members have declared their intention to harvest from such seasonal pool. If the Cooperative receives an additional Non-Whiting species allocation before its initial allocation of such species has been exhausted, the additional allocation shall be apportioned among the seasonal pools pro rata according to the proportion of initial Pacific whiting tonnage that the Members have declared their intention to harvest from such seasonal pool. If the Cooperative receives an additional allocation of a Non-Whiting Species after its initial allocation of such species has been exhausted, the additional allocation shall be apportioned among one or more seasonal pools as the Board of Directors determines appropriate, per Section 11.b.viii, below.

v. As of the earlier of (i) the total amount of Pacific whiting Harvest Share allocated to a seasonal pool being harvested, or (ii) the aggregate amount of one or more Non-Whiting Species apportioned to that seasonal pool being caught, the Manager shall close such seasonal pool, and all harvesting from that pool shall cease. If a seasonal pool is closed because the

total amount of Pacific whiting allocated to that seasonal pool has been harvested, all vessels that harvested Pacific whiting from that pool shall be eligible to harvest Pacific whiting from subsequent seasonal pools during the same fishing year. If a seasonal pool closes because the aggregate amount of one or more Non-Whiting Species apportioned to the seasonal pool has been harvested, the Manager shall evaluate each participating vessel's catch amounts of each Non-Whiting Species apportionment that was fully harvested from that seasonal pool. Subject to the provisions of subsection 11.v.A, below, if the amount of the Non-Whiting Species harvested by a vessel participating in the pool that was fully harvested from that seasonal pool exceeds one hundred and twenty five percent (125%) of the amount of such Non-Whiting Species allocated to the pool on the basis of the Pacific whiting tonnage assigned to the pool for harvesting by that vessel, as reduced by Non-Whiting Species amounts associated with Pacific whiting that was subsequently transferred to other pool vessels for harvesting, and as increased by the Non-Whiting Species amounts associated with Pacific whiting subsequently transferred to and harvested by that vessel, then such vessel shall not be eligible to harvest any Pacific whiting transferred from a closed pool to a subsequent pool, and shall not be eligible to harvest any Pacific whiting Harvest Share apportioned to a subsequent seasonal pool other than that assigned to such vessel at the time of initial Member election pursuant to Section 11.b.ii, above, unless and until all other vessels operating in compliance with such 125% performance standard have ceased harvesting Pacific whiting for the year or there is Non-Whiting Species catch available in sufficient amount to support its fishing activity, as determined by the Cooperative's Board of Directors in its sole discretion. If the Cooperative receives an additional Non-Whiting species allocation before its initial allocation of such species has been exhausted, upon the additional allocation being apportioned among the seasonal pools in accordance with Section 11.b.iv., above, the Manager shall re-evaluate the performance of vessels participating in each pool that was closed on the basis of the harvest of such species (if any), taking the additional allocation into account, and each vessel's eligibility to harvest in a subsequent pool shall be determined in accordance with this Section on the basis of the adjusted allocation.

A. If a seasonal pool is closed because the aggregate amount of one or more Non-Whiting Species apportioned to the seasonal pool has been harvested, and one or more vessels are declared ineligible to harvest under Section 11.b.v, above, as a result, the Manager shall thereafter monitor the quotients of the remaining amount of each Non-Whiting Species divided by the remaining amount of Pacific whiting on an ongoing basis. If at any time the Manager determines that quotient for every Non-Whiting Species is greater than one hundred fifty percent (150%) of the quotient of the initial amount of such Non-Whiting Species available to the Cooperative divided by the

initial amount of Pacific whiting available to the Cooperative, the Manager shall evaluate the amount of each Non-Whiting Species that was the basis for pool closure caught by each vessel that has been declared ineligible to fish under subsection 11.b.v. If the amount of any such Non-Whiting Species harvested by any such vessel does not exceed two hundred percent (200%) of the amount of such Non-Whiting Species initially allocated to such pool on the basis of the Pacific whiting tonnage assigned to such seasonal pool for harvesting by that vessel, as reduced by Non-Whiting Species amounts associated with Pacific whiting that was subsequently transferred to other pool vessels for harvesting, and as increased by the Non-Whiting Species amounts associated with Pacific whiting subsequently transferred to and harvested by that vessel, then, subject to the vessel continuing to meet the cumulative Non-Whiting Species catch limit set forth below, that vessel shall be eligible to harvest Pacific whiting transferred from a closed pool to a subsequent pool, and shall be eligible to harvest Pacific whiting Harvest Share apportioned to a subsequent seasonal pool in addition to that assigned to such vessel at the time of initial Member election pursuant to Section 11.b.ii. Notwithstanding the foregoing, if at any time the cumulative amount of any Non-Whiting Species subsequently harvested by a vessel fishing under this subsection is such that the quotient of Non-Whiting Species harvested by the vessel divided by Pacific whiting harvested by the vessel exceeds the quotient of the remaining amount of such Non-Whiting Species divided by the Cooperative's remaining un-harvested Pacific whiting as of the time that the Manager determined that the Cooperative's Non-Whiting Species quotients met the 150% test applied under this subsection, such vessel shall cease to be eligible to continue fishing under this exemption, and shall stop fishing unless there is Non-Whiting Species catch available in sufficient amount to support its fishing activity, as determined by the Cooperative's Board of Directors in its sole discretion.

vi. Any Non-Whiting Species set-asides or allocations that are not used before a seasonal pool subsequent to the seasonal pool to which they are apportioned opens shall be available for harvest by vessels participating in subsequent seasonal pools on a species by species basis, when the respective Non-Whiting Species set-aside or allocation originally made to such subsequent seasonal pool is exhausted. In the event that a Member's Pacific whiting Harvest Share tonnage is not fully harvested during a seasonal pool to which it was allocated, such Member may harvest its remaining Harvest Share or have its remaining Harvest Share harvested during the subsequent seasonal pool on the condition that the vessel(s) harvesting such Member's Harvest Share during the prior seasonal period are eligible to harvest in the subsequent pool under subsection 11.b.v or 11.b.v.A, above.

vii. For purposes of Sections 11.b.v and 11.b.vi, above, “subsequent seasonal pool” shall mean the next seasonal pool in calendar order that has quota assigned to it and is open for harvest. If none of the remaining seasonal pools satisfy both of those criteria, then the “subsequent seasonal pool” shall be the first seasonal pool, if it does so, and the next pool following the first seasonal pool that does so, if the first seasonal pool does not.

viii. If the Cooperative’s initial allocation of a Non-Whiting Species is exhausted, notwithstanding the provisions of Sections 11.b.v. and 11.b.vi., above, all seasonal pools shall close, regardless of whether their allocations of such Non-Whiting Species have been attained. If subsequent to such closure, the Cooperative receives an additional allocation of such Non-Whiting Species, the Cooperative Board of Directors may re-open one or more seasonal pools, allocate some or all remaining and supplemental Non-Whiting Species allocations to it or among them as it determines appropriate in its sole discretion, and establish criteria concerning the Vessels eligible to harvest from such pool(s) as it determines appropriate in its sole discretion, the provisions of Sections 11.b.v and 11.b.vi, notwithstanding.

c. Rockfish Bycatch Control Measures. The Members agree to manage their incidental catch of Pacific Ocean perch, canary rockfish, darkblotched rockfish and widow rockfish (each, a “Rockfish Species”) in accordance with this Section 11.c, as it may be modified by the Cooperative’s Board of Directors pursuant to Section 11.c.v. For purposes of this Section 11.c, the following terms shall have the following meanings.

“Base Rate” means the ratio of incidental catch of a Rockfish Species to harvest of a metric ton of Pacific whiting, calculated annually by dividing the amount of each Rockfish Species available for incidental catch in the mothership sector of the Pacific Coast whiting fishery for the fishing year by the Pacific whiting Total Annual Catch amount allocated to the mothership sector for that fishing year.

“Permit Pro Rata Share” means the amount of each Rockfish Species available under each Assigned Permit for each seasonal pool, calculated by multiplying the amount of Pacific whiting declared to that pool under the Assigned Permit by the Base Rate for such Rockfish Species.

“Platform” means the group of vessels that harvest Pacific whiting for delivery to a mothership operating under a specific mothership permit and the mothership operating under that permit.

“Platform Pro Rata Share” means the aggregate amount of each Rockfish Species available under the Assigned Permits that are obligated to the Platform’s mothership permit in the open seasonal pool or pools from which the Platform is harvesting.

i. Unless it is exempt under Section 11.c.iii, below, when a Platform takes more than its Platform Pro Rata Share of any Rockfish Species, it shall relocate to an area or to areas where the Platform catcher vessel and mothership operators believe such Rockfish Species is unlikely to be caught for the remaining duration of the seasonal pool(s) from which it is harvesting at the time.

ii. Unless it is exempt under Section 11.c.iii, below, when a Platform has taken more than its Platform Pro Rata Share of a Rockfish Species, on any given day thereafter when its incidental catch of that Rockfish Species exceeds the Base Rate for that species while the Platform is harvesting from the same seasonal pool(s), the Platform shall relocate per Section 11.c.i, above, and, unless they are exempted from doing so under Section 11.c.iii or Section 11.c.iv, below, the Platform’s catcher vessels whose deliveries during that day contained incidental catch of that Rockfish Species in excess of the related Base Rate shall cease fishing for a 24 hour period.

(iii) The Platform obligation to relocate per Sections 11.c.i and 11.c.ii, above, and the catcher vessel obligation to cease fishing for 24 hours per Section 11.c.ii shall not apply under the any of the following circumstances:

A. When the ratio of the amount of unharvested Rockfish Species at issue to the amount of unharvested Pacific whiting in the seasonal pool or pools from which a Platform is harvesting exceeds the Base Rate.

B. When all other Platforms have completed their harvest of Pacific whiting from the pool or pools from which a Platform is harvesting.

C. When all other Platforms have ceased harvesting Pacific whiting for the year.

iv. The obligation for catcher vessels to cease fishing for 24 hours per Section 11.c.ii, above, shall not apply in connection with deliveries from test tows. To qualify as a test tow, a tow must be the first tow

made after a Platform has moved to a new area where other Platforms are not fishing, the Platform making the tow must have provided all other Platforms with advance notice it is making a test tow, the tow must be less than an hour in duration or must contain less than 15 metric tons of Pacific whiting, and the Platform making the tow must provide information concerning the location and contents of the tow to all other Platforms.

v. The Cooperative's Board of Directors may suspend or modify the provisions of this Section 11.c as it deems appropriate to address unintended consequences, to address unexpected fairness issues or when it deems that enforcing the provisions of this Section is not necessary to ensure that the Platform or Platforms that are still fishing have a reasonable opportunity to harvest their remaining amounts of Pacific whiting.

d. Fishing. For purposes of this Agreement, "fishing" shall mean all activity of a vessel between the time of initial gear deployment and final gear retrieval. For purposes of this Section 11, "gear deployment" and "gear retrieval" shall have the meanings given them in 50 C.F.R. 679.2 or its successor, as the same may be amended from time to time. Initial gear deployment shall mean setting trawl gear with an empty codend, and final gear retrieval shall mean retrieving trawl gear to either pull a codend aboard the vessel or to deliver the codend to another vessel. Notwithstanding the definitions of fishing, gear deployment and gear retrieval set forth in this Section, each Member shall have an independent obligation to comply with all applicable regulations covering such activities, as they are defined in such regulations.