

III. CONSIDERATIONS FOR ALASKA FISHERIES

When oil spills and commercial fisheries coincide, a number of agencies, organizations, and interest groups are impacted. This section discusses the policy and practical considerations that arise from this intersection of fish and oil. This section explains the jurisdictional relationships between fishery management agencies and describes how a work group or other coordinating body may be used to facilitate decision-making. It also considers how data collection through the water quality sampling program must connect back to the policy considerations and decision points identified by fishery managers, industry groups, and stakeholders.

FISHERY MANAGEMENT AUTHORITY

Alaskan fisheries are managed under a complex and overlapping regime of state, federal, and international advisory and regulatory bodies. Jurisdictional authority is sometimes, but not always, determined by the location of the fishery (e.g. state, federal, or international waters). Since fish do not distribute themselves according to political boundaries, some fisheries are co-managed by the state and federal government, others are the sole responsibility of one or the other, and still others are managed under international treaties. Some geographic areas host operations related to multiple fisheries. When an oil spill occurs in an area where commercial fishing may be present, the first question to address is: Who manages the fishery?

The Alaska state agency with primary authority to manage commercial fishery openings and closures is the Alaska Department of Fish and Game (ADFG) Division of Commercial Fisheries. The National Marine Fisheries Services (NMFS) is the federal agency with primary fisheries management authority. The NMFS is responsible for management of all fisheries in the federal exclusive economic zone (EEZ) which includes waters 3 to 200 nautical miles from shore. NMFS manages all groundfish fisheries in the EEZ and closely coordinates their management with that of ADFG for species that are exploited in both state and federal waters. ADFG manages all fisheries within 3 nautical miles of the shore (state waters). ADFG manages all salmon and herring fisheries which occur exclusively in state waters with the exception of traditional salmon fisheries that occur in limited areas of the EEZ; these include areas of the Alaska Peninsula and Cook Inlet, as well as the area of the Southeast Alaska salmon troll fishery. NMFS defers management of the traditional EEZ salmon fisheries to the state through the salmon fisheries management plan. ADFG has traditionally managed all shellfish fisheries in state and federal waters prior to the enactment of the federal Magnuson-Stevens Fishery Conservation and

Management Act. ADFG continues to manage these fisheries under delegation of authority through federal fisheries management plans for Bering Sea/Aleutian Islands crabs and scallops. Note that ADFG manages shellfish fisheries in the Gulf of Alaska (except scallops) without a federal fisheries management plan.

To provide for an open public process and to give direction to ADFG, the Alaska State Legislature created the Alaska Board of Fisheries (BOF). The BOF is responsible for developing fishery management plans, allocating resources among users, and promulgating regulations. ADFG, which supports and takes direction from the BOF, has unique Emergency Order authority which provides ADFG fishery managers with the essential ability to expeditiously open and close fisheries in season. Therefore, during an oil spill response, ADFG will be the lead agency for state fishery openings and closures. Another state agency with regulatory authority is the Commercial Fisheries Entry Commission (CFEC). CFEC has the authority to establish moratoria or limited entry systems for state-managed fisheries.

Aquaculture, mariculture, and aquatic farming in Alaska are managed by ADFG, ADEC, and the Alaska Department of Natural Resources (ADNR), with additional permitting requirements from a number of state and federal agencies. For the purpose of spill response, ADFG and ADEC are the two agencies most likely to be involved in aquaculture decision-making.

Incidental fishery closures may also result from the establishment of a safety zone by the U.S. Coast Guard, where vessel traffic is prohibited in certain areas adjacent to the spill site or clean-up operations.

ADFG has regional offices in Anchorage, Juneau, Fairbanks, and Kodiak, with field offices located in most major commercial fishing ports. NMFS has its Alaska Regional Headquarters in Juneau, with field personnel stationed in most major commercial fishing ports during certain seasons. In addition to ADFG and NMFS, there are other regulatory boards that manage certain Alaska fisheries. For example, commercial halibut fisheries are managed under an international treaty by the International Pacific Halibut Commission (IPHC). For other fisheries that occur in international waters, various treaties or international agreements may govern catch limits. Table III-1 summarizes the jurisdictional authorities and includes contact information for regulatory bodies with responsibility for in-season management of Alaska commercial fisheries and aquaculture. New fisheries are sometimes introduced, or existing fisheries halted, based on the size and health of the resource.

Table III-1. Alaska commercial fishery agencies and regulatory bodies

Type of Fishery	Location	Management Agency	Exceptions
Groundfish: Pacific cod, walleye, pollock, Atka mackerel, sablefish, flatfish, some rockfish	State waters - 0 to 3 nautical miles (nm) from shore	ADFG Comfish (parallel season to federal fisheries for same species)	Halibut managed under international treaty.
	Federal waters (3-200 nm from shore)	NMFS (parallel season to state fisheries for same species)	Halibut managed under international treaty.
Groundfish: black/blue rockfish, lingcod	Shore to 200 nm	ADFG Comfish (0 to 3 nm) and NMFS (3 to 200 nm)	For species that are exploited in both state and federal waters, management is closely coordinated between ADFG and NMFS.
Herring	Shore to 3 nm	ADFG Comfish	Herring is a prohibited species in EEZ ground fisheries.
Salmon	Shore to 3 nm (state waters)	ADFG Comfish	Also a federal management plan which closes the EEZ to salmon fishing with the exception of traditional fishing areas, South Alaska Peninsula, Cook Inlet, and Southeast Alaska troll fishery. Management of those areas deferred to the state. Salmon is a prohibited species in groundfish fisheries.
Shrimp	Shore to 200 nm	ADFG Comfish	
Scallops	Shore to 200 nm	ADFG Comfish	Also a federal management plan, but devolves in-season management to state, with the exception of a few offshore licenses.
Crab - Gulf of Alaska, Bering Sea/Aleutian Islands (Tanner, Dungeness, king, snow)	Shore to 200 nm	ADFG Comfish	Oversight of all but Dungeness by North Pacific Fishery Management Council for Bering Sea/Aleutian Islands but not for Gulf of Alaska.
Invertebrates (e.g. sea cucumbers, sea urchin, clams)	State waters (0 to 3 nm)	ADFG Comfish	
Shellfish aquaculture	State waters (0 to 3 nm)	ADFG Comfish - Mariculture	
Halibut	US and Canadian waters	IPHC	
Agency Contact Information:			
Alaska Department of Fish & Game – Commercial Fisheries Division (ADFG Comfish) P.O. Box 25526 1255 W. 8th St., Juneau, AK 99802-5526 Phone (907) 465-4210 Fax (907) 465-2604			
Alaska Department of Fish & Game – Mariculture Coordinator P.O. Box 25526 1255 W. 8th St., Juneau, AK 99802-5526 Phone (907) 465-6150 Fax (907) 465-4168			
National Marine Fisheries Service (NMFS) Alaska Region P.O. Box 21668 Juneau, AK 99802-1668 Phone (907) 586-7221 Fax (907) 586-7249			
International Pacific Halibut Commission (IPHC) P.O. Box 95909 Seattle, WA 98145-1838 Phone (206) 634-1838 Fax (206) 632-2983			

SEAFOOD SAFETY REGULATORY AUTHORITY

While ADFG, NMFS, and other bodies have jurisdiction over the opening and closure, catch levels, gear restrictions, and other operational parameters for Alaska commercial fisheries, their jurisdiction generally ends when the fish is landed and seafood processing begins. In Alaska, the state agency with jurisdictional authority over seafood safety and sanitation is the ADEC Division of Environmental Health (ADEC/EH). ADEC/EH has a regular inspection and monitoring program to oversee the quality of Alaska seafood products before they make it to market. During an oil spill, ADEC/EH is charged with enforcing the state's zero tolerance policy, and may institute enhanced seafood inspection procedures to ensure that no tainted fish are landed or brought to market.

The U.S. Food and Drug Administration (USFDA) has jurisdiction over all seafood that crosses state lines. USFDA inspects Alaska seafood products that are shipped out of state to ensure no tainted products make it to market.

WATER QUALITY STANDARDS

When assessing commercial fisheries water quality and potential seafood contamination, it is important to differentiate between background contamination levels and contamination caused by the oil spill. This is not always possible in all areas of Alaska due to lack of data.

Alaska state law specifies acceptable levels for total aqueous hydrocarbons (15 mg/l) and total aromatic hydrocarbons (10 mg/l) in the water column where fish, shellfish, and other aquatic life live, either in the wild or under cultivation. The regulations add, "there may be no concentration of petroleum hydrocarbons, animal fats, or vegetable oils in shoreline or bottom sediments that cause deleterious effects to aquatic life. Surface waters and adjoining shorelines must be virtually free from floating oil, film, sheen, or discoloration" (18 AAC 70.020).

Furthermore, the Alaska regulations specify that water samples must be taken below the surface and "away from any observable sheen." Specific EPA methods, available in 40 CFR 136, Appendix A, must be used when official state samples are analyzed. Alternative methods may be used with ADEC approval.

PUBLIC PERCEPTION AND COMMERCIAL FISHERIES IN ALASKA

Alaska's commercial fisheries are worth over one billion dollars annually, based on ex-vessel value (ADFG, 2005). The stability of this important economic sector not only depends on the relative abundance of species, but demand in the global marketplace for Alaskan seafood. Demand may decrease if the public perceives that a spill has contaminated the product. Public perceptions of taint may extend well

beyond the geographic or temporal scope of the oil spill. Therefore, it is just as important that a sampling program identify areas where oil is *not* as well as areas where it *is*.

The general public trust of Alaskan seafood products depends in large part on trust of the State's zero tolerance policy on contamination of food by oil. This trust can be bolstered by clearly communicating both sampling program data and aggressive inspection measures undertaken by the State and participants in all aspects of the fishery. Input from seafood marketing associations or experts can create public information releases that paint an accurate and convincing picture of the actual impact of a spill. However, credibility depends on the careful design and rigor of the water quality sampling program and inspections carried out by the State and operators in all aspects of the fishery.

COMMUNICATION WITH STAKEHOLDERS

The findings of a water quality sampling program will be useless unless they are a) acquired through rigorous and accepted methods and analysis, and b) communicated clearly with all interested parties. Data may be used by fishery managers to make opening/closure determinations; by vessel operators or processors to modify operations based on the scope and type of contamination in a specific area; or by seafood marketers to reassure the public of the quality of the product.

Decisions or findings vetted by the UC for release to the public should be disseminated in a clear, concise, and consistent manner. This may involve announcement at public meetings, posting text or images on the UC or other website, or press releases. When available, maps or photographs should be used to illustrate findings and show activities such as seafood inspections.

The following general considerations apply to fisheries risk communication during an oil spill (from Yender et al., 2002):

- Be proactive. Acknowledge and discuss potential fishery impacts as soon as possible.
- Establish a seafood safety or fisheries work group. This group should meet regularly to discuss and assess the risks to fisheries as they evolve over the course of the oil spill (see next section).
- Keep the public informed. Tell the public what is being done to determine whether fisheries or seafood safety are at-risk. Provide details regarding sampling activities and results. Public information should be fact-based, straightforward, and communicated in a timely manner.
- Identify a central point of contact. An individual should be identified and contact information provided to the public for additional information. Make sure the point of contact has the most up-to-date information. Consider the use of the Internet

to supplement public information flow. The incident Public Information Officer or Liaison Officer may fit this role.

- Meet directly with affected stakeholders. Provide stakeholders with an opportunity to discuss the issues and process. Issue notices to the fishing fleet through local fish processors or fishing industry groups.
- Use straightforward, unambiguous language. Make sure that the public understands the thresholds and criteria for water quality and seafood safety. Clearly define all terminology and relate back to defined standards.

Appendix C contains examples of public information releases from the *M/V Selendang Ayu* oil spill.

ESTABLISHING AND COORDINATING A COMMERCIAL FISHERIES WORK GROUP

During the *M/V Selendang Ayu* oil spill response, ADEC established a Commercial Fisheries Work Group, consisting of decision-makers from state and federal fishery management agencies, the Unified Command, seafood marketing organizations, and seafood processors. The group met regularly and provided policy direction and input on the commercial fisheries water quality sampling design. While not required for every oil spill, a work group provides an opportunity for key decision-makers to come together (either in person or via teleconference) and share their concerns. A work group can fulfill one or more of the following purposes:

- **Provide technical expertise on at-risk fisheries.** In general, spill management personnel do not have a specialized knowledge of the timing, location, vessel configuration, gear requirements, processing operations, and other fishery-specific details. Participants in a work group should have, or have access to, data and information regarding the fishery or fisheries being considered.
- **Guide sampling program design.** The work group should use a consensus process to provide direction on the sampling program goals and objectives and, where appropriate, on the sampling design. If time permits, the work group may review and comment on draft sampling plans and provide feedback to the Sampling Group Supervisor or program manager.
- **Analyze sampling program data.** Data from the sampling program can be analyzed in the context of the operational expertise of fishery managers or industry experts and additional inputs from UC observations (overflights, etc.).
- **Communicate decisions and advisories.** The work group should disseminate their decisions, findings, and advisories in agreed-upon language, either directly to the public or

through agency or UC press releases. Information may also be communicated through incident or agency websites.

Work group membership will likely vary according to the location and timing of the oil spill and, subsequently, the fisheries at-risk. During the *M/V Selendang Ayu* response, the Commercial Fisheries Work Group membership expanded over time as different fisheries opened, and also in response to inquiries from local officials and stakeholders. In general, work group members should be executive level persons with the ability to make decisions and commit resources on behalf of their agencies or organizations. Some representatives may find it useful to include support staff or field personnel to advise on technical issues. Work group membership may include, but is not necessarily limited to, the following:

- Managers from state and federal fishery agencies
- Experts in environmental health, fishery biology, and oceanography
- Representatives of local and tribal governments
- Seafood marketing organizations
- Unified Command representatives

In addition to these decision-makers, the work group may include stakeholder organizations as well. Although the introduction of these groups may cause the membership to swell considerably and may complicate decision-making, stakeholder groups often bring to the table considerable technical and operational expertise. Stakeholder members may include:

- Fishing vessel owners and operators
- Seafood processors
- Seafood consumers (general public, both locally and in target markets)
- Aquaculture industry representatives
- Sport and subsistence resource consumers

Table III-2 describes principles and recommendations that will facilitate the successful establishment and management of the workgroup. Appendix A contains an example of a meeting summary from the *M/V Selendang Ayu* Oil Spill Commercial Fisheries Work Group.

Considerations for Alaska Fisheries

Table III-2. Recommendations for coordination of Commercial Fishery Work Group.

Principle	Recommendations
Appoint facilitator to coordinate and run meetings.	Facilitator should be person or organization with strong management and leadership skills. Observe established rules of order in conducting meetings.
Make meetings as accessible as possible.	When possible, schedule next meeting time as part of follow-up points. Always remind all participants of meeting times/locations/call-in information in advance. Use teleconference capability to facilitate participation.
Document discussion points and decisions.	Distribute meeting minutes to all workgroup members in a timely manner. Include agreed-upon follow-up activities and identify responsible individuals.
Establish clear goals for the workgroup and each meeting.	Workgroup goals should be clearly stated and reiterated at start of each meeting. Meeting agendas should concisely describe purpose and objectives of meeting (decision points, etc.).
Provide administrative support.	Use email and Internet communications to support work group function. Distribute agendas, meeting minutes, sampling program information (including maps, photos, and findings), updated participant contact list, and work group statements to all members.
Clarify consensus requirements.	Establish whether or not work group will function on a consensus basis, and what this requires. Clarify instances where consensus is not applicable, such as jurisdictional considerations.