

## Attachment 1

### Update to the Tracking and Monitoring Costs of the Program

#### **Tracking and Monitoring Program**

A key feature of the trawl rationalization program would be a shift from the current catch accounting system for the shoreside sector that uses fleetwide estimates of discards based on an observer sampling system that has 20 percent coverage to an ‘individual accountability’ system where all catch by shoreside vessels would count against participants’ shares, including both retained and discarded catch based on 100 percent observer coverage on vessels and 100 percent compliance monitoring in the plants. Under the current management system, shorebased fishermen fish against bimonthly trip limits and annual fleetwide quotas and have no direct accountability for discards. Under the proposed system, shorebased fishermen would fish against “individual” quotas against which their discards would count. Within the whiting fishery, there will be two major changes. Shoreside whiting vessels will no longer be monitored by cameras as they will be required to have observers. Catcher-vessels that deliver to motherships are currently unmonitored; these vessels, too, will be required to carry observers.

Amendment 20 would include a tracking and monitoring program to ensure that all catch (including discards) would be documented. For shoreside vessels, catch would be matched against QP; for the at-sea co-ops, catch would be matched against sector amounts. The Council specified that observers would be required on all vessels, and shoreside monitoring (catch monitors) would be required during all off-loading (100 percent coverage). Compared to status quo monitoring, this would be a monitoring and observer coverage level increase for a large portion of the trawl fleet, particularly nonwhiting shoreside vessels.

The Council recommended providing NMFS with the flexibility to develop a monitoring program that would achieve the objectives of the QP program. NMFS is working closely with the states and the Council to develop the details of the tracking and monitoring program, as reported by Pacific States Marine Fisheries Commission (PSMFC) at the April 2010 Council meeting. The details of the program will be proposed in the upcoming program components rule. As reported by PSMFC, the following tracking and monitoring components will be addressed.

Amendment 20 would require NMFS-certified, at-sea observers on each vessel. This requirement includes shoreside catcher vessels, mothership catcher vessels, mothership processors, and catcher-processors. Because this is a new program, ensuring adequate observer coverage would be particularly important for monitoring the complex suite of allocations. Observers aboard vessels would be required to adequately account for catch and bycatch in the fishery. Among his or her duties, the observer would record fishing effort and estimate total, retained, and discarded catch weight by species or species group; determine species composition

of retained and discarded catch (non-whiting vessels), and document the reasons for discard; record interactions and sightings of protected species; take biological samples from tagged fish and discards; and estimate viability of Pacific halibut. Observers would be essential to monitor IBQ in the fishery, including IBQ weighing and discarding.

An increase in observer and catch-monitoring coverage requirements would result in increased costs over the status quo observer program costs. There would be a combined status quo, pay-as-you-go industry funding and agency-funded observer and catch monitoring system, as required for each sector. The agency has announced its intent, subject to available Federal funding, that participants initially be responsible for 10 percent of the cost of hiring observers and catch monitors. The industry proportion of the costs of hiring observers and catch monitors will be increased every year so that, by 2014, once the fishery has transitioned to the rationalization program, the industry will be responsible for 100 percent of the cost of hiring the observers and catch monitors. NMFS believes that an incrementally reduced subsidy to industry-funding will enhance the observer and catch monitor program's stability, ensure 100 percent observer and catch monitor coverage, and facilitate the industries' successful transition to the new quota system.

Amendment 20 would require that first receivers—shorebased processors or other entities that receive groundfish from IFQ harvesters sort, weigh, and report all landings of IFQ species under a catch monitoring plan. First receivers will be required to hire NMFS-certified catch monitors to verify all shoreside deliveries of IFQ species, ensure that species are sorted into Federal species groups, ensure that the fish are weighed on state-certified scales that are tested periodically and record and submit catch data daily.

To ensure that the QP program goals are met, and landings are tracked, first receivers will be required to submit electronic fish tickets using software provided by the Pacific States Marine Fisheries Commission. Further, vessels will be required to use VMS to indicate vessel locations and to make declarations. In addition, there are plans to develop and require an electronic vessel logbook, but this component will not be immediately implemented.

To ensure that program goals are met to track transferrable QS and QP, NMFS is also developing an online accounting system for the tracking and trading of QS by owner and for the tracking, trading, and use of the QP that result from these quota shares by vessels.

The agency will collect fees to cover the administrative costs of issuing the quota shares, permit endorsements (one-time fee and annual renewal), and first receiver site licenses (annual).

Amendment 20 would allow for assessing cost recovery fees of up to 3 percent of ex-vessel value, consistent with 303A(e) of the MSA. The costs to be recovered would be the agency's costs of management, data collection, analysis, and enforcement activities. The Council will develop the methodology required by 303(A)(e) in a trailing action.

NMFS plans to propose additional program details in a future proposed rule. Such additional details would include program components applicable to IFQ gear switching, observer programs, retention requirements, equipment requirements, catch monitors, catch weighing requirements, coop permits/agreements, first receiver site licenses, quota share accounts, vessel quota pound accounts, further tracking and monitoring components, and economic data collection requirements. In order to encourage more informed public comment, this proposed rule includes a general description of these additional program requirements. NMFS is also planning a future cost-recovery rule based on a recommended methodology yet to be developed by the Pacific Fishery Management Council.

### **Tracking and Monitoring Costs**

The costs of the program can be broken into three categories:

Agency Implementation Costs (one-time costs to develop the tracking and monitoring programs)

Agency Annual Costs (state and Federal costs associated with running the Program when fully implemented)

Direct Observer and Monitoring Costs (daily costs associated with hiring observers and plant monitors)

These costs are shown in the table below. They are based on converting quarterly estimates developed for the Federal fiscal year budget process. While funds may be received in one quarter, they may not be expended in that quarter. Estimates of agency implementation costs were based on funds received during FY 2010 and first quarter of FY 2011. As programs develop, in some cases using this approach to estimate implementation cost may yield estimates that are too high and in other cases too low. As the fishery progresses and programs adapt, new features will have to be developed, while others will be corrected or phased out. For example, the quota share trading system, while initially developed for 2011, will not be tested until 2013 because the trading in quota shares is prohibited for the first two years. There may also be implementation costs associated with the Adaptive Management Programs or the Community Fishery Association Program. As programs develop, agency costs may increase because of the transition from old programs to new programs where, for a period of time, both programs have to be maintained (see attached figure).

#### Agency Implementation Costs

These are one-time additional costs to NMFS and the states to implement the program. For managing the program, these include developing the initial issuance processes (historical database development, initial application forms, the appeals processes), permitting processes and development of the shorebased total catch accounts (electronic fish tickets, compliance monitor

reports, and observer discard estimates) and shorebased, vessel accounting systems). Based on review of NMFS Alaska and Northeast Region programs, NMFS estimates that there may be over 100 appeals. States will also incur some implementation costs for upgrading their catch tracking systems to meet the new electronic reporting requirements. The federal enforcement program will have to train new officers and staff and pay their salaries while in training. State enforcement programs will also have to train new officers and staff, but these costs are included in annual costs. Both the NWR and NWFSC will have to expand their monitoring programs and develop the necessary infrastructure (IT, equipment, training, and office space. It may cost more than \$12,000 to equip an observer with a laptop, motion-compensated scale, safety gear, and raingear. It costs about \$2000 to equip a compliance monitor with gear and a computer. Approximately 100 observers and 60 to 80 plant monitors will have to be equipped and trained for the first year of implementation.

### Agency Annual Costs

These are recurring state and federal costs associated with running the program when fully implemented. For the NMFS NWR Management Office, these costs include five positions for managing the permitting processes, quota share accounts, vessel accounts, catch monitoring program, and cost-recovery program. PSMFC and NMFS NWR will continue to expend about \$200,000 annually to maintain the IT aspects of electronic fish ticket, total catch databases, quota share, and vessel accounts. States will continue to receive \$200,000 each for managing state fish ticket system and for increased port sampling needs. For the Federal enforcement office, these costs fund four positions. For state enforcement, \$800,000 is planned to be provided to the three states because of increased enforcement levels. The trawl rationalization program is complex, and there will be a initial need for high enforcement presence. These costs may decline once the program matures, and participants develop better understanding and acceptance of the regulations. These enforcement costs may also decline as a result of the expected consolidation of the fleet. Other costs may change as a better understanding of the roles of compliance monitors, port samplers, and enforcement agents develops, and the roles are revised to avoid duplication or to better complement each other. With respect to the Observer and Economic Data Collection Programs, the Northwest Fisheries Science Center will expend funds associated with about five positions. PSMFC will continue to receive grants for debriefing positions and gear. In addition, contracts for collecting economic data will be developed. The total cost is expected to be approximately \$5.0 million by FY 2013. [Note that inflationary effects are taken into consideration.]

### Direct Observer and Compliance Monitor Costs—Estimates by Fleet

Observer-Shoreside Non-whiting: In 2008, there were 2,166 actual non-EFP trawl trips. The number of trips has ranged from a high of 3,486 to a low of 2,088 between 2002 and 2008. Therefore, for purposes of analysis, we will assume 2,300 trips. The average trip length has been 3.3 days (trips are usually no longer than five days but range from one to eight days in length).

This yields about 7,600 sea days. The cost of an observer is estimated to be \$500 a day based on conversations with the observer providers. Due to the logistical complexities of the west coast groundfish fleet and the high number of unknowns, there is considerable risk for the providers, and they estimate that the cost per sea day at \$500 per day. This is higher than in the North Pacific but lower than the \$510 estimates associated with the Northeast Region's industry-funded scallop observer program. This estimate leads to a direct annual cost for the shorebased non-whiting fishery of about \$3.8 million. Unit costs of observers are a function of the ability to work with the observer providers and make arrangements to lower costs. At the September 2009 Pacific Fishery Management Council meeting, the NWFSC provided information suggesting that if an observer is placed on a monthly stipend under which the observer is expected and guaranteed to work 20 days, the average daily rate of the observer could be lower (Agenda Item E.6.B Supplemental NWFSC Powerpoint September 2009 "Thoughts on Costs").

Observer-Shoreside Hake: In 2008, 590 trips were taken. Using this value and \$500 as the daily observer cost, the total cost is \$295,000.

Observer-Mothership Catcher Vessel: It is estimated that they will fish for 30 sea days. Using 15 participants and 30 sea days each yields 450 total sea days. At \$500 per day, this would yield an observer cost of \$225,000. If the season were 60 days with 20 participants, at \$500 per day for an observer, the total cost would be \$600,000

Mothership Processors and Catcher-Processors: The NWFSC estimates the current at-sea costs of observers for both the Mothership and Catcher-Processor fleets is about \$600,000.

Catch monitors: For the non-whiting fishery, if there are 7,600 sea days, and the average trip is 3.3 days, then a projected 2,300 trips that will have to be monitored. This implies that if a catch monitor can monitor one trip per day the direct annual compliance monitor cost would be about \$800,000 at \$350 per day. For the whiting fishery, if there are 14 processors and a 60-day season, there will be 840 processing days and potential cost of \$300,000. If the season is 30 days, then the costs would be about \$150,000. For approximation purposes, these estimates were rounded up to a total of \$1.3 million.

The total of the direct cost observers and compliance monitors for the shoreside component is \$5.4 million (observers, shoreside non-whiting, \$3.8 million; observer shoreside hake, \$300,000; and catch monitors, \$1.3 million). The total costs for the observers in the mothership and catcher-processor fishery is about \$1.2 million (observer-mothership catcher vessel, \$600,000 and mothership processors and catcher-processors, \$600,000). The initial grand total of the direct costs of observing and monitoring this fishery is about \$6.6 million.

The agency has announced its intent, subject to available Federal funding, that participants would initially be responsible for 10 percent of the cost of hiring observers and catch monitors. The industry proportion of the costs of hiring observers and catch monitors would increase every year so that, by 2014, once the

fishery has transitioned to the rationalization program, the industry would be responsible for 100 percent of the cost of hiring the observers and catch monitors. NMFS believes that an incrementally reduced subsidy to industry funding would enhance the observer and catch monitor program's stability, ensure 100 percent observer and catch monitor coverage, and facilitate the industries' successful transition to the new quota system.

The initial observer and catch monitoring costs projections (shoreside, \$5.4 million and at-sea whiting, \$1.2 million) do not reflect two cost lowering effects: the effects of consolidation and as the industry increasingly bears the burden of paying for the observer and catch monitors and the ability of the industry to work with observer and compliance monitor providers to reduce costs. It is not unreasonable to expect a 25 percent reduction in costs to a level of \$5.0 million annually as a result of these effects.

West Coast Trawl Rationalization program Implementation costs and funding											
Funds Required											
	FY2010	FY2010	FY2010	FY2010	FY2011	FY2011	FY2011	FY2011	FY2011	FY2012	FY2013
	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Total	Total
Regs Dev./Permitting/ Issuance - NWR salaries	50,000	0	100,000	150,000	225,000	125,000	125,000	125,000	600,000	600,000	600,000
Appeals	0	0	0	0	170,000	20,000	20,000	20,000	80,000	0	0
Total Catch Databases and Quota Share/Vessel Accounts	1,100,000	0	0	1,100,000	200,000	0	500,000	0	700,000	700,000	700,000
State and Federal Enforcement	700,000	0	0	700,000	450,000	0	0	0	450,000	1,182,000	1,150,000
Catch Monitor Program	300,000	0	0	300,000	300,000	0	0	0	300,000	300,000	300,000
Observer and Economic Data Collection Program	519,000	0	0	519,000	1,488,500	720,500	720,500	720,500	3,650,000	3,650,000	2,050,000
<b>Total Agency Costs</b>	<b>2,669,000</b>	<b>0</b>	<b>100,000</b>	<b>2,769,000</b>	<b>2,833,500</b>	<b>865,500</b>	<b>1,365,500</b>	<b>865,500</b>	<b>5,780,000</b>	<b>6,432,000</b>	<b>4,800,000</b>

# Observer Program Transition to TRat

