





MEMORANDUM

TO: Jeff Regnart, Director 
Division of Commercial Fisheries

DATE: October 26, 2012

Charles O. Swanton, Director 
Division of Sport Fish

THRU: Tracy Lingnau, Regional Supervisor
Division of Commercial Fisheries, Region II

SUBJECT: Bristol Bay
Escapement Goal
Memo

James J. Hasbrouck, Regional Supervisor
Division of Sport Fish, Region II

FROM: Lowell Fair, Regional Research Coordinator
Division of Commercial Fisheries, Region II

Jack W. Erickson, Regional Research Coordinator
Division of Sport Fish, Region II

The purpose of this memo is to inform you of our progress in reviewing and recommending escapement goals for Bristol Bay. In February 2012, an interdivisional salmon escapement goal committee, including staff from the divisions of Commercial Fisheries and Sport Fish, initially met to discuss salmon escapement goals in the Bristol Bay Management Area. Since then, historical sockeye salmon brood tables have been updated with recent information and reconstructed using genetic stock-specific markers used to allocate commercial harvests.

The committee's review of Bristol Bay escapement goals is complete. Recommended changes to the goals are summarized in Table 1. Details of how we formed these recommendations will be described in oral and written reports presented to the Alaska Board of Fisheries (board) in December 2012. Subsequent to the December board meeting, a follow-up memo will be prepared to include escapement goal recommendations to division directors for final approval.

Table 1.—Summary of current escapement goals and recommended escapement goals for salmon stocks in Bristol Bay, 2012.

System	Current Escapement Goal			Recommended Escapement Goal			
	Goal	Type	Year Adopted	Escapement Data	Action	Goal	Type
King Salmon							
Alagnak	2,700 minimum	SEG	2007	Aerial	No Change		
Egegik	450 minimum	SEG	2007	Aerial	Drop		
Naknek	5,000 minimum	SEG	2007	Aerial	No Change		
Nushagak	40,000–80,000	SEG	2007	Sonar	Change in range	55,000–120,000	SEG
Togiak	9,300 minimum	SEG	2007	Aerial	Drop		
Chum Salmon							
Nushagak	190,000 minimum	SEG	2007	Sonar	Change in range	200,000 minimum	SEG
Coho Salmon							
Nushagak	50,000–100,000	SEG	2007	Sonar	New Goal	60,000–120,000	SEG
Pink Salmon							
Nushagak				Sonar	New Goal	165,000 minimum	SEG
Sockeye Salmon							
Alagnak	320,000 minimum	SEG	2007	Tower	No Change		
Egegik	800,000–1,400,000	SEG	1995; Changed to SEG in 2007	Tower	Change in range	900,000–2,000,000	SEG
Igushik	150,000–300,000	SEG	2001; Changed to SEG in 2007	Tower	Change in range and type	200,000–400,000	BEG
Kvichak	2,000,000–10,000,000	SEG	One goal for all years in 2010	Tower	No Change		
Kulukak Bay	8,000 minimum	SEG	2007	Aerial	Drop		
Naknek	800,000–1,400,000	SEG	1983; Changed to SEG in 2007	Tower	Change in range and type	900,000–2,000,000	BEG
Nushagak	340,000–760,000	SEG	1998; Changed to SEG in 2007	Sonar	Change in range and type	400,000–900,000	BEG
Togiak	120,000–270,000	BEG	2007; Changed to SEG in 2010	Tower	No Change		
Ugashik	500,000–1,200,000	SEG	1995; Changed to SEG in 2007	Tower	Change in range	600,000–1,400,000	SEG
Wood	700,000–1,500,000	SEG	2001; Changed to SEG in 2007	Tower	Change in range and type	800,000–1,800,000	BEG

Report and Recommendations
to
Alaska Board of Fisheries
and
Alaska State Legislature

from
Salmon Industry Restructuring Panel

January 2006

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1.0 Background

The Board of Fisheries Commercial Salmon Industry Restructuring Workgroup was created by a joint agreement between the Alaska Board of Fisheries and the Legislative Salmon Industry Task Force. The scope of work recommended was as follows:

Examine policy and other options for the Legislature and the Board of Fisheries to properly consider in restructuring Alaska's commercial salmon industry, including identification of research/information and analysis needed on the range of policy alternatives.

During Fall 2004, the Board of Fisheries forms a public panel to focus on the task and develop a plan. Board committee is chaired by Ed Dersham and includes Robert Heyano and John Jensen. Public panel may include a scientific panel and a public panel representative of various industry interests

The public panel develops a plan of action to present to full board: 1) Develop models for restructuring the commercial salmon industry, and 2) Specify research and analysis needed on the range of policy alternatives.

The Board of Fisheries and Public Panel will gather public input throughout the state to develop and analyze models on policy alternatives.

- Board may take written and oral comment at each regularly-scheduled meeting
- Panel may schedule meetings as needed for development of alternatives and receiving public comment on the alternatives.
- Panel receives results of impact studies, if any.

Winter 2005: The Panel will bring recommendations to full board. The full board begins developing findings/recommendations to submit to the Legislature. The board continues to receive public input throughout this process

January or February 2006: The board will present a report to the legislature.

The board members who worked with the panel were:

Ed Dersham, chair

John Jensen

Robert Heyano

Art Nelson replaced Ed Dersham at the October 2005 meeting.

Staff support was provided by:

Kurt Shelly, CFEC

Alan Austerman, Office of the Governor

Cheryl Sutton of Senator Ben Stevens' office

Diana Cote, Executive Director of the Board of Fisheries

Doug Mecum, ADF&G, Commercial Fisheries Director

Denby Lloyd replaced Doug Mecum at the October 2005 meeting

The workgroup consisted of stakeholders appointed by the Board of Fisheries. The board's goal was to appoint a public panel that had broad geographical representation, as well as from various parts of the industry. The following members were appointed:

Steve Brown, Homer
Sam Cotten, Anchorage
Karen Dunmall, Kawerak, Nome
Pete Esquiro, NSRAA, Sitka
Wallace Fields, Kodiak
John Garner, NorQuest Seafoods
Andy Golia, Dillingham
Jill Klein, YRDFA, Anchorage
Stephanie Madsen, Juneau
Chuck McCallum, Chignik
Jerry McCune, Cordova
Kris Norosz, Iccle Seafoods, Petersburg
Bob Thorstenson, UFA, Juneau
Gale Vick, Anchorage
Bob Waldrop, Anchorage
Dr. Charles Crapo, UAF (technical advisor)

The group met several times between September of 2004 and October 2005. The following report and recommendations are the work product of the group and recommendations for the future of the restructuring effort.

Recommended Salmon Industry Restructuring Form Package

The Panel's unanimously adopted five-page Restructuring Package (following) includes:

- A. Goal Statement
- B. Definition of a Restructuring Proposal
- C. Board of Fisheries Criteria for Review of Restructuring Proposals
- D. Process to Review Restructuring Proposals
- E. Recommendation for Restructuring Proposal Form
- F. Instructions for Filling out the Proposal Form, including Part I: How to determine if your proposal is a "restructuring" proposal, and Part II: How to Fill out the Restructuring Proposal Form

Salmon Industry Restructuring

1.1 Goal Statement

Alaska's commercial salmon fisheries have been in existence for over 125 years. During this time, salmon fisheries have become fully utilized, and the Alaska State Legislature and Board of Fisheries have often imposed statutory or regulatory actions that constrain efficiency to ensure adequate escapements occur to sustain the resource, or to protect those dependent upon fishery resources, including subsistence, personal use, sport and commercial users. These constraints have taken many forms, including time and area closures and gear restrictions that may have increased harvest costs and decreased harvest values. For those who have made investments to harvest, tender, and process salmon, these increased costs limit the economic benefit to participants and Alaska's fishery dependent communities. Because many of Alaska's fishery-dependent communities rely on an economically viable harvesting and processing sector, there can be tension between rules that create inefficient harvesting and processing systems and the goals of harvesters, processors, fishery dependent communities and others dependent upon the fishery resources.

Within various salmon fisheries, the cost of doing business is not always supported by the market value of the production using current management approaches to harvesting. As a result, the status quo may provide an inadequate return on investments and may not provide enough capital to renew the equipment, vessels, and processing facilities needed for the commercial enterprise. In some fisheries the current management approaches to harvesting salmon may not provide the desired level of management flexibility and effectiveness. Therefore, new processes and procedures may be needed to entertain restructuring options for Alaska's commercial salmon fisheries.

1.2 Definition of a Restructuring Proposal

A "restructuring proposal" is a proposal that is likely to have substantial economic, social, or biological impacts and may require significant changes to the management of a fishery. The proposed regulatory change may strive to improve the value of a fishery by providing new and increased opportunities to: (1) raise the revenue generated from harvested fish (e.g. through improved quality); or (2) lower the cost of fishing operations; or (3) improve conservation. Such proposals may include, but are not limited to, consolidation of fishing effort, a shift in who harvests the fish, changes in harvest methods used, or allocations of quotas.

1.3 Board of Fisheries Criteria for Review of Restructuring Proposals

Keeping in mind that all proposals must promote the sustainability of fishery resources and be consistent with other Board of Fisheries policies, the Board of Fisheries may consider comprehensive regulatory restructuring proposals, and when doing so shall use the following criteria:

- 1) Promote an increased net economic benefit to the participants remaining in the fishery following restructuring;
- 2) Identify possible interactions within and between regions;

- 3) Identify potential mitigation measures for those dependent on the fishery that may be negatively impacted;
- 4) Promote improvements in a fisheries value, product quality, or an increase in efficiency;
- 5) Adequately address biological impacts to the resource caused by changes in management systems and utilization of the resource;
- 6) Promote a healthy fishing economy in Alaska that provides social and economic benefit to communities dependent upon the fishery and contributes to the overall benefit of the resource and the economy of the state; and
- 7) In addition to the criteria above, other factors may be considered as appropriate.

1.4 Process to Review Restructuring Proposals

Restructuring proposals may have substantial economic, social, and/or biological impacts and may require significant changes to the management of a fishery. Accordingly, the Board of Fisheries is interested in ensuring ample opportunity for review and comment by potentially affected regions and fishery participants.

- 1) Submit proposal as part of regular review cycle for a given area. *(Responsibility: Applicant)*
- 2) Determine if proposal is a restructuring proposal. *(Responsibility: Board)*
- 3) Publish restructuring proposals in a separate section of the board proposal book or otherwise identify proposal as a restructuring proposal. *(Responsibility: Boards Support Section)*
- 4) Hold a publicly-noticed work session to determine: *(Responsibility: Board)*
 - a. Is proposal complete?
 - b. Are there outstanding questions or information needed?
 - c. Confirm that board has authority to act on proposal; identify any aspects of proposal where board may need additional authority to make decisions.
 - d. Identify whether CFEC, DNR or other agencies need to be consulted on issues raised by the proposal. If so, bring staff together to schedule work and process.
 - e. Identify proposal's review process and schedule.
- 5) Hold information-gathering public hearing within region if needed. *(Responsibility: Board)*
- 6) Hold other hearings/work sessions as needed. *(Responsibility: Board)*
- 7) Board of Fisheries decision. *(Responsibility: Board)*

1.5 Alaska Board of Fisheries - Restructuring Proposal Form

Please answer the questions below as completely as possible. Your response will likely require multiple pages and considerable time and effort. Some questions may not be applicable to your proposal. Some questions may be quite difficult to answer; incomplete answers will not necessarily disqualify your proposal.

Please carefully read the instructions on page 2 before answering the questions.

- 1) What regulatory area, fishery, and gear type does this restructuring proposal affect?
- 2) Please thoroughly explain your proposal. (See Part II, Question 2 of the instructions on page 2 for important guidance on how to answer this question).
- 3) What are the objectives of the proposal?
- 4) How will this proposal meet the objectives in question #3?
- 5) Please identify the potential allocative impacts of your proposal. Is there an allocation or management plan that will be affected by this proposal?
- 6) If the total value of the resource is expected to increase, who will benefit?
- 7) What will happen if your fishery is not restructured as your proposal recommends, and how is this proposal an improvement over current practices?
- 8) Considering the history of the commercial fishery, what are the potential short- and long-term positive and negative impacts on:
 - a) the fishery resource;
 - b) harvesters;
 - c) the sector, species, and regional interdependence relationships;
 - d) safety;
 - e) the market;
 - f) processors; and
 - g) local communities.
- 9) What is your understanding of the level of support for your proposal among the harvesters, processors, and local communities?
- 10) What are the potential short and long-term impacts on conservation and resource habitat?
- 11) What are the potential legal, fishery management, and enforcement implications if this proposal is adopted? What other governmental actions may need to be taken into account?

Submitted By: Name _____ (signature required)
 Individual or Group _____
 Address _____ Zip Code _____ Phone _____

1.6 *Instructions for Restructuring Proposal Form*

Please answer the questions below as completely as possible. Your response will likely require multiple pages and considerable time and effort. Some questions may not be applicable to your proposal. Some questions may be quite difficult to answer and incomplete answers will not necessarily disqualify your proposal.

Part I: How to determine if your proposal is a "restructuring" proposal

A "restructuring proposal" is a proposal that is likely to have substantial economic, social, and/or biological impacts and may require significant changes to the management of a fishery. The proposed regulatory change may strive to improve the value of a fishery by providing new and increased opportunities to: (1) raise the revenue generated from harvested fish (e.g. through improved quality); or (2) lower the cost of fishing operations; or (3) improve conservation. Such proposals may include (but are not limited to): consolidation of fishing effort or a shift in who harvests the fish, changes in harvest methods used, or allocations of quotas.

Please note that if the board does not have the legal authority to implement the proposed regulation then your proposal may be dismissed or tabled. If your proposal is found to be incomplete, the board may direct you to potential resources or specific agencies you may need to work with. If your proposal is determined to be a restructuring proposal, the board may put the proposal on a special timeline for action to allow for appropriate public input. If the proposal is determined to be incomplete or otherwise needs further development prior to action, the board, at its discretion, may table the proposal for future action. The board may, at its discretion, amend any proposal and move it forward.

Restructuring proposals may have broad ramifications with both positive and/or negative impacts to harvesters, processors, coastal communities, associated businesses and the State of Alaska. Therefore, your proposal should consider the potential impacts of the proposed new regulation on all stakeholders.

Part II: How to Fill out the Restructuring Proposal Form

Question #1: For which fishery management areas and gear type will the regulations be changed? For which specific fisheries?

Question #2: To completely explain your proposal, address the questions below:

- a. Will this proposal require initial harvester qualification for eligibility? If so, how would it work?
- b. Are there new harvesting allocations? If so, how are they determined?
- c. What means, methods, and permitted fishing gear are proposed?
- d. Is a change in vessel length proposed?
- e. Are the transferability of permits or harvest privileges affected? If so, explain.
- f. Is there a defined role for processors? If so, please describe.
- g. Will this proposal be a permanent change to regulation? If not, for how long?
- h. If adopted, will your proposal require a change in monitoring and oversight by ADF&G?
- i. Will vertical integration (e.g. harvesting and/or processing) or consolidation occur? Will limits be imposed?
- j. How do you propose to monitor and evaluate the restructured fishery?
- k. Is there a conservation motivation behind the proposal? If so, please explain.
- l. What practical challenges need to be overcome to implementing your proposal, and how do you propose overcoming them?

Question #3: Restructuring proposals may have many goals that may not be apparent from the proposal itself. What specific changes do you want to occur if this proposal is put into regulation?

Question #4: How and why will your proposed regulation meet the goals and objectives in question #3?

Question #5: A restructuring proposal will often have allocative or reallocative impacts. Please identify those potential impacts. Other than already identified in question #1, what management plans and allocation regulations might be affected? Note that this could include fisheries distant from the fishery being regulated.

Question #6: Who will benefit? Harvesters? Processors? Communities? State? Subsistence users? Etc.

Question #7: How is your proposal better than status quo?

Question #8: Restructuring proposals will have positive and/or negative impacts to harvesters, processors, coastal communities, associated businesses and the State of Alaska. Your proposal is more likely to be judged complete if you try to identify both the positive and negative impacts of your proposal on:

- a) The fishery resource: 1) biological; 2) management system; and 3) economic utilization.
- b) Harvesters: 1) economic efficiency of the harvesting function; 2) species interdependence impacts; 3) harvesting asset ownership impacts; 4) distribution of product value; and 5) market access.
- c) Interdependence: How will your proposal impact other gear types and fisheries targeting other species? How will it affect interactions between regions and within the communities of the region?
- d) Safety: How does your proposal affect safety, if at all?
- e) The market: 1) market access and product form; 2) market timing; 3) competitive opportunities; 4) other, if any.
- f) Processors: 1) economic efficiency of the processing function; 2) species interdependence impacts; 3) processing asset ownership impacts; 4) distribution of product value; and 5) market access.
- g) Local communities: 1) employment enhancement, displacement, and loss; 2) municipal revenue impacts; 3) industry infrastructure impacts; 4) species interdependence impacts; 5) ownership of local harvesting and processing impacts; and 6) gain or loss of associated businesses.

Question #9: Is this a “one-person idea” or does your proposal have broad support?

Question #10: Conservation and development of fisheries resources are major goals of the board and any impacts on these goals, positive or negative, are of high importance. Please explain the likely impacts of your proposal.

Question #11: Restructuring proposals often have legal, fishery management, and enforcement implications that the board will have to address before it can take action. Please identify the potential issues in these areas.

2.0 Recommendations on needed Board of Fisheries Research Capacity and Data, Authority Changes, and Support

2.1 Research Capacity and Needs

As restructuring proposals come forward, three types of research or data will be needed:

1. Permit Latency. Ideally, Board of Fisheries (BOF) would address permit latency in the fishery simultaneous with review and approval of a restructuring proposal. To enable this, we need to identify optional methods, costs, and pros and cons of ways to address permit latency; then enact regulatory or statutory changes needed to implement. (Ideas discussed include creating a registration deadline, requiring permit holders to have gear available to participate in fishery, etc.)
2. Need a simple input-output model, or similar tool, to be able to assess the impacts to communities of various restructuring proposals and minimize unintended consequences of a restructuring decision.
3. Following implementation of a restructuring decision, the state needs to maintain data gathering effort so evaluate the social, biological and economic impacts of that decision.
4. As litigation is settled over the next six months and the question of Board restructuring Authorities is better known, it is worth reexamining this question to see what new research or data may be needed.

2.2 Board of Fisheries Authorities

There may need to be some changes to BOF authorities to enable it to take action on restructuring proposals.

There are uncertainties about current BOF authorities, given active litigation. This hampers the ability to consider a full range of options of potential changes in board authority, and undoubtedly will mean that recommendations developed on this matter are interim and will need reexamined after pending litigation is settled. However, all agreed there is merit in proceeding with this review.

A Panel Subcommittee is now building upon Panel deliberations over the last year to:

1. Develop a matrix that depicts current BOF authorities and where each authority is derived.
2. Review BOF (and CFEC) proposals and challenges from the last few years to identify where and why there were roadblocks or problems. A review of these issues may identify patterns and recurrent issues.
3. Based on work above and other knowledge, develop a Problem Statement that articulates areas where a lack of authority has frustrated BOF (or CFEC) action particularly, but not exclusively, with regard to salmon fishery structure or restructuring proposals.

4. Identify authorities the BOF may need but does not currently have to implement restructuring proposals.

Throughout the BOF authorities discussion the Panel also mentioned the need to look at a bigger picture. It would be useful to articulate where the salmon fishing industry will be in 15 years, in order to consider which BOF authority changes are needed to get there. Another idea is to develop an Alaskan salmon fishing mission or policy statement. If the commonly acknowledged goal is to make the salmon fishing industry work better, it is important to define what better means. The Panel considered whether investigation of these bigger picture issues is crucial, or whether, because a balance must always be struck between economic and social goals (while maintaining primary focus on resource conservation), to specify beyond this isn't practical as different fisheries will necessarily strike different balances and answers.

2.3 Board of Fisheries Support

Due to the significant impacts on communities, harvesters, processors and the State that restructuring proposals have, the BOF will need additional support, data and technical expertise to enable it to review these proposals. The Salmon Industry Restructuring Panel recommends the following:

1. **Maintain current data collection efforts/programs.** Responsibility for the Commercial Operators Annual Reports (COAR) has shifted between ADF&G and CFEC because of funding shortages and changing priorities. The COAR data, fish ticket data, and fish harvesting and employment estimates are currently funded either fully or partly with federal grants. In recent years the amount of federal funding for these projects has been decreasing. At a minimum the State must maintain its current data collection programs in order to maintain a reliable continuous source of fisheries data for economic analysis.
2. **Conduct an in-depth study to determine the kind of additional data needed to connect crewmember information to existing fisheries data,** its value for fishery analyses, and the industry's willingness to provide additional information. Do this prior to embarking on a new crew data collection project.¹
3. **Create an electronic fish ticket reporting system for salmon and put it into use.** ADF&G has proposed an FY 07 budget increment to accomplish this.
4. **Hire two staff with knowledge of fisheries, economics and research techniques (could be at ADF&G, CFEC, DCCED) to conduct research and respond to inquiries BOF will have to analyze restructuring proposals.** An Economist II and Research Analyst III are recommended. Cost of accomplishing this, in FY 05 dollars²:

¹ Crewmembers can not be linked to a particular fishery or area, so it is not possible to know if the crewmember fished, where they fished, how much they fished, how many crew fished from a vessel, or how much they earned. It is also not possible to associate crew salaries or crew earnings with a particular fishery or area. Some economists assume that crewmembers are hired from the permit holder's home town and attribute the crew's earning and tax information to the permit holder home town, an assumption which may not be correct.

² These figures and other recommendations herein excerpted from, "State of Alaska Data Collection Programs and Needs: A Report to the Salmon Industry Restructuring Panel," Susan M. Shirley, March 2005; ADF&G Special Publication No. 05-05.

Personnel		
Economist II		\$67,000
Research Analyst III		\$67,800
Other:		
Computer equip & software		\$6,000
Basic Office supplies		\$500
Travel		\$2,000
TOTAL		\$144,100

Since the efforts above will be of benefit to the BOF and CFEC in its regular work as well, it is recommended that these items be funded permanently, not viewed as one-time expenditures. This will also support the higher level of monitoring and data submission that will likely be needed to evaluate medium and long term impacts, including those unanticipated, of salmon fishery restructuring.

3.0 Recommendations on the Future of the Restructuring Panel.

The Panel believes it should stay active through part or all of 2006, due to outstanding litigation and resultant uncertainties over current BOF authorities as well as what changes may be needed to consider restructuring proposals, the Panel believes it should stay active through part or all of 2006.

The Panel identified some big-picture questions and four specific tasks it could assist the Legislature and/or BOF with if desired including, but not limited to:

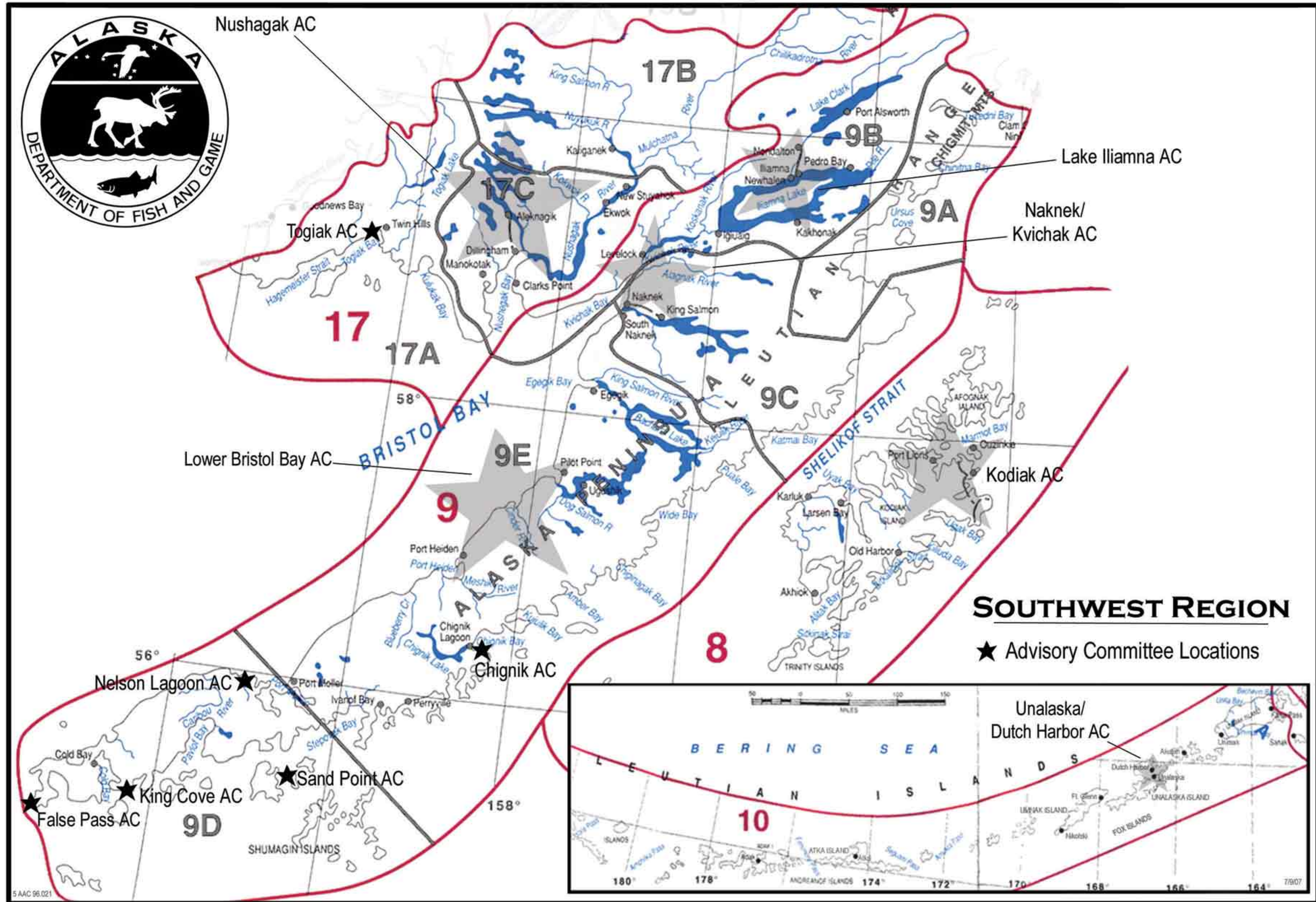
3.1 *Big Picture*

Facilitate discussion and seek input by region(through the advisory committee process on what Alaska's salmon industry will look like in the future in the different areas of the state. This is related to restructuring proposals because how can needed authority changes be identified if the directions that the industry is moving have not been articulated. Is Limited Entry the best model for addressing future needs? What has been learned from rationalization and other fishery management efforts that could be relevant to salmon? Can the desired balance between economic and social goals in salmon fishery management be better defined? ISER stated that an obstacle to fishery restructuring is no organization in State government has clear responsibility for the economic success of fisheries or clear and broad authority to make significant changes in the rules for salmon harvesting. These and related big-picture questions deserve investigation and discussion

3.2 *Specific*

1. Research, data needs and authorities the BOF may need to review and implement restructuring proposals may become clearer as litigation is settled. When outstanding court challenges are settled the Panel should reexamine these matters.

2. The Panel could investigate and make recommendations to address obstacles to successful and affordable transportation of salmon from western Alaska and other rural areas that are outside the Railbelt.
3. Similarly, the Panel could investigate and make recommendations to address banking and financing obstacles
4. The BOF could refer specific salmon restructuring proposals to this group to examine.



SOUTHWEST REGION

★ Advisory Committee Locations