ADF&G SCALLOP FISHERY MANAGEMENT IN THE ABSENCE OF THE STATE VESSEL-BASED-LIMITED-ENTRY PROGRAM

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The Alaska Department of Fish and Game (ADF&G) supported the vessel-based limited entry program for the state water weathervane scallop fishery when it was introduced in 2004 and when it was reconsidered in 2008. If the limited entry program expires in December 2013, the scallop fishery in state waters will revert to open access while the fishery in federal waters 3–200 nautical miles offshore will remain under the federal license limitation program (LLP) approved by the North Pacific Fishery Management Council (NPFMC) in 2001. If the state limited entry program expires, ADF&G fishery managers from around the state (Figure 1) who currently manage the scallop fishery in both state and federal waters would decide how to manage the open access state waters scallop fishery.

Scallop Fishery in State Waters

In Southeast Region, seven discrete scallop beds have been identified from scallop observer program logbooks (Figure 2). Of this area, 17 percent lies in state waters and we estimate that 23 percent of the total 2009/10 through 2012/13 (most recent four seasons) catch of 629,000 lbs. scallop meat was harvested from state waters.

In the Central Region Area E fishery off Kayak Island (Figure 3), 10 percent of the area identified as scallop beds using observer program logbooks lies in state waters, and over the 2009/10 through 2010/11 seasons, about 2.5 percent of the 42,100 lbs. scallop harvest was taken from state waters. The Kayak Island fishery was not opened during the 2012/13 season.

In Kodiak Shelikof District, about 32 percent of the main scallop bed between Cape Douglas and Hallo Bay (Figure 4) lies in state waters, and we estimate that 24 percent of the 584,000 lbs. harvested during the 2009/10 through 2012/13 seasons was taken in state waters. Besides the main bed, several other areas further south in Shelikof Strait that lie in state waters open to scallop fishing are occasionally targeted by the fleet but have produced less than 5 percent of the total harvest since inception of the scallop observer program in 1993.

Scallop abundance in these fisheries is currently trending downward. For example, the 2012/13 Yakutat District scallop guideline harvest level (GHL) was set at 120,000 lbs. scallop meats, a decrease from 160,000 lbs. during the 2009/10–2010/11 seasons and 150,000 lbs. during the 2006/07–2008/09 seasons. Similarly, the Kodiak Shelikof District GHL was reduced to 105,000 lbs. in 2012/13 from 135,000 lbs. for 2011/12 and 170,000 lbs. for the 2007/08–2010/11 seasons. The Kayak Island scallop fishery, which is assessed by biennial dredge surveys, is currently closed due to low estimated scallop abundance.

Current Fishery Participants

Four vessels have participated in the statewide scallop fishery over the past several seasons. Of these, two hold state waters licenses and were responsible for the state waters harvest detailed

above. One of these vessels is part of the three-vessel Alaska Scallop Association (industry cooperative) and one is a smaller vessel home ported in Kodiak that has participated in the Kodiak Area and Cook Inlet fisheries. ADF&G expects that current LLP license holders would fish in the same areas as any new entrants to the fishery, thereby competing with new entrants for the limited state waters scallop harvest. Note that two cooperative vessels that currently do not hold state waters permits would acquire rights to fish in state waters if the state's limited entry program expired. Further information on current license holders is contained in the attached Commercial Fisheries Entry Commission report *Limited Entry in the Alaska Weathervane Scallop Fishery*.

Management of an Open Access Scallop Fishery in State Waters

Decisions on how to manage open access state waters scallop fisheries would fall to ADF&G shellfish managers in each affected region. At least three possibilities exist. First, if there was not a substantial increase in scallop fishing effort, state water scallop fisheries could be managed on a parallel basis with federal water fisheries, i.e., a single GHL would be set for a management unit that included both state and federal waters and fishing would proceed until closed. Typically, scallop fisheries are closed when the upper bound of the GHL is reached but may also be closed before then due to concerns about crab bycatch or poor fishery performance. Second, separate GHLs could be set for state and federal waters. These could be based on historic information from the scallop observer program summarized above or could be set using estimates from the Kayak Island dredge survey or from experimental CamSled video surveys in Kodiak Shelikof District. Currently, abundance estimates from survey data (where available) are made on a whole bed basis rather than being split between state and federal waters. Third, managers could keep state waters closed while allowing the scallop fishery to proceed in federal waters. This might be a preferred option if effort increased substantially and raised concerns about conservation of the scallop resource. Note that in many parts of the state, scallop dredging has been prohibited in state waters by the Alaska Board of Fisheries (Figure 1).

Onboard scallop observers are required by state regulations for all vessels fishing for weathervane scallops except in Cook Inlet, where the fishery occurs in federal waters and is limited to a single dredge with maximum width 6 ft. Vessels fishing for scallops in all other areas can deploy up to two 15 ft. dredges (some smaller vessels are limited by the LLP to two 10 ft. dredges) and carry onboard observers who report to ADF&G by email regularly during fishing operations. Managers would continue to rely on inseason information from onboard observers to monitor scallop fishery harvest and bycatch in the event of open access scallop fisheries in state waters. New participants would need to make arrangements with observer contractors well ahead of the season as a limited number of trained scallop observers are available.

A possible enforcement issue could arise if the state water scallop fishery went to open access. Vessels fishing for scallops under the federal LLP are required to carry a vessel monitoring system (VMS), which allows real-time tracking of vessel position. Vessels fishing for scallops in state waters under open access would not be required to carry VMS under current regulations, and LLP vessel operators would likely complain to ADF&G, Alaska State Troopers, and/or NOAA Fisheries Office of Law Enforcement if these vessels appeared to impinge on federal waters. This problem would likely be exacerbated by the irregular nature of state-federal water boundaries in scallop fishing areas (Figures 2-4), which could make determination of vessel position with respect to the boundary difficult.

Barriers for new entrants to an open access state water scallop fishery include the onboard observer requirement, obtaining scallop dredges, approval for food processing operations (shucking or shucking/freezing of scallops) by the Alaska Department of Environmental Conservation, relatively low harvest levels, developing markets, and Alaska weather. Onboard observers currently cost \$300/day and require vessels to provide accommodations for an extra person onboard who is not part of the fishing operation. Scallop dredges are heavy pieces of fishing gear, and most are built on the east coast. Vessels 50 ft. or less in overall length would in general not be well-suited for this fishery due to space and stability requirements. Still, the potential number of new entrants to an open access state water fishery is impossible to predict at this time.

As a historical note, analysis performed by NPFMC staff during consideration of the LLP (see attached report) indicated that the fishery was overcapitalized during the 1990s. Indeed, the primary reason for NPFMC approval of the LLP was economics; vessel operators successfully argued that under open access, too many vessels chasing too few scallops would make most operations unprofitable.



Figure 1. Map showing Alaska weathervane scallop fishing registration areas and districts. Grey-shaded areas are closed to scallop fishing. Scallop fisheries with fishing in both state and federal waters occur in Southeast Region's Area D, Central Region's Area E, and in Kodiak Shelikof District, part of Westward Region.



Figure 2. Map showing eastern Gulf of Alaska scallop fishing areas in state and federal waters identified from observer program logbooks (green polygons).



Figure 3. Map showing scallop fishing effort distribution around Kayak Island. Black dots are starting positions of all scallop tows between 1997 and 2011 from observer program logbooks.



Figure 4. Map showing state and federal water boundary (red line) in Kodiak Shelikof District. The green polygon constructed from observer program logbook data encloses area that produced over 95 percent of the Shelikof District scallop harvest.