Trawl Rationalization Program
Cost Recovery Annual Report
Fee Calculation for 2020 and Fishing Year 2019 Payments

April 2020

Overview

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) requires the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) to collect fees to recover the costs directly related to the management, data collection and analysis, and enforcement of a limited access privilege program (LAPP) (16 U.S.C. 1854(d)(2)), also called "cost recovery." The Pacific Coast Groundfish Trawl Rationalization Program (Trawl Program) is a LAPP and consists of three sectors: the Shorebased Individual Fishing Quota (IFQ) Program, the Mothership (MS) Co-op Program, and the Catcher/Processor (CP) Co-op Program.

In accordance with the Magnuson-Stevens Act, and based on a recommended structure and methodology developed in coordination with the Council, NMFS collects mandatory fees of up to three percent of the ex-vessel value of groundfish by sector (IFQ Program, MS Co-op Program, and CP Co-op Program). NMFS collects the fees to cover the incremental costs of management, data collection and analysis, and enforcement of the Trawl Program.

Cost recovery for the Trawl Program was implemented in January 2014. The details of cost recovery for the Trawl Program are in regulation at 50 CFR 660.115.

What is in this annual report?

NMFS is committed to transparent cost accounting practices, including publishing this annual report detailing recoverable costs. This annual report includes information on the fee percentage calculation, program costs, ex-vessel value by sector, and total fees collected by NMFS from the previous year. Information on cost recovery programs in other regions can be found in Appendix 1.

Details on Cost Recovery Calculations

For cost recovery, NMFS must make two calculations during the last quarter of every calendar year, after each fiscal year ends, and announce those values in a *Federal Register* notice before they go into effect on January 1 of the following year. The NMFS fiscal year for which the 2020 fee is calculated is 2019, which includes October 1, 2018 through September 30, 2019. The data and calculations used in the fee calculation are detailed in this report. The two calculations are:

1. Fee Percentage Calculation by Sector
2. MS Pricing for the CP Co-op Program

Fee Percentage Calculation by Sector

For the Trawl Program, NMFS calculates the fee percentage by sector using the best available information, not to exceed the Magnuson-Stevens Act three percent cap. To calculate the fee percentage by sector, NMFS uses the formula specified in regulation at § 660.115(b)(1), where the fee percentage by sector equals the lower of three percent of ex-vessel value or direct program costs (DPC) for that sector divided by total ex-vessel value (V) for that sector multiplied by 100.

Fee percentage = the lower of 3% or (DPC/V) x 100

"V" or ex-vessel value, specified in regulation at §660.115(b)(1)(ii), is the total ex-vessel value for each sector from the previous calendar year. The ex-vessel value for each sector is defined at §660.111 (see below) and includes the total ex-vessel value for all groundfish species.

> *Ex-vessel value means, for the purposes of the cost recovery program specified at § 660.115, all compensation (based on an arm's length transaction between a buyer and seller) that a fish buyer pays to a fish seller in exchange for groundfish species (as defined in § 660.11), and includes the value of all in-kind compensation and all other goods or services exchanged in lieu of cash. Ex-vessel value shall be determined before any deductions are made for transferred or leased allocation, or for any goods or services.*
>
> *(1) For the Shorebased IFQ Program, the value of all groundfish species (as defined in § 660.11) from IFQ landings.*
>
> *(2) For the MS Coop Program, the value of all groundfish species (as defined in § 660.11) delivered by a catcher vessel to an MS-permitted vessel.*
>
> *(3) For the C/P Coop Program, the value as determined by the aggregate pounds of all groundfish species (as defined in § 660.11) retained on board by the vessel registered to a C/P-endorsed limited entry trawl permit, multiplied by the MS Coop Program average price per pound as announced pursuant to § 660.115(b)(2).*

DPC or direct program costs, defined in regulation at §660.115(b)(1)(i), are the actual incremental costs for the previous fiscal year directly related to the management, data collection and analysis, and enforcement of each sector. Actual incremental costs means those net costs that would not have been incurred but for the implementation of the Trawl Program, including both increased costs for new requirements of the program and reduced costs resulting from any program efficiencies. If the amount of fees collected by NMFS is greater or less than the actual net incremental costs incurred, the DPC will be adjusted accordingly for calculation of the fee percentage in the following year. The 2020 fee percentages, accounting for adjustments, were published in the Federal Register (84 FR 67720) and are displayed below.

2020 Fee Percentages

- **Shorebased IFQ Program: 3.0%**
- **MS Program: 0.29%**
- **CP Program: 0.08%**

(announced in 84 FR 67720, 12/11/2019)

Cost of Management, Data Collection, and Enforcement

As described earlier, DPC in the calculation are the actual incremental costs for the previous fiscal year directly related to the management, data collection and analysis, and enforcement of each sector. In other words, they are costs that would not have been incurred but for the implementation of the Trawl Program.

Since 2014, the first year of cost recovery, NMFS has only recovered the costs of employees' time (salary and benefits) spent working on the program in the calculation of DPC rather than all incremental costs of

management, data collection and analysis, and enforcement. Thus, the DPC for 2020 fee percentage calculations is an underestimate of costs compared to all incremental costs. NMFS has not included other categories of incremental costs, such travel, rent, and equipment in the fee calculation. NMFS also has not included any federal costs resulting from duties performed by the states of Washington, Oregon, or California in the calculation of DPC.

The recoverable costs of employees' time spent working on the Trawl Program are the incremental costs of those employees' time. In other words, it is the cost of employees' time that would not have been incurred but for the implementation of the Trawl Program. NMFS employees have coded and tracked their time card for time spent on the Trawl Program by sector (IFQ, MS, CP) since 2011.

NMFS employees determine which tasks are incremental before attributing their time spent on these tasks to the cost recovery program. NMFS employees and their supervisors discuss the task and consult with the cost recovery coordinator, supervisors, and/or general counsel, if necessary. If they determine that the task would not have occurred if the Trawl Program were not in place, then NMFS employees record their time spent on the task with the appropriate cost recovery code. NMFS seeks to make this determination early in the process. For example, when the Council begins consideration of a new groundfish action, NMFS discusses whether the action would be considered incremental before any NMFS work begins.

When evaluating the incremental status of tasks, NMFS may determine that some tasks are partially incremental. If NMFS makes such a determination, NMFS staff would be instructed to allocate their time into incremental and non-incremental hours. These same methods would be used if it is determined that a task, such as Cost Recovery Annual Report, is relevant to more than one sector. For example:

> 1) Ratio Based: NMFS could determine that a ratio of a task is recoverable and staff members will split their time spent on the project by the ratio.
>
> 2) Hours Based: NMFS could instruct staff members to allocate their time based on the specific time spent on each task. Time spent on the recoverable tasks would be recorded separately from the time spent on the non-recoverable tasks.

NMFS has determined the incremental cost of employees' time by using those recoverable costs directly attributable to management, data collection and analysis, and enforcement of the trawl rationalization program. The majority of employees included in this estimate are either employees directly hired to work on the Trawl Program or employees whose time was directed away from other agency duties to work on the Trawl Program (e.g., less time spent on grant work, recreational fisheries issues, and open access issues).

Table 1 provides a summary of the total incremental costs from fiscal year 2019 (FY2019) from each Financial Management Center (FMC) used to determine the DPC for each sector used in calculation of the 2019 fee percentages.

Table 1. DPC associated with management, data collection and analysis, and enforcement of all sectors of the Trawl Program by FMC, FY 2019 (October 1, 2018 to September 30, 2019).[1]

Cost Category*	West Coast Region (WCR)	Northwest Fisheries Science Center (NWFSC)	Office of Law Enforcement (OLE)	Total (before adjustment[2])
IFQ	*$875,942.60*	*$864,964.27*	*$66,661.28*	*$1,807,568.15*
MS	*$53,650.36*	*$52,939.38*	*$571.64*	*$107,161.38*
CP	*$58,560.08*	*$26,355.98*	*$519.67*	*$85,435.73*
Total	$$988,153.04	$944,259.63	$67,752.59	$2,000,165.26

*. Federal employee personnel costs include salary and benefits. The federal grant to the Pacific States Marine Fisheries Commission (PSMFC) for the Catch Monitor and Electronic Ticket Programs is inclusive of the total grant costs (e.g., salary, benefits, overhead, travel, other goods and services) and is included in the WCR column.

Table 2 provides breakdowns of the total hours staff reported working on incremental tasks from each program office for each sector and the resulting personnel costs that contributed to the totals in Table 2. Note that, when split by sector, staff numbers are not additive; the same employee may have worked on more than one sector.

[1] The costs in this table match those described in the Federal Register Notice for the 2020 Fee Calculation Determination (84 FR 67720). Since publishing the notice, non-recoverable costs associated with WCR contracting, SDM contracting, and the PSMFC grant were inadvertently included. See the section "Updates from the Notice for the 2020 Fee Calculation Determination" later in the document for more detailed information.
[2] Details can be found in the "Adjusted DPCs" section later in the document.

Table 2. Incremental costs, hours, and number of staff, by program office, FY 2019.

WCR[3]				
IFQ	**Costs**	**Hours**	**Staff**	**Full time equivalent[1]**
Groundfish	*$49,719*	*61*	*3*	*0.02*
Permits	*$31,089*	*552*	*4*	*0.27*
OPB	*$20,409*	*451*	*2*	*0.22*
NWFSC Scientific Data Management team (SDM)	*$496,071*	*2,995*	*3*	*1.4*
PSMFC	*$278,655*	*na*	*2*	*na*
CP	**Costs**	**Hours**	**Staff**	**Full time equivalent**
Groundfish	*$36,364*	*6*	*1*	*0..003*
Permits	*$1,903*	*31*	*2*	*0.01*
OPB	*$20,294*	*449*	*2*	*0.22*
NWFSC (SDM)	*na*	*na*	*na*	
PSMFC	*na*	*na*	*na*	
MS	**Costs**	**Hours**	**Staff**	**Full time equivalent**
Groundfish	*$24,104*	*60.5*	*2*	*0.03*
Permits	*$9,457*	*163*	*3*	*0.08*
OPB	*$20,089*	*427*	*2*	*0.21*
NWFSC (SDM)	*na*	*na*	*na*	
PSMFC	*na*	*na*	*na*	

[3] Non-recoverable costs associated with WCR contracting, SDM contracting, and the PSMFC grant were inadvertently included. See the section "Updates from the Federal Register Notice for the 2020 Fee Calculation Determination" later in the document for more detailed information.

Total	Costs	Hours	Staff	Full time equivalent
Groundfish	*$110,149*	*127*	*3*	*0.05*
Permits	*$42,448*	*746*	*4*	*0.33*
OPB	*$60,792*	*1327*	*2*	*0.64*
NWFSC (SDM)	*$496,071*	*2,995*	*3*	*1.4*
PSMFC	*$278,655*	*Na*[2]	*2*	*na*

NWFSC				
IFQ	**Costs**	**Hours**	**Staff**	**Full time equivalent**
Economics and Social Science Research (ESSR)	$130,461	2,000	*2*	0.96
ESSR Contractors	$187,999	-	*2*	-
Fisheries Observation Science (FOS) [3]	$154,584	2,904	*9*	1.4
FOS Contractors	$48,041	-	*1*	-
PSMFC	$343,878	7,250		3.49
CP	**Costs**	**Hours**	**Staff**	**Full time equivalent**
Economics and Social Science Research	$556	9	*2*	*0.004*
ESSR Contractors	$24,972	-	*1*	-
Fisheries Observation Science	$828	9	*2*	*0.004*
FOS Contractors	*Na*	*na*	*na*	-
PSMFC	*Na*	*na*	*na*	-
MS	**Costs**	**Hours**	**Staff**	**Full time equivalent**
Economics and Social Science Research	$12,592	*181*	*3*	*0.087*
ESSR Contractors	$25,366	-	*1*	-
Fisheries Observation Science	$4,767	*62*	*3*	*0.030*
FOS Contractor	$858	-	*1*	-
PSMFC	$9,357	*197*	-	*0.095*

Total	Costs	Hours	Staff	Full time equivalent
Economics and Social Science Research	*$143,609*	*2,189*	*2*	*1.05*
ESSR Contractors	*$238,337*	*-*	*2*	*-*
Fisheries Observation Science	*$160,179*	*2,975*	*9*	*1.43*
FOS Contractors	*$48,899*	*-*	*1*	*-*
PSMFC	*$353,235*	*7,447*	*10*	*3.58*

OLE				
IFQ	**Costs**	**Hours**	**Staff**	**Full time equivalent**
FTE	*$66,661*	*1,2823*	*11*	*0.617*
CP	**Costs**	**Hours**	**Staff**	**Full time equivalent**
FTE	*$520*	*10*	*5*	*0.005*
MS	**Costs**	**Hours**	**Staff**	**Full time equivalent**
FTE	*$572*	*11*	*6*	*0.005*
Total	**Costs**	**Hours**	**Staff**	**Full time equivalent**
FTE	*$67,753*	*1,304*	*11*	*0.627*

1. This value is based on 40-hour workweeks.
2. Fisheries Observation Science = NWFSC Observer Programs.
3. Hourly detail not requested in grant.

Further details of the incremental costs for management, data collection and analysis, and enforcement of the Trawl Program by sector are described below. The details are grouped by FMC within NMFS: WCR, NWFSC, and OLE.

West Coast Region (WCR)

The WCR manages the Trawl Program by working on policy issues, drafting and implementing regulations, tracking the fishery, and issuing permits. This includes work done by WCR Groundfish, Permits and Monitoring, and Operations and Policy Branches. It also includes WCR costs for work done by the NWFSC's IT group for work on the online IFQ program web application, and for work done by the Pacific States Marine Fisheries Commission for the Catch Monitor Program and electronic fishtickets for Shorebased IFQ Program landings. The specific tasks identified to be recoverable are outlined in greater detail later in this document.

WCR employees track their time in timecards for work done on the Trawl Program with accounting codes by sector and in 15-minute increments. For many employees, only part of their time is for trawl Program. Supervisors review and approve timesheets on a bi-weekly basis. Employee time spent processing permits for which there are permit fees (i.e., first receiver site licenses (FRSL) and MS permits) are not

included in the DPC. The WCR included SDM costs of $496,070.61[4] in their DPC for tasks in FY 2019, applied toward three contract employees in support of the Shorebased IFQ Program. The PSMFC was provided $278,654.82[5] from the WCR in FY 2019 for salaries, benefits, overhead, supplies, other goods and services, travel, and professional/contractual services for the Catch Monitor Program and electronic fishtickets for the Shorebased IFQ Program.

For FY 2019, the following contributed to the DPC for the WCR:

Total cost from salaries + benefits = $ 988,9153.04
(Contractors included in these totals)
IFQ - $ 875,942.60
MS - $ 53,650.36
CP - $ 58,560.08

Examples of WCR, PSMFC, and NWFSC SDM incremental tasks in FY2019 and which sectors were charged are described below.

Groundfish Branch

Ongoing and Annual Tasks – these activities are performed on an annual or ongoing basis to administer the program and for which staff time fluctuates minimally.

- Trawl Program Support & Compliance – Provide support to constituents to understand and comply with program requirements.
  - Coordinate with Permits Branch for annual issuance of quota pound (QP) and carryover (IFQ).
  - Respond to requests for clarification of Trawl Program regulations by phone, email, and in person (IFQ).
  - Assist the Permits Branch in the review of annual mothership and catcher/processor coop applications (MS, CP).
- Website Updates – Prepare and update information for the West Coast Groundfish Trawl Catch Share Program website.
- Assist Permits Branch, West Coast Groundfish Observer Program (WCGOP), and OLE in monitoring and investigation of compliance with Trawl Program regulations (ALL, mostly IFQ).
- Cost recovery policy, participation in the fee percentage calculation, and review of annual report (ALL).
- Groundfish Management Team (GMT) analysis on recoverable tasks, as appropriate (ALL). Time spent at GMT meetings working on incremental tasks is not charged but time spent analyzing tasks identified as incremental outside a Council meeting is charged.
- Cost recovery tracking, accounting, and reporting.

Ad-hoc, Periodic, or One-time Tasks – these activities are driven by priorities and needs of the Council and NMFS or periodic requirements, such as rulemakings and program reviews, for which staff time would fluctuate from year to year.

[4] Non-recoverable costs associated with SDM contracting were inadvertently included. See the section "Updates from the Federal Register Notice for the 2020 Fee Calculation Determination" later in the document for more detailed information.

[5] Costs that are not considered recoverable, under current WCR policy, were inadvertently included. See the section "Updates from the Federal Register Notice for the 2020 Fee Calculation Determination" later in the document for more detailed information.

- Rulemakings & Council Support – Developed rulemakings and participated in policy development at the Council for the Trawl Program and worked on associated implementation and analytical requirements for specific rulemakings, including:
    - Trawl Rationalization Follow-on Actions: Final Rule (Published 12/17/19) (ALL)
        - Changes to at-sea set aside specification and management
        - Extend the opportunity for quota trading and utilization after the fishing year in the Shorebased IFQ sector
        - Expand economic data collection of CP and quota share (QS) owners
        - Cost recovery housekeeping
    - Shorebased IFQ Trawl Gear EFP: Removal of the selective flatfish trawl requirement between 40°10′ and 42° N. lat, coastwide year round midwater fishery
    - Sablefish Management and Trawl Allocation Committee (SaMTAAC) (IFQ): Alternatives development and implementation considerations.
    - Development and implementation of EM regulations for the bottom trawl and non-whiting midwater trawl fisheries (IFQ).
    - Amendment 26 (IFQ): Proposed revising trawl and non-trawl allocations for blackgill rockfish and slope rockfish south of 40°10' N. lat.
- Attending meetings and providing regional input to support nationwide cost recovery policy

<u>Operations and Policy Branch</u>

- Cost recovery policy, fee percentage calculation and notice, preparation of annual report and presentation to the Council, providing assistance to industry in paying cost recovery fees, coordinating the dispersal of cost recovery funds. Attending meetings and providing regional input to support nationwide cost recovery policy (ALL).

<u>Permits & Monitoring Branch</u>

Ongoing and Annual Tasks – these activities are performed on an annual or ongoing basis to administer the Trawl Program and for which staff time fluctuates minimally.

- Permits and Licenses – Process and administer permit and license applications and programs.
    - Review new applications and renewals for QS permits/accounts (IFQ), vessel accounts (IFQ), observer-catch monitor provider permits (ALL), and coop permits (MS, CP).
    - Work with applicants to understand requirements, and complete and submit required forms (ALL, mostly IFQ).
    - Enter data into database, issue permits, and establish new accounts. Maintain paper and electronic files associated with permits, licenses, and accounts (ALL, mostly IFQ).
- Trawl Program Support & Compliance – Provide support to constituents to understand and comply with program requirements.
    - Respond to constituents' requests for information and assistance by phone, email, and in person (IFQ).
        - Clarify Trawl Program regulations.
        - Reset passwords and provide support for vessel and quota share accounts.
        - Train new entrants on how to use IFQ account system.

        - Complete administrative transfers for deceased QS permit owners and work with families to understand requirements.
    - Proactive outreach with constituents about deadlines and changes in regulation (IFQ).
        - Contact constituents with an upcoming renewal, application, or quota pound transfer deadline.
        - Post messages on the IFQ website.
    - Data entry and Quality Assurance/ Quality Control (QA/QC):
        - Enter and QA/QC data.
        - Reconcile data discrepancies found in the IFQ account system (IFQ).
    - Update catch monitor plan guidelines and template for first receivers (IFQ).
    - Data Requests – Prepare Trawl Program data reports in response to various constituents (i.e., Council staff, industry, Non-governmental organizations, Congressional, members of the public) and internal NMFS requests (IFQ).
    - Database Maintenance/Troubleshoot Reported System Errors – Work with NWFSC IT to maintain and make enhancements to the online IFQ systems (IFQ).
        - Prepare business rules and use cases for programming staff to code system enhancements/revisions, such as password reset functionality.
        - Work with programming staff to test new functionality of systems before release.
        - Carry out QA/QC of system.
    - Quota Pound Allocations – Calculate and allocate quota pounds to QS accounts and carryover quota pounds to vessel accounts (IFQ).
        - Prepare a preliminary carryover calculation with total issuance amounts for the GMT Council. Brief GMT staff on carryover calculation and preliminary issuance amounts.
        - Prepare memos documenting QP allocation and carryover actions.
    - Website Updates – Prepare and update information for the West Coast Groundfish Trawl Catch Share Program website (year-end notice, carryover notice, updated forms, etc.).
- Cost recovery tracking, accounting, and reporting (ALL).

Ad-hoc, Periodic, or One-time Tasks – these activities are driven by priorities and needs of the Council and NMFS, such as rulemakings and program reviews, for which staff time would fluctuate from year to year.

- Rulemakings & Council Participation – Develop rulemakings and participate in policy development at the Council for the Trawl Program and work on associated implementation and analytical requirements, including:
    - Implementation of electronic monitoring (EM) program for the whiting and fixed gear fisheries, including participation in and preparation of analysis for the Groundfish EM Policy Advisory Committee (GEMPAC) and Council meetings (IFQ, MS).
    - Development of EM regulations for the bottom trawl and non-whiting midwater trawl fisheries (IFQ).
    - Responding to data requests and providing information for development and analysis of SaMTAAC, including highlighting implementation concerns with proposed measures (IFQ).

    - Development of post-season trading process and review of regulations (IFQ).
- Implementation of New Programs – Implement new or changes to existing program processes and requirements associated with regulatory changes.
    - Implementation of post-season trading, including modifications to the vessel account system.
    - Implementation of groundfish EM program, including development of policies and procedures, and database architecture.
    - Implementation of QS owner survey, including development of database modifications to incorporate into annual permit renewal process.
    - Implementation of the cowcod EFP to allow sharing of pooled vessel limits.
- Paperwork Reduction Act Submission and Unit Cost Computation – Prepare and submit for approval of packages documenting forms and reporting requirements and associated fees to comply with the Paperwork Reduction Act (PRA) and Unit Cost Computation policies, which includes development of new forms, revision of existing forms, and calculation of fees.
    - Prepared and submitted for approval a PRA renewal package for Trawl Program permits and licenses (IFQ).
    - Prepared and submitted for approval a PRA renewal package for electronic fish tickets (35% IFQ).
- Over-allocation of minor slope rockfish south of 42° N. latitude – Prepared memoranda and outreach materials to address overallocation of minor slope rockfish south of 42° N. latitude IFQ, including initial administrative decisions and appeals.

PSMFC

Ongoing and Annual Tasks – these activities are performed on an annual or ongoing basis to administer the Trawl Program and for which staff time fluctuates minimally.

- Catch Monitor (CM) Program Management.
    - Manage CM program, including training and overseeing CM certifications.
    - Debrief CM, manage, and QA/QC CM data.
    - Review catch monitor plans for FRSL applications, conduct site inspections, work with applicants to revise and resubmit final CM plans.
    - Respond to constituent requests for information about the CM program and requirements.
    - Participate in the development of policies and protocols for the CM program, including implementation of changes (e.g., as a result of regulatory actions).
- E-Tickets Support (IFQ)
    - Respond to constituent requests for assistance with e-tickets, train new users, manage and troubleshoot data entry and transmission.

SDM

The NWFSC SDM team provides the user interface and database architecture that allows IFQ QS and vessel account owners to manage QS and QP through transfers and balance reporting of fish landings and discards. NWFSC SDM has developed and maintained the IFQ Catch Share web application since the initial launch on January 11, 2011, and continues to provide enhancements as user needs and regulations have warranted. NWFSC SDM provides a data reporting interface available to key NMFS and state law enforcement agents, NMFS WCR Permits Office, NMFS economists, PSMFC staff, and Council staff.

Ongoing and Annual Tasks – these activities are performed on an annual or ongoing basis to administer the Trawl Program and for which staff time fluctuates minimally.

- Database Enhancements, Maintenance, Troubleshoot Reported System Errors – Design and develop enhancements for the online IFQ and permit systems; revise user interface; prepare use cases for programming staff to code system enhancements/revisions; test new functionality of systems before release; on an ongoing basis carry out QA/QC of system (ALL).
- Administrative transfers – e.g., top-ups, QP allocations, carryover, reapportionment (IFQ).
- Posting messages to the system (IFQ).
- Cost recovery tracking, accounting, and reporting (ALL)

Ad-hoc, Periodic, or One-time Tasks – these activities are driven by priorities and needs of the Council and NMFS, such as rulemakings and program reviews, for which staff time would fluctuate from year to year.

- Implementation of Council actions, including development of use cases, development, testing, and deployment of database modifications:
    - Post-season trading of quota pounds (IFQ)
    - EM compliance report database (IFQ, MS)
    - Cowcod EFP shared vessel limit (IFQ)
    - QS owner survey (IFQ)
    - EM permits applications (IFQ, MS)

NWFSC

NWFSC collects and analyzes data on the Trawl Program through observers on vessels and through economic and social surveys. This includes work done by the NWFSC Fishery Resource Assessment and Monitoring Program (FRAM) and additional employees paid through a PSMFC grant.

For FRAM employees, timecards were coded with project and task codes by sector in a similar manner as those from the WCR. Only costs attributable to the implementation of the 2011 Trawl Program were included. Because the mothership processing vessels (i.e., not the mothership catcher vessels) and CP vessels were fully observed with mandatory observers and debriefers from the At-Sea Hake Observer Program (A-SHOP) before the Trawl Program, these debriefer costs were not included. The A-SHOP manages observers for the at-sea whiting processors, which includes mothership processors (not the catcher vessels), and the CPs. The WCGOP administers the observer program for the shorebased catcher vessels (IFQ) and the catcher vessels fishing for and delivering to motherships. 25% of the costs attributed to the WCGOP for the Shorebased IFQ Program were deducted to account for observer coverage of the limited entry trawl fishery by the WCGOP prior to the implementation of the Trawl Program.

The PSMFC observer costs are only for Trawl Program activities. Costs are only tracked at the Trawl Program and non- Trawl Program level; however, the bulk of these costs are for the Shorebased IFQ Program. The PSMFC observer costs include the salary, benefits, and overhead for PSMFC observer staff working on Trawl Program activities. These values only cover staff time for observer program activities, not Catch Monitor Program activities, or any other PSMFC activities. In addition to the Shorebased IFQ Program, some of the cost is also attributable to the MS fishery for debriefing and training observers deployed on MS/CVs but not for activities onboard the vessels. To determine how much of these costs should be apportioned to the MS fishery, NMFS looked at the sea days spent as a percentage of MS/CVs vs Shorebased IFQ. In FY19, this was 2% to 98% respectively. As with the other NWFSC observer estimates, 25% of the hours and costs were deducted from the IFQ amounts to account for coverage of the limited entry trawl fishery prior to the implementation of the Trawl Program.

For FY 2019, the following contributed to the DPC for the NWFSC:

Total cost from salaries + benefits = $944,259.63

- IFQ: $864,964.27
- MS: $52,939.38
- CP: $26,355.98

Fisheries Observation Science

Ongoing and Annual Tasks – these activities are performed on an annual or ongoing basis to administer the Trawl Program and for which staff time fluctuates minimally. Time should be allocated directly to the sector in which work is being done when possible. For tasks that apply to all sectors, time should be split equally across applicable sectors as noted below.

- Trawl Program data review, reporting, and observer debriefings (WCGOP only, no A-SHOP costs reported) (IFQ, MS).
    - Debrief observers, error check observer data, and provide guidance to observers deployed in the Trawl Program.
    - QA/QC observer data to ensure it is of the highest quality.
    - Maintain nightly automated reporting of discard data to the vessel account system.
    - Prepare, package, file, and archive Trawl Program observer program data.
- Trawl Program observer trainings and briefings (WCGOP only, no A-SHOP costs reported) (IFQ, MS).
    - Conduct high-quality annual trainings and briefings (refresher training) to deploy observers in the Trawl Program. Develop and modify manuals and lesson plans to meet observer sampling needs in the Trawl Program.
    - Document and track observer certifications for Trawl Program deployments as established in regulation. Review observer candidate applications to ensure they meet minimum standards and maintain appropriate records.
- Support to constituents with their vessel accounts with regard to observer discards (IFQ)
    - Maintain phone and email service to constituents in order to address questions regarding observer discard debits from vessel accounts. Explain how discard is calculated in specific circumstances based on observer sampling. Provide data as requested to support debits.
    - Manually calculate discard estimates using best available data for unforeseen instances such as gear loss or improper catch handling.
- Develop EM program audit capabilities (IFQ, MS)
    - Design data systems to store and deliver EM data, and apply business rules
    - Collaborate with WCR, PSMFC, and EM 3rd party providers to help develop business rules, manuals, and other documents/guidance as needed
    - Build video review capabilities and feedback mechanisms for debriefing 3rd party generated data.
- Manage and error check trawl catch data with PSMFC, WCGOP, and OLE (ALL)
    - Provide data and support as requested by OLE or EM program to support the Trawl Program.
- Cost recovery, data analysis and reporting (ALL).
    - Query, aggregate, modify, and provide recoverable cost data to cost-recovery coordinator.
    - Determine and provide annual guidance regarding cost recoverable activities and time-keeping.
- Cost recovery tracking, accounting, and reporting (ALL).

Economics and Social Science Research

Ongoing and Annual Tasks – these activities are performed on an annual or ongoing basis to administer the Trawl Program and for which staff time fluctuates minimally. The costs for these ongoing tasks are apportioned based on the following criteria. For sector specific tasks, IFQ, MS, and CP costs are apportioned to the particular sector. For non-sector specific tasks, such as database maintenance, costs are apportioned as 33.3% to each sector. For catcher-vessel related tasks, some cost is apportioned to the MS sector because catcher-vessels also participate. The apportionment is 88% to IFQ and 12% to MS based on the average percentage of active fishing vessels that participate in the MS sector.

- Economic Data Collection (EDC) form administration and mailings (IFQ, MS, CP).
    - Update paper surveys to reflect general survey upkeep from year-to-year.
    - Design and implement survey updates and improvements based on feedback from participants and users of data and data products.
    - Acquire Paperwork Reduction Act (PRA) approval of surveys.
    - Order paper copies of surveys and other supplies needed for annual mailing of survey packets.
    - Identify entities that owe an EDC survey in a given year.
    - Update survey packets, which include cover letters and instructions as well as the current year's EDC survey.
    - Compile and mail survey packets as well as creating new file folders for current year's incoming surveys.
- EDC development and maintenance of web-based forms (IFQ, MS, CP)
    - Update web-based forms (via XML code) to reflect general survey upkeep from year-to-year.
    - Add any survey updates (including new questions) to web-based forms by updating XML code.
    - Test web-based forms each year to ensure forms are functioning properly and data is recorded.
    - General updates to web-based forms to increase usability (including identifying incorrect entries, and preventing submission of incomplete forms).
    - Generate new unique form IDs for each survey that is owed.
- EDC data QA/QC (IFQ, MS, CP).
    - Double-key entry of any surveys submitted via paper forms.
    - Update and improve automated QA/QC business rules.
    - Data validation using external data sources, including the Pacific Fisheries Information Network (PacFIN), Alaska Fisheries Information Network (AKFIN), At-Sea Hake Observer Program, and the West Coast Regional Permit Office.
    - Data validation using internal data sources, including data submitted by participants in other years and data submitted by other participants.
    - Communicate QA/QC items to participants and working with them to clarify any items that have been flagged (via phone calls, emails, and letters).
    - Mail audit letters to participants that have not clarified existing items.
    - Record electronic and paper logs of communications with participants.
- EDC database maintenance (IFQ, MS, CP).
    - Clean and transform raw data into data files for analyses.
    - Design and implement updates and improvements to data cleaning process, including cost disaggregation, fishery designations, categorizing entities, etc.
- Produce EDC reporting through EDC reports and web-site (IFQ, MS, CP).
    - General upkeep of code to generate annual EDC reports and web-site, including updating language to reflect current year, additional formatting associated with including an additional year of data, etc.

    - Update report overviews to reflect current year's data. Report overviews focus on presenting the most recent year of data, so from year-to-year the language and discussions must be updated.
    - Design and implement updates and improvements to data presentation, including generating new figures and tables.
- Regularly coordinate and provide OLE information to determine actions pertaining to delinquent and inaccurate submissions, which include delinquency letters, audit letters, warnings, site visits, and fines.
- Cost recovery tracking, accounting, and reporting (ALL).

Ad-hoc, Periodic, or One-time Tasks – these are activities that are driven by priorities and needs of the Council and NMFS or periodic requirements, such as rulemakings and program reviews, for which staff time would fluctuate from year to year.

- Trawl Rationalization Follow-on Actions:
    - Changes to at-sea set aside specification and management.
    - Extend opportunity for quota trading and utilization after the fishing year in shorebased trawl sector.
    - Council support for expanding the economic data collection program to QS owners.
- Cost Recovery Working Group
    - Attending meetings and providing regional input to support nationwide cost recovery policy.
- SAMTAAC participation.
- Peer reviewed research to estimate the outcomes of the Trawl Program.
    - Economic outcomes for harvesters and processors.
    - Analysis of crew compensation and job satisfaction.
    - Policy analysis of processor allocated quota to inform fisheries management decision-making.
- Investigating the economic dynamics of gear-switching in the Trawl Program.

NOAA's Office of Law Enforcement (OLE)

OLE enforces the requirements of the Trawl Program. OLE tracks labor costs by one project/task code, but sworn law enforcement officers and agents track their daily hours by activity codes on their timecards (1 for each sector – IFQ, MS, CP). Law enforcement officers and agents recorded recoverable activities in FY2019 associated with IFQ, CP, and MS programs.

Trawl Program enforcement technicians also perform recoverable activities for all three categories (IFQ, MS, CP). Enforcement technicians activities apply to all categories and include, but are not limited to, tracking QS and vessel account balances, contacting vessel owners if an account is negative, assisting with fishery declarations, and tracking fishing status and activity through the vessel monitoring system.

For FY 2019, the following contributed to DPC for OLE:

Total cost from salaries + benefits = $67,752.59

- IFQ: $66,661.28
- MS: $571.64
- CP: $519.67

Examples of OLE incremental tasks considered recoverable include:

Ongoing and Annual Tasks – these activities are performed on an annual or ongoing basis to administer the Trawl Program and for which staff time fluctuates minimally.

- Evaluate enforcement issues related to permit renewals and new applications (e.g., coop permits, QS and vessel accounts, FRSL) (ALL, mostly IFQ).
- Monitor QS and vessel accounts for regulatory compliance (IFQ).
- Monitor trawl catch data on a daily basis to ensure compliance with regulations (IFQ). Take enforcement action where appropriate to include verbal communication, correction letters, summary settlements, and formal investigation leading to the issuance of written warnings and Notice of Violation Assessments (NOVA) by General Counsel Enforcement Section (GCES).
- Analysis and evaluation of EDC report submittals for regulation compliance, inclusive of issuing compliance correction letters, and conducting investigations leading to the issuance of written warning and NOVAs by GCES (ALL).
- Ongoing monitoring and subsequent investigations of alleged violations of Trawl Program regulations by vessel owners, operators, processors, and First Receivers (FRs) (IFQ).
- Actively engaged in the evaluation of numerous regulation complexities specific to IFQ midwater and bottom trawl fishing activity that have emerged because of the implementation of the IFQ program (IFQ).
- Participate in the analysis, creation, and QA/QC of IFQ program outreach materials; i.e., compliance guides (IFQ).
- Data Requests/Reports – Prepare Trawl Program data reports in response to various constituents (e.g., Council staff, industry, NGOs, Congressional, members of the public) and internal NMFS requests (IFQ).
- Investigation of alleged observer and compliance monitor harassment violations (IFQ).
- Investigation of alleged violations of ownership interest for the IFQ trawl fleet across permits and vessels.
- Develop procedures and processes of monitoring, analyzing, and investigating alleged excessive QS holdings.
- Participate in designing programming updates for the online IFQ system to improve monitoring and investigative capabilities.
- Cost recovery tracking, accounting, and reporting (ALL).

Ad-hoc, Periodic, or One-time Tasks – these activities are driven by priorities and needs of the Council and NMFS or periodic requirements, such as rulemakings and program reviews, for which staff time would fluctuate from year to year.

- Participate in designing programming updates for the online IFQ system to improve monitoring and investigative capabilities.
- Evaluate related enforcement implications in regards to new rulemaking, reviewed proposed and final rules.
- Investigations and support for observer reports including interference/harassment (CP).

Northwest Section of General Counsel

NMFS did not include the cost of employees from the Northwest Section of General Counsel in the cost recovery calculation. Of the other Regions around the country collecting cost recovery fees for LAPPs under the MSA, no other Region includes General Counsel in recoverable costs. The Alaska Region did recover their General Counsel costs in the past, but has stopped doing so.

Redetermination of Past DPCs

On August 10, 2016, the U.S. Court of Appeals for the Ninth Circuit issued its opinion in Glacier Fish Co. LLC v. Pritzker, 832 F.3d 1113 (9th Cir. 2016), a case involving a challenge to NMFS' authority to recover cost recovery fees from members of the CP Program and the reasonableness of NMFS'

calculation of the CP Program's 2014 fee percentage. The court held that the calculation of the 2014 CP Program fee was inconsistent with NMFS' cost recovery regulations and the court remanded to NMFS to re-determine the 2014 fee.

In response, NMFS re-valuated and modified the methodology used to determine the CP Program's DPC for the 2014 fee calculation. NMFS elected to apply a similar revised methodology for all sectors for 2014-2016 to redetermine the DPC for those years and to use the revised methodology for all sectors for all following calculations.

Adjusted DPCs

Cost recovery regulations at § 660.115(b)(1)(i) specify that, if the amount of fees collected by NMFS are greater or less than the actual net incremental costs incurred, the DPC will be adjusted accordingly for calculation of the fee percentage in the following year. The adjustments to the 2019 DPCs are below:

- Shorebased IFQ Program: No adjustment
- MS Program: -$73,928.46
- CP Program -$69,385.25

The resulting adjusted DPC values are below:

- Shorebased IFQ Program: $1,807,568.15
- MS Program: $33,232.92
- CP Program $16,050.48

Determining the Value of the Fishery (V)

The cost recovery program regulations define ex-vessel value slightly differently for each sector (IFQ, MS, and CP). This results in slightly different methods to calculate "V" for each sector. For the Shorebased IFQ program, NMFS used the ex-vessel value (defined at §660.111 and above in this report under "fee percentage calculation by sector") for calendar year 2018 as reported in Pacific Fisheries Information Network (PacFIN) from electronic fish tickets to determine "V." The MS Program and the CP Program values are calculated using the average price of Pacific whiting as reported in PacFIN from the Shorebased IFQ Program in 2018. This average price ($0.08) and the retained catch estimates (weight) from the observer data (as reported in PacFIN from NORPAC) were used to calculate the "V" for the MS and CP Programs.

The DPC is calculated on the fiscal year, "V" is calculated on the calendar year. NMFS considered calculating "V" on the fiscal year, but had concerns that the data available right after the fiscal year ends may not be accurate. Ex-vessel value for the Shorebased IFQ Program is reported in PacFIN from fish ticket data. PacFIN reports often have a time delay, with data continuing to update in the PacFIN system for several months. Therefore, pulling data based on a fiscal year, right after the fiscal year has closed, may not result in the best available data. NMFS will continue to calculate "V" using the previous calendar year's ex-vessel value. There is no concern with calculating DPC on the fiscal year and "V" on the calendar year as long as it remains consistent between years (i.e., "V" does not switch between 2 years from calendar year to fiscal year).

To determine "V" by sector for calendar year 2018, NMFS queried the PacFIN database on October 16, 2019. Shorebased IFQ landings and revenue estimates (including all groundfish species) were taken from the PacFIN Comprehensive FT table where nominal ticket species categories are distributed to individual rockfish species at the daily level, using area and species composition proportions supplied by the state

sampling programs (Table 3). For the MS and CP fisheries, retained catch estimates and corresponding whiting values were taken from the NORPAC Comprehensive table within PacFIN. While all groundfish species are included in the Shorebased IFQ ex-vessel value, values for non-whiting species are not calculated for the MS and CP fisheries, since the vast majority of them do not result in revenue.

Table 3. Retained catch estimates by month and sector. IFQ includes all landed species; at-sea sectors include only whiting. Whiting value estimates for at-sea sectors were queried from the NORPAC comprehensive table in PacFIN. IFQ estimates were queried from the PacFIN Comprehensive FT table.

2018	IFQ lbs	IFQ value	CP lbs.	CP value	MS lbs.	MS value
Jan	3,922,513	$2,209,972	0	$0	0	$0
Feb	3,288,567	$1,913,191	0	$0	0	$0
Mar	5,540,089	$2,670,831	0	$0	0	$0
Apr	6,416,499	$2,741,750	0	$0	0	$0
May	32,033,124	$4,199,026	60,047,854	$4,692,767	36,086,193	$2,717,635
Jun	62,047,837	$6,175,911	54,001,877*	$4,443,572*	48,510,037	$3,987,912
Jul	67,596,641	$7,290,682	na	na	0	$0
Aug	73,009,730	$8,013,188	0	$0	0	$0
Sep	57,758,371	$6,751,698	52,952,950	$4,515,739	14,319,297	$1,198,742
Oct	28,087,682	$6,007,970	63,345,582	$4,932,230	35,215,322	$2,894,544
Nov	8,603,815	$4,199,546	25,453,693	$1,723,664	11,277,850	$763,709
Dec	4,247,521	$2,621,600	0	$0	0	$0
Sum	**352,552,389**	**$54,795,365**	**255,801,956**	**$20,307,972**	**145,408,699**	**$11,562,543**

*includes June and July for confidentially.

Calculating the Fee as a Percentage of Total Fishery Value

Using the formula described above in "Fee Percentage Calculation by Sector" and the values for V and adjusted DPC, the fee percentage by sector is as follows:

Fee percentage = the lower of 3% or (DPC/V) x 100

- Shorebased IFQ Program: 3.0% = the lower of 3% or ($1,807,568.15/$54,795,365.00) x100
- MS Program: 0.29% = the lower of 3% or ($33,232.92/$11,562,542.83) x 100
- CP Program: 0.08% = the lower of 3% or ($16,050.48/$20,307,972.13) x 100.

Table 4. 2020 cost recovery fee percentage calculation.

Trawl Sector	WCR*	NWFSC*	OLE*	Total by Sector	2019 Fee Adjustment	final Sector Totals	Ex-vessel Value**	Fee Percentage by Sector	Fee Percentage by sector (max 3%)
Shorebased IFQ Program	$875,942.60	$864,964.27	$66,661.28	$1,807,568.15	$0.00	$1,807,568.15	$54,795,365.00	3.30%	3.00%
MS Coop Program	$53,650.36	$52,939.38	$571.64	$107,161.38	$73,928.46	$33,232.92	$11,562,542.83	0.29%	0.29%
C/P Coop Program	$58,560.08	$26,355.98	$519.67	$85,435.73	$69,385.25	$16,050.48	$20,307,972.13	0.08%	0.08%
Total	$988,153.04	$944,259.63	$ 67,752.59	$2,000,165.26		$1,856,851.55	$86,665,879.96		

*Incremental costs of *employees' time (salary + benefits), as well as grants and contracts, from FY 2019 attributable in support of the Trawl Program.*

***Ex-vessel value from calendar year 2018.*

The 2019 fee adjustment column has been added to the "total by sector" to give the "final sector totals." The "final sector totals" column of the table is divided by the values in the "ex-vessel value" column to determine the "fee percentage by sector." Additionally, the fee percentage must not be greater than 3% as shown in the "fee percentage by sector (max 3%)" column.

MS Pricing for the CP Program

For 2020, NMFS has calculated the MS pricing for the CP Program to use as a proxy as $ 0.08/lb for Pacific whiting.

NMFS uses the best information available from other sectors to estimate the ex-vessel value of whiting in the CP Program. In regulation, this is called "MS pricing," and is the MS Program's average price used in the fee calculation. The MS pricing will be used by the CP Program to determine their fee amount due (MS pricing multiplied by the value of the aggregate pounds of all groundfish species harvested by the vessel registered to a CP-endorsed limited entry trawl permit, multiplied by the CP fee percentage, equals the fee amount due). MS pricing for cost recovery has been based on the average price per pound of Pacific whiting as reported in PacFIN from the Shorebased IFQ Program. In other words, data from the IFQ fishery was used as a proxy for the MS average price per pound to determine the ''MS pricing'' which is also used in the calculation for the CP sector's fee amount due. True MS average price per pound was planned to be calculated from the MS Program Annual Reports. However, because the MS cost recovery fee was set to zero percent in 2019, there were no reports to submit and the previous method was used again for the 2020 MS pricing.

Updates from the Federal Register Notice for the 2020 Fee Calculation Determination (84 FR 67720)

NMFS has identified several non-recoverable costs that were included in the 2019 DPCs. The non-recoverable costs were associated with the WCR contracting, SDM contracting, and the PSMFC grant. The WCR included contracting costs that were not recoverable which resulted in a credit. There were also some staff hours that were excluded resulted in a debit. SDM costs were reevaluated and showed an over charge which resulted in a credit. PSMFC's DPC included costs that did not fall under labor, benefits, or overhead, such as supplies, travel, and "other goods and services," which, under the current policy, are not considered recoverable[6]. Removing these costs resulted in a credit for the Shorebased IFQ Program.

Table 4. Adjustment to be included in the 2021 fee calculation.

Sector	WCR Contracting Adjustment	WCR Staff Adjustment	SDM Adjustment	PSMFC Adjustment	Adjustment for 2021 calculation
IFQ	-$6,300	$3,200	-$196,423	-$31,751	-$231,274
MS	-$3,600	$2,048	$6,019	$0	$4,647
CP	-$8,100	$512	$13,873	$0	$6,285

NMFS is currently moving forward with a Federal Register Notice that will adjust the Shorebased IFQ Program fee percentage for the remainder of 2020. This adjustment to 2.88 percent would become effective upon publication of the notice in the *Federal Register*. Because the adjustment has resulted in a

[6] MSA allows for these costs to be included; the WCR policy to exclude them may be updated in the future.

lower fee for the Shorebased IFQ Program, NMFS will calculate the fees that should have been collected in 2020 under the 2.88 percent fee and include the excess as a credit in the 2021 fee calculation. The adjustments for the MS and CP Programs will be included in the 2021 cost recovery fee calculation.

Fees Collected during Fishing Year 2019

The fees collected in 2019 can be found in Table 5.

Table 5. Cost recovery fees collected through pay.gov for 2019 catch.

	2019 Fees collected
Shorebased IFQ Program	$1,640,129.28
MS Program	$0.00
CP Program	$0.00
Total	**$1,640,129.28**

Use of Funds

Payments received by NMFS as a result of cost recovery are deposited in the Limited Access System Administrative Fund as required by the Magnuson-Stevens Act. Funds deposited in this account are available only to the Secretary of Commerce and may only be used to administer and implement the Magnuson-Stevens Act in the fishery in which the fees were collected. All cost recovery fees will be used for current and future management, data collection and analysis, and enforcement of the Trawl Program.

Evaluating Program Efficiencies

During discussions with industry members as well as the Groundfish Advisory Subpanel (GAP), NMFS was asked to provide a pre-trawl rationalization (catch share) program costs estimate, in detail, and details on cost saving provided by the program.

Currently the WCR uses a "but for" approach when determining the DPC as specified in 50 CFR 660.115(b)(1)(i). This approach looks at incremental costs that would not have been incurred but for the implementation of the catch share program and is consistent with the "with and without" language in "The Design and Use of Limited Access Privilege Programs" tech memo (NOAA, 2007), which states:

> "The relevant costs to recover are the incremental costs, i.e., those costs that would not have been incurred but for the IFQ program (NMFS, 2003). Conceptually, measuring these costs involves a "with and without" comparison, i.e., What is the cost of running the management program for the specified fishery under the status quo regime, and what is the cost of running the management program under the LAP program? The difference is the incremental costs attributable to implementing the LAP program…"
>
> "The reason for a with-without comparison rather than a before-after comparison is to keep all other factors equal. This becomes tricky for any currently unmanaged fisheries. Here the baseline to use as a reference for the cost comparison is the estimated cost of basic data collection and analysis, management and enforcement under a traditional non-LAP method for that fishery.

> This means that if the status quo management system is incomplete or insufficient to meet current objectives and just happens to be adjusted concurrent with the introduction of the LAP program, the costs of satisfying the insufficiency should not be attributable to the LAP program. For example, a newly managed fishery would need some form of a stock assessment regardless of whether the management strategy was a LAP or non-LAP approach. The stock assessment cost would not be a recoverable cost in this case. Another example is the general recognition that observers are necessary in a multi-species fishery managed with a non-LAP program. However, consider the case where observers were not part of the initial management program and a decision was subsequently made to require observers. Even though the decision to introduce observer might coincide with the start of a LAP program, the observer costs would not necessarily be eligible for cost recovery unless they were directly related to and in support of the LAP program…"

We have evaluated how to calculate pre-catch share program costs, and after discussions with WCR and NWFSC staff, including the SFD economist, and NMFS Headquarters staff, we have decided that an attempt to determine sector specific costs pre-catch share at this point would be time-consuming, inaccurate, and not informative. Before the implementation of the cost recovery time codes, staff time was not tracked using the current methods and NMFS did not necessarily track staff time by sector or fishery. For example, for the pre-catch share period, time spent on the sablefish fishery cannot be differentiated from time spent on the groundfish fishery, so looking at funds spent by the Groundfish or Permits Branches do not reflect the cost of managing the groundfish fishery alone. In addition, many of the staff who worked on the groundfish fisheries are no longer with NMFS and are therefore unable to provide any insight on how much of their time was spent on various projects. Given these limitations, it would be difficult to reconstruct the pre-catch share program costs for a quantitative comparison to current program costs.

NMFS can, however, look at other information sources to get a general sense of the changes in program costs. For example, we can look at the number and types of actions such as proposed/final rules and inseason actions on an annual basis. Table 7 below shows actions four years prior to rationalization and the years after. While the total number of actions, and the associated NEPA documents, produced each year has not changed dramatically, there has been something of a reduction in inseason actions. This analysis, however, does not demonstrate how much time NMFS staff invested in each action. Some regulatory actions can require a significant time investment from NMFS staff, whereas other actions require a smaller time investment.

These numbers have been updated from the 2017-2018 annual report to provide a clearer picture of the total actions required to manage the groundfish fishery. Each of the actions will include the drafting and review of multiple documents such as decision memos, NEPA documents (environmental assessments, environmental impact statements, or categorical exclusions), Paperwork Reduction Act documentation, public notices, and Federal Register notices. All of these documents are predicated on significant time spent on analysis and discussion between NMFS staff and meetings and coordination with committees such as the GAP and GMT. In addition, each action could include mandatory public comment periods. This information is included to help explain the investment of time staff are committing for each action.

Table 6. Number and type of regulatory actions by year.

Year	Corrections	Proposed Rules	Final Rules	Inseason	Total actions
2007	3	2	4	7	16
2008	1	3	1	9	14
2009	1	2	5	7	15
2010	2	5	7	6	21
2011	2	4	5	5	18
2012	1	5	1	7	15
2013	0	5	5	5	15
2014	4	7	5	4	20
2015	1	6	7	6	20
2016	0	7	3	4	14
2017	1	4	2	5	12
2018	2	2	3	4	11

As shown in Table 67, the total actions have not changed significantly however there has been some change in the type of actions. Table 7 contains the yearly averages before and after rationalization.

Table 7. Annual averages of regulatory actions before and after rationalization.

	Pre-Rationalization 2007-2010	Post-Rationalization 2011-2018
Corrections	1.8	1.4
Proposed Rules	3.0	5.0
Final Rules	4.3	3.9
Inseason	7.3	5.0
Total actions	16.5	15.6

Appendix 1

Information on LAPPs in other Regions can be found online using the links below.

- **Alaska Crab Rationalization**
- **Alaska Halibut/Sablefish IFQ**
- **Central Gulf of Alaska Rockfish Program**
- **Alaska American Fisheries Act Pollack Program**
- **Aleutian Islands Pollock Program**
- **Bering Sea and Aleutian Islands Amendment 80 Program**
- **Western Alaska Community Development Quota Program**
- **Greater Atlantic Golden Tilefish IFQ**
- **Greater Atlantic Scallop IFQ**
- **Greater Atlantic Surf Claim and Ocean Quahog ITQ Program**
- **Gulf of Mexico Grouper-Tilefish IFQ Program**
- **Gulf of Mexico Red Snapper IFQ Program**
- **Wreckfish IFQ Program**