

BRISTOL BAY

Federal Subsistence

Regional Advisory Council



Fisheries Meeting Materials

Sept. 23, 2010

Dillingham

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**BRISTOL BAY SUBSISTENCE REGIONAL ADVISORY COUNCIL
Dillingham City Council Chambers
DILLINGHAM, ALASKA**

DRAFT A G E N D A

PUBLIC COMMENTS: *Public comments are welcomed for each agenda item. Please fill out a comment form or be recognized by the Chair. Testimony time limits may be given to provide opportunity for all to testify and to keep on schedule.*

PLEASE NOTE: *Agenda is subject to change. Contact staff at the meeting for the current schedule.*

Evening session may be called by the Chair of the Bristol Bay Regional Advisory Council.

AREA CONCERNS: *The Regional Council arranges its meetings to hear and understand the subsistence concerns in the areas where it meets. Please share your subsistence concerns and knowledge. The agenda is an outline and is open to the area’s subsistence concerns, listed or not.*

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Presentation Procedure for Proposals

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- 3) Other Federal, State and Tribal agency comments
- 4) Interagency Staff Committee Comments
- 5) Subsistence Resource Commission comments
- 6) Fish and Game Advisory Committee comments
- 7) Summary of Written Public Comments

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- 14. Other Business**
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 - A. Winter 2011105
 - B. Fall 2011106
- 16. Adjourn**

If you have a question regarding this agenda or need additional information, please contact Donald Mike, Regional Coordinator, toll free at 1-800-478-1456 ext. 3629 or 786-3888; or fax your comments at 907-786-3898.

Teleconferencing is available upon request. You must call the Office of Subsistence Management, 1-800-478-1456, 786-3888 or 786-3676, at least 72 hours prior to the meeting to receive this service. Please notify the Regional Coordinator which agenda topic interests you and whether you wish to testify regarding it.

The U.S. Fish and Wildlife is committed to providing access to this meeting for all participants. Please direct all requests for sign language interpreting, Computer Aided Real-time Translation (CART) or other accommodation needs to Donald Mike no later than September 14, 2011.

If you need alternative formats or services because of a disability, please contact the Diversity and Civil Rights Manager at (907)786-3328 (Voice), via e-mail at douglas_mills@fws.gov, or via Alaska Relay (dial 7-1-1 from anywhere in Alaska or 1-800-770-8255 from out-of-state) for hearing impaired individuals with your request by close of business Monday, September 27.

**REGION 4
BRISTOL BAY ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

Seat	Term Expires	Member Name	City
1	2010	Peter M. Abraham	Togiak
2	2010	Daniel J. O'Hara	Naknek
3	2010	Nanci A. Morris Lyon	King Salmon
4	2011	Dale C. Myers	King Salmon
5	2011	Alvin Boskofsky	Chignik Lake
6	2011	Molly B. Chythlook	Dillingham
7	2011	Dan O. Dunaway	Dillingham
8	2013	Richard Wilson	Naknek
9	2013	Thomas A. Hedlund	Iliamna
10	2013	Vacant	

MINUTES

Bristol Bay Subsistence Regional Advisory Council

March 03-04, 2010

BBNA Family Resource Center

Dillingham, Alaska

Call to Order

Meeting called to order by Secretary Dan Dunaway.

Roll Call and Establish Quorum

Council members present: Peter Abraham, Dan O'Hara, Dale Myers, Alvin Boskofsky, Molly Chythlook, Dan Dunaway, Richard Wilson.

Absent: Nanci Morris Lyon, Thomas Hedlund, excused, members had prior commitments. One vacant seat. Quorum established.

Welcome and Introductions

Acting Chairman Dunaway welcomed guests and staff members.

Government Agency Employees

Donald Mike	U.S. F&WS OSM	Anchorage
Spencer Rearden	U.S. F&WS OSM	Anchorage
Polly Wheeler	U.S. F&WS OSM	Anchorage
Paul Leidberg	U.S. F&WS Togiak NWR	
Tevis Underwood	U.S. F&WS Togiak NWR	
Dan Sharp	BLM	Anchorage
Lem Butler	ADF&G	
Ted Krieg	ADF&G	
Andrew DeValpine	ADF&G	

Burton Miles
Joey Klutsch

Election of Officers

Acting Chair Dunaway requested Mr. Mike to open the nomination for Chair. Mr. O'Hara nominates Ms. Molly Chythlook for Chair, second called by Mr. Myers. Mr. O'Hara moved to close the nominations for Chair and requested for unanimous consent for Madam Chair Chythlook. Mr. Myers called for the second for unanimous consent. No objections. Ms. Chythlook elected as the Chair. Nominations open for vice chair.

Madam Chair Chythlook opens the nomination for vice chair. Mr. Dunaway nominated Mr. O'Hara, Mr. O'Hara declines. Mr. O'Hara nominated Mr. Dunaway, second called by Mr. Myers. Mr. O'Hara moves to close the nomination for vice chair and called for unanimous consent. Second called by Mr. Wilson. Unanimous consent reached. Nominations open for Secretary.

Mr. Dunaway nominated Ms. Nanci Morris Lyon for Secretary. Mr. O'Hara move to close the nomination and requested for unanimous consent for Nanci Morris Lyon for Secretary. Second called by Mr. Wilson. Unanimous consent reached.

Review and Adopt Meeting Agenda

Mr. Dunaway suggested to move WP10-45, after addressing WP10-46 to 49, and 52. WP10-45, is contingent on actions taken on proposals WP10-46 to 49 and 52.

Recognition of service for Mr. Randy Alvarez on the Bristol Bay RAC.

Correspondence to the Alaska Board of Game to consider predator control for Unit 9E/C.

Mr. O'Hara moved to amend the agenda with the changes. Second called by Mr. Dunaway. Motion carries. Agenda adopted as amended.

Review and Adoption of minutes: Naknek October 27, 2009

Mr. Dunaway moved to adopt the minutes, second by Mr. O'Hara. No comments or questions on the minutes. Motion carries, minutes adopted.

Chair's Report

No reports.

Council Member reports: Mr. O'Hara briefed the Council on his attendance and participation along with other RAC chairs in a meeting with Pat Pourchot to discuss the Federal subsistence review.

Open floor for public comments

The public has the opportunity to comment on subsistence related issues throughout the meeting.

Wildlife Proposal review and recommendations

The following wildlife proposals are the final actions taken by the Council for the Federal Subsistence Board to consider.

Statewide Proposals

Support proposal WP10-01 **with modification** as presented by OSM. The definition clarifies a term in the Federal subsistence hunting regulations and does not affect fish and wildlife populations, subsistence uses or other uses.

Support proposal WP10-03 **with modification** as presented by OSM. The Council supported the proposal to simplify the current regulations to reduce confusion among the public and federal managers.

Support proposal WP10-04 **with modification** as presented by OSM. The Council supports State and Federal alignment of regulations that enhance the management of the resources, reduce confusion for the public, and allow for subsistence uses to continue.

Support proposal WP10-05 as presented by OSM. The Council supported the proposal to simplify the regulations and provide clarifying language for the public to understand clearly regarding accumulation of harvest limits for fish and wildlife. The proposal will not impact subsistence users and will not affect fish and wildlife populations.

Bristol Bay Regional Proposals

WP10-45

The Council tabled WP10-45 until its September 2010 fall meeting in Dillingham to a working group to address the season dates, hunting corridors, and Federal land closure in Unit 9 to address the issue of providing subsistence opportunities for rural residents of the Bristol Bay region. The working group will also engage in wolf and bear management discussion to protect moose and caribou populations. The working group will present its results and recommendation to the Council in its fall meeting at which time the proposal will be taken off the table for Council action.

WP10-46

The Council tabled WP10-46 until its September 2010 fall meeting in Dillingham to a working group to address the season dates, hunting corridors, and Federal land closure in Unit 9 to address the issue of providing subsistence opportunities for rural residents of the Bristol Bay region. The working group will also engage in wolf and bear management discussion to protect moose and caribou populations. The working group will present its results and recommendation to the Council in its fall meeting at which time the proposal will be taken off the table for Council action.

WP10-47

The Council tabled WP10-47 until its September 2010 fall meeting in Dillingham to a working group to address the season dates, hunting corridors, and Federal land closure in Unit 9 to address the issue of providing subsistence opportunities for rural residents of the

Bristol Bay region. The working group will also engage in wolf and bear management discussion to protect moose and caribou populations. The working group will present its results and recommendation to the Council in its fall meeting at which time the proposal will be taken off the table for Council action.

WP10-48

The Council tabled WP10-48 until its September 2010 fall meeting in Dillingham to a working group to address the season dates, hunting corridors, and Federal land closure in Unit 9 to address the issue of providing subsistence opportunities for rural residents of the Bristol Bay region. The working group will also engage in wolf and bear management discussion to protect moose and caribou populations. The working group will present its results and recommendation to the Council in its fall meeting at which time the proposal will be taken off the table for Council action.

WP10-49/50

The Council tabled WP10-49/50 until its September 2010 fall meeting in Dillingham to a working group to address the season dates, hunting corridors, and Federal land closure in Unit 9 to address the issue of providing subsistence opportunities for rural residents of the Bristol Bay region. The working group will also engage in wolf and bear management discussion to protect moose and caribou populations. The working group will present its results and recommendation to the Council in its fall meeting at which time the proposal will be taken off the table for Council action.

WP10-52

The Council tabled WP10-52 until its September 2010 fall meeting in Dillingham to a working group to address the season dates, hunting corridors, and Federal land closure in Unit 9 to address the issue of providing subsistence opportunities for rural residents of the Bristol Bay region. The working group will also engage in wolf and bear management discussion to protect moose and caribou populations. The working group will present its results and recommendation to the Council in its fall meeting at which time the proposal will be taken off the table for Council action.

WP10-51/53

Support proposal WP10-51 **with modification** as presented by OSM. The Council supported the proposal to shorten the season to protect the caribou population in Units 9A-C as a conservation concern to protect the declining population.

Support proposal WP10-53 **with modification** as presented by OSM. The Council supported the proposal to reduce the harvest limit to one bull. This action will also address the conservation concern and to help increase the caribou bull to cow ratio and to protect the declining population.

2009 Annual Report

The Council adopted its 2009 annual report to the Federal Subsistence Board. Refer to the Chairs report for detailed response, September 23, 2010 meeting material.

Agency Reports

Informational reports were presented or provided to the Council by Federal and State staff, and Tribal organizations.

Time and Location of Next meeting

The next meeting will be September 23, 2010 in Dillingham.

Winter meeting March 09-10, 2011 in Naknek.

Meeting adjourned March 04, 2010.

I hereby certify that, to the best of my knowledge, the forgoing minutes are accurate and complete.

\s\ Donald Mike

Donald Mike, DFO
Regional Advisory Council Coordinator

These minutes will be formally considered by the Bristol Bay Alaska Subsistence Regional Advisory Council at its next meeting, and any corrections or notations will be incorporated in the minutes of that meeting.



U.S. FISH and WILDLIFE SERVICE
BUREAU of LAND MANAGEMENT
NATIONAL PARK SERVICE
BUREAU of INDIAN AFFAIRS

FWS/OSM 10051/AW

Federal Subsistence Board
1011 E. Tudor Rd., MS 121
Anchorage, Alaska 99503-6199



U.S. FOREST SERVICE

JUL 1 2010

Ms. Molly B. Chythlook, Chair
Bristol Bay Subsistence
Regional Advisory Council
Post Office Box 155
Naknek, Alaska 99633

Dear Ms. Chythlook:

Enclosed with this letter is a report of the Federal Subsistence Board's actions at its May 18-20, 2010, meeting regarding proposed changes to subsistence wildlife regulations. The Board used a consensus agenda on those proposals where the Regional Advisory Council(s), the Interagency Staff Committee, and the Alaska Department of Fish and Game were in agreement. The Board adopted the consensus agenda at the conclusion of the meeting. Details of these actions and the Board's deliberations are contained in the meeting transcripts. Copies of the transcripts may be obtained by calling our toll free number, 1-800-478-1456, and are available online at the Office of Subsistence Management website, <http://alaska.fws.gov/asm/index.htm>.

The Federal Subsistence Board appreciates the Bristol Bay Subsistence Regional Advisory Council's active involvement in and diligence with the regulatory process. The ten Regional Advisory Councils continue to be the foundation of the Federal Subsistence Management Program, and the stewardship shown by the Regional Advisory Council chairs and their representatives at the Board meeting was noteworthy.

If you have any questions regarding the summary of the Board's actions, please contact Donald Mike, 1-907-786-3629.

Sincerely,

/S/ Michael R. Fleagle

Michael R. Fleagle, Chair

Enclosure

cc: Bristol Bay Subsistence Regional Advisory Council members
Peter J. Probasco, OSM

**FEDERAL SUBSISTENCE BOARD ACTION REPORT
MAY 18-20, 2010**

Note to Reader: 1) Changes to regulatory language are shown by ~~lettering~~ for deleted language and **lettering** for new language. 2) The consensus agenda is comprised of proposals for which the Office of Subsistence Management, Regional Advisory Council(s), the Interagency Staff Committee, and the Alaska Department of Fish and Game agree on a recommended action. The Federal Subsistence Board does not address consensus agenda proposals individually unless requested to do so at the meeting.

STATEWIDE PROPOSALS

Proposal WP10-01

DESCRIPTION: Proposal WP10-01, submitted by the USFWS, Office of Subsistence Management (OSM), requests the addition of a definition for “drawing permit” to the Federal subsistence management regulations.

COUNCIL RECOMMENDATION/JUSTIFICATION:

Southeast Alaska SRAC: Support with modification as described in the OSM conclusion. This proposal is housekeeping and provides clarity for a term in common use.

Southcentral Alaska SRAC: Support with modification as described in the OSM conclusion. This proposal would not negatively affect subsistence users.

Kodiak/Aleutians SRAC: Support with modification as described in the OSM conclusion.

Bristol Bay SRAC: Support with modification as described in the OSM conclusion.

Yukon-Kuskokwim Delta SRAC: Support with modification as described in the OSM conclusion. This is a housekeeping proposal to clarify random drawing.

Western Interior Alaska SRAC: Support with modification as described in the OSM conclusion.

Seward Peninsula SRAC: Support with modification as described in the OSM conclusion. The Council agrees with clarifying definitions for “drawing permits.”

Northwest Arctic SRAC: Support. The Council supported the proposal because subsistence is a way of life and there are concerns about having to use a drawing permit.

Eastern Interior Alaska SRAC: Support with modification as described in the OSM conclusion. This proposal is housekeeping and would simplify and clarify regulations.

North Slope SRAC: Support. Subsistence is a way of life and there are concerns about having to use a drawing permit.

BOARD ACTION/JUSTIFICATION: **Adopted with modification**, as recommended by eight councils to read, “*Statewide-General Regulations §__ .25(a) Definitions. **Drawing permit—a permit issued to a limited number of Federally qualified subsistence users selected by means of a random drawing.***” The definition clarifies a term that is used in the Federal subsistence hunting regulations and does not affect fish and wildlife populations, subsistence uses or other

uses. The modified wording simplifies the definition and makes it clear that drawing permits are based on a random drawing for all similarly situated Federally qualified subsistence users.

Proposal WP10-02

NOTE: The status of Proposal WP10-02 (deferred proposal WP08-05) was presented to all Regional Advisory Councils during the winter 2010 cycle of meetings. This proposal was further deferred until the assigned State-Federal workgroup completes its work and presents its findings to the Board in January 2011. The Southeast Alaska SCRAC was the only council that took action on the proposal.

COUNCIL RECOMMENDATION/JUSTIFICATION:

Southeast Alaska SRAC: Support use of brown bear parts for handicrafts. There is no evidence to indicate the need for a bear handicrafts workgroup or a need to limit or restrict the use of brown bear parts. There is no need to defer action.

BOARD ACTION/JUSTIFICATION: The Board did not address this proposal, preferring instead to wait until the workgroup has completed its work.

Proposal WP10-03

DESCRIPTION: Proposal WP10-03, submitted by the Office of Subsistence Management, requests the addition of a general provision in Federal subsistence management regulations to allow the harvest of fish and wildlife by participants in a cultural or educational program.

COUNCIL RECOMMENDATION/JUSTIFICATION:

Southeast Alaska SRAC: Support with modification as described in the OSM conclusion. The Council favors removing confusing language regarding the ceremonial use of fish and wildlife. However, it is unclear to the Council how OSM would define an educational camp. The Council favors simplifying regulations that do not include hard timelines and that provide flexibility in the number of animals that can be taken.

Southcentral Alaska SRAC: Support with modification to read "~~§____.27(e) §____.25(g) Cultural/educational program permits. (2)(1) The U.S. Fish and Wildlife Service Office of Subsistence Management may issue a permit to harvest fish for a qualifying cultural/educational program to an organization that has been granted a Federal subsistence permit for a similar event with the previous 5 years. A qualifying program must have instructors, enrolled students, minimum attendance requirements, and standards for successful completion of the course. Applications must be submitted to the **Federal Subsistence Board through the Office of Subsistence Management and should be submitted** 60 days prior to the earliest desired date of harvest. **Permits will be issued for no more than 25 fish per culture/education camp. Appeal of a rejected request can be made to the Federal Subsistence Board. Application for an initial permit for a qualifying cultural/educational program, for a permit when the circumstances have change significantly, when no permit has been issued within the previous 5 years, or when there is a request for harvest in excess of that provided in this paragraph (e)(2), will be considered by the Federal Subsistence Board. Harvest must be reported and any animals harvested will be**~~

counted against any established Federal harvest quota for the area in which it is harvested. (2) A permit to harvest fish, wildlife, or shellfish for a qualifying culture/educational program which has been granted a Federal subsistence permit for a similar event with the previous 5 years may be issued by the Federal in-season manager (for fisheries) or the Federal local land manager (for wildlife). Requests for follow-up permits must be submitted to the in-season or local land manager and should be submitted 60 days prior to the earliest desired date of harvest.” These amendments provide more clarity, especially with respect to harvest limits.

The proposal will not affect existing culture camps and is consistent with existing regulations.

Kodiak/Aleutians SRAC: Support with modification as described in the OSM conclusion. The modified proposal will simplify the process.

Bristol Bay SRAC: Support with modification as described in the OSM conclusion. The proposal would simplify the current regulations to reduce confusion among the public and Federal managers.

Yukon-Kuskokwim Delta SRAC: Support with modification as described in the OSM conclusion. This is a housekeeping proposal; adding general provisions in the regulations would clarify subsistence management regulations.

Western Interior Alaska SRAC: Support with modification as described in the OSM conclusion.

Seward Peninsula SRAC: Support with modification as described in the OSM conclusion.

Northwest Arctic SRAC: Support with modification as described in the OSM conclusion. It is very important to provide opportunity for cultural/educational programs permits.

Eastern Interior Alaska SRAC: Support with modification as described in the OSM conclusion. This proposal supports subsistence uses of wildlife and retains the ability to obtain permits with less than a 60-day notice. The Council suggested further simplification by asking the Federal Subsistence Management Program to work with the Alaska Department of Fish and Game to develop a joint Federal-State permit.

North Slope SRAC: Support with modification as described in the OSM conclusion. It is very important to provide opportunity for cultural/educational programs permits.

BOARD ACTION/JUSTIFICATION: Adopted with modification, as recommended by nine councils, to read, §____.25(g) *Cultural/educational program permits (1) A qualifying program must have instructors, enrolled students, minimum attendance requirements, and standards for successful completion of the course. Applications must be submitted to the Federal Subsistence Board through the Office of Subsistence Management and should be submitted 60 days prior to the earliest desired date of harvest. Harvests must be reported and any animals harvested will count against any established Federal harvest quota for the area in which it is harvested. (2) Requests for follow-up permits must be submitted to the in-season or local manager and should be submitted 60 days prior to the earliest desired date of harvest.*

The harvest of fish and wildlife by participants in cultural and educational programs is generally allowed in the Federal Subsistence Management Program regulations. Proposal WP10-03 will further clarify for fish and wildlife manager, Office of Subsistence Management staff, members of the Interagency Staff Committee, and members of the Federal Subsistence Board the cultural and educational permit regulations.

Proposal WP10-04

DESCRIPTION: Proposal WP10-04, submitted by the Office of Subsistence Management, would remove Units 6, 12, 20A, 20B, 20C east of the Teklanika River, 20D, and 20E from the areas for which the Assistant Regional Director for Subsistence Management has the delegated authority to open close or adjust Federal subsistence lynx seasons and to set harvest and possession limits.

COUNCIL RECOMMENDATION/JUSTIFICATION:

Southeast Alaska SRAC: No action taken.

Southcentral Alaska SRAC: Support with modification as described in the OSM conclusion. The proposed action would not impact subsistence users and there are no conservation concerns for the lynx population.

Kodiak/Aleutians SRAC: No action taken. The Council did not want to take action on a proposal that would affect another region.

Bristol Bay SRAC: Support with modification as described in the OSM conclusion. The Council supports Federal and State alignment of regulations that enhance the management of resources, reduce confusion for the public, and allow subsistence uses to continue.

Yukon-Kuskokwim Delta SRAC: Support with modification as described in the OSM conclusion. This is a housekeeping proposal and has no impact on the Yukon-Kuskokwim Delta Region.

Western Interior Alaska SRAC: Support with modification as described in the OSM conclusion.

Seward Peninsula SRAC: No action taken. The proposed action would not affect the Seward Peninsula Region.

Northwest Arctic SRAC: Oppose.

Eastern Interior Alaska SRAC: Support. This proposal could be considered housekeeping in that the ability to adjust seasons is still possible and this change would simplify regulations.

North Slope SRAC: Support with modification to delete the regulatory language found in § __.26(f)(3) and delegate the authority to open, close, or adjust Federal lynx seasons and to set harvest and possession limits for lynx via a delegation of authority letter only.

BOARD ACTION/JUSTIFICATION: **Adopted with modification** to delete the regulatory language found in § __.26 (f)(3), and delegate the authority to open, close, or adjust Federal lynx seasons and to set harvest and possession limits for lynx via a delegation of authority letter only, consistent with five of the Councils' recommendations.

Proposal WP10-05

DESCRIPTION: Proposal WP10-05, submitted by the Office of Subsistence Management, seeks to update, clarify, and simplify the regulations regarding accumulation of harvest limits for both fish and wildlife.

COUNCIL RECOMMENDATION/JUSTIFICATION:

Southeast Alaska SRAC: Support. This proposal is housekeeping and necessary to accommodate previous changes to Federal regulations.

Southcentral Alaska SRAC: Support. This is a housekeeping proposal that would not affect fish and wildlife populations and subsistence users.

Kodiak/Aleutians SRAC: Support.

Bristol Bay SRAC: Support. The proposal will not impact subsistence users and will not affect fish and wildlife populations.

Yukon-Kuskokwim Delta SRAC: Support. This is a housekeeping proposal that would benefit subsistence users.

Western Interior Alaska SRAC: Support.

Seward Peninsula SRAC: Support. The Council agrees with simplifying and clarifying wording for accumulations of harvest limits. This proposal does not affect the Seward Peninsula Region.

Northwest Arctic SRAC: Oppose. The Council expressed concerns about the State management program in relation to the Federal program.

Eastern Interior Alaska SRAC: Support. This proposal is housekeeping and would clarify current regulations.

North Slope SRAC: Support. This proposal does not change Federal subsistence regulations for the North Slope Region concerning accumulation of harvest limits or the timeframe for harvest limits.

BOARD ACTION/JUSTIFICATION: Adopted, as recommended by nine of the Councils. This action will simplify the regulations.

BRISTOL BAY

Proposal WP10-45

DESCRIPTION: Proposal WP10-45, submitted by the Bristol Bay Subsistence Regional Advisory Council, would shorten the fall and winter moose seasons in Unit 9B from August 20—September 15 to September 1—15, and from December 1—January 15 to December 15—January 15, and would align the Federal and State seasons.

COUNCIL RECOMMENDATION/JUSTIFICATION: Tabled to a time definite. With OSM support and participation, ADF&G will form a working group to address the season dates, hunting corridors, and Federal land closure in Unit 9, and to address the issue of providing subsistence opportunities for rural residents of the Bristol Bay region. The working group will also engage in discussions regarding wolf and bear management discussion to protect moose and caribou populations. The working group will present its results and recommendation to the Council at its September 2010 fall meeting in Dillingham at which time the proposal will be taken off the table for Council action.

BOARD ACTION/JUSTIFICATION: Deferred. This proposal was on the consensus agenda.

Proposal WP10-46

DESCRIPTION: Proposal WP10-46, submitted by the Bristol Bay Subsistence Regional Advisory Council, requests that Federal public lands in Unit 9B and a portion of Unit 9C be closed for the taking of moose by non-Federally-qualified subsistence users.

COUNCIL RECOMMENDATION/JUSTIFICATION: Tabled to a time definite. With OSM support, ADF&G will form a working group to address the season dates, hunting corridors, and Federal land closure in Unit 9, and to address the issue of providing subsistence opportunities for rural residents of the Bristol Bay region. The working group will also engage in discussions regarding wolf and bear management discussion to protect moose and caribou populations. The working group will present its results and recommendation to the Council at its September 2010 fall meeting in Dillingham at which time the proposal will be taken off the table for Council action.

BOARD ACTION/JUSTIFICATION: **Deferred.** This proposal was on the consensus agenda.

Proposal WP10-47

DESCRIPTION: Proposal WP10-47, submitted by the Bristol Bay Subsistence Regional Advisory Council, requests that non-Federally-qualified users hunting moose in Unit 9C be restricted from harvesting moose within a two-mile wide buffer on either side of waterways within Federal public lands. The proponent would like the buffer to be applied along the Kvichak and Alagnak rivers, Big Creek (just east of King Salmon), and King Salmon Creek northeast of King Salmon).

COUNCIL RECOMMENDATION/JUSTIFICATION: Tabled to a time definite. With OSM support, ADF&G will form a working group to address the season dates, hunting corridors, and Federal land closure in Unit 9, and to address the issue of providing subsistence opportunities for rural residents of the Bristol Bay region. The working group will also engage in discussions regarding wolf and bear management discussion to protect moose and caribou populations. The working group will present its results and recommendation to the Council at its September 2010 fall meeting in Dillingham at which time the proposal will be taken off the table for Council action.

BOARD ACTION/JUSTIFICATION: **Deferred.** This proposal was on the consensus agenda.

Proposal WP10-48

DESCRIPTION: Proposal WP10-48, submitted by the Bristol Bay Subsistence Regional Advisory Council, requests that non-Federally-qualified users hunting moose in Unit 9B be restricted from harvesting moose within a two-mile wide buffer on either side of waterways within Federal public lands. The proponent would like the buffer to be applied along the Kvichak River and Kaskanak and Yellow creeks.

COUNCIL RECOMMENDATION/JUSTIFICATION: Tabled to a time definite. With OSM support, ADF&G will form a working group to address the season dates, hunting corridors, and Federal land closure in Unit 9, and to address the issue of providing subsistence opportunities for rural residents of the Bristol Bay region. The working group will also engage in discussions regarding wolf and bear management discussion to protect moose and caribou populations. The working group will present its results and recommendation to the Council at its September 2010 fall meeting in Dillingham at which time the proposal will be taken off the table for Council action.

BOARD ACTION/JUSTIFICATION: **Deferred.** This proposal was on the consensus agenda.

Proposals WP10-49/50

DESCRIPTION: Proposal WP10-49, submitted by Native Village of Perryville and proposal WP10-50, submitted by Chignik Lake Traditional Council, request that Federal public lands in Unit 9E be closed to the taking of moose for non-Federally-qualified users.

COUNCIL RECOMMENDATION/JUSTIFICATION: Tabled to a time definite. With OSM support, ADF&G will form a working group to address the season dates, hunting corridors, and Federal land closure in Unit 9, and to address the issue of providing subsistence opportunities for rural residents of the Bristol Bay region. The working group will also engage in discussions regarding wolf and bear management discussion to protect moose and caribou populations. The working group will present its results and recommendation to the Council at its September 2010 fall meeting in Dillingham at which time the proposal will be taken off the table for Council action.

BOARD ACTION/JUSTIFICATION: **Deferred.** This proposal was on the consensus agenda.

Proposals WP10-51/53

DESCRIPTION: Proposals WP10-51/53 were submitted by the Bristol Bay Subsistence Regional Advisory Council. Proposal WP10-51 requests that the caribou season in Units 9A, 9B, 17B, a portion of 17C, 18, 19A, and 19B be established as August 1—March 31. Proposal WP10-53 requests that the harvest limit for caribou be consistent at 2 caribou in Units 9A, 9B, a portion of 9C, 17A, 17B, 17C, 18, 19A, and 19B. It also requests a restriction in harvest so that no more than 1 bull may be taken and no more than 1 caribou may be taken August 1—January 31 in Units 9A, 9B, a portion of 9C, a portion of 17A, 17B, a portion of 17C, 18, 19A, and 19B (excluding Lime Village).

COUNCIL RECOMMENDATION/JUSTIFICATION:

Bristol Bay SRAC: Support WP10-51 with modification as described in the OSM conclusion. This proposal would shorten the season in Units 9A-C as a conservation measure to protect the declining population and would align with the State season. Support WP10-53. This action

would address the conservation concern, help increase the caribou bull to cow ration, protect the declining population, and align with the State regulation.

Yukon-Kuskokwim Delta SRAC: Support WP10-51 with modification as described in the OSM conclusion. Federally-qualified residents of Unit 18 harvest caribou in Unit 18, 17A, and 19A. The Mulchatna Caribou Herd has declined; there is a need to conserve and rebuild the caribou population. Support WP10-53. Federally-qualified residents of Unit 18 harvest caribou in Unit 18, 17A, and 19A. The Mulchatna Caribou Herd has declined; there is a need to conserve and rebuild the caribou population.

Western Interior Alaska SRAC: Support WP10-51 with modification as described in the OSM conclusion. The Council is concerned about expanding hunt opportunity and harvest that may exacerbate the decline of large breeding bulls in the population. Support WP10-53.

BOARD ACTION/JUSTIFICATION: WP10-51: **Adopted with modification** to read, “*The season for caribou harvest in Units 9A, 9B, and 9C; portions of Units 17A, 17B, and 17C; and Units 18 and 19A will be August 1-March 15.* WP10-53: **Adopted**. These proposals were on the consensus agenda.

Proposal WP10-52

DESCRIPTION: Proposal WP10-52, submitted by the Bristol Bay Subsistence Regional Advisory Council, requests that non-Federally-qualified users hunting moose in Unit 9E be restricted from harvesting moose within a two-mile wide buffer on either side of waterways within Federal public lands. The proponent would like the buffer to be applied along the following rivers: King Salmon (near Egegik), Egegik, Ugashik, Dong Salmon, King Salmon (near Pilot Point), Cinder, and the Meshik rivers.

COUNCIL RECOMMENDATION/JUSTIFICATION: Tabled to a time definite. With OSM support, ADF&G will form a working group to address the season dates, hunting corridors, and Federal land closure in Unit 9, and to address the issue of providing subsistence opportunities for rural residents of the Bristol Bay region. The working group will also engage in discussions regarding wolf and bear management discussion to protect moose and caribou populations. The working group will present its results and recommendation to the Council at its September 2010 fall meeting in Dillingham at which time the proposal will be taken off the table for Council action.

BOARD ACTION/JUSTIFICATION: **Deferred**. This proposal was on the consensus agenda.



U.S. FISH and WILDLIFE SERVICE
BUREAU of LAND MANAGEMENT
NATIONAL PARK SERVICE
BUREAU of INDIAN AFFAIRS

Federal Subsistence Board

1011 E. Tudor Rd., MS 121
Anchorage, Alaska 99503-6199



U.S. FOREST SERVICE

FWS/OSM 10075/AW

JUL 29 2010

Ms. Molly Chythlook, Chair
Bristol Bay Subsistence
Regional Advisory Council
Post Office Box
Dillingham, Alaska 99576

Dear Ms. Chythlook:

This letter responds to the Bristol Bay Subsistence Regional Advisory Council's 2009 Annual Report. The Federal Subsistence Board (Board) appreciates your effort in developing the Annual Report and values the opportunity to review the issues brought forward concerning your region. Annual Reports allow the Board to become more aware of the issues that fall outside the regulatory proposal process and affect subsistence users in your region.

The responsibility to respond to these reports has been delegated to the Board by the Secretaries of the Interior and Agriculture. The Board has reviewed your Council's Annual Report and offers the following responses.

Issue 1: Annual Moose and Caribou Surveys

Moose and caribou populations in the Alaska Peninsula are still depressed. The Council continues to encourage the service to fund biological surveys. The surveys are important which provides data to implement into management plans for moose and caribou. The survey data and management plans are tools used by the Council when it develops recommendation on wildlife proposals for the Federal Subsistence Board to consider. Without adequate and recent moose survey data, it is difficult to develop informed recommendations without affecting other users or the resource.

Response

The National Wildlife Refuges and National Parks in the Bristol Bay Region are committed to continue efforts to conduct moose and caribou surveys. Moose surveys are typically conducted when there is adequate snow cover to help detect moose. Surveys are often planned for October through December when bulls still retain their antlers, which allows for collecting composition data in addition to population data. Surveys conducted after December, when it is more difficult

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to distinguish bulls from cows, are mostly for obtaining population data only. Moose surveys throughout the Bristol Bay area will continue to be funded to help in management plans and decisions.

The Alaska Peninsula/Becharof National Wildlife Refuge will continue to survey for moose within the established trend survey areas within Unit 9E when snow and weather conditions allow. If conditions are not adequate by December, Refuge biologists will try to at least obtain population data by early spring.

The Togiak National Wildlife Refuge is planning to conduct moose surveys in most of Unit 17A in the winter of 2010/2011. This survey was scheduled for winter 2009/2010, but due to poor snow conditions, the surveys were not conducted.

The Lake Clark National Park and Preserve plans to conduct moose surveys within the preserve in Unit 9B in November and December 2010. Lake Clark National Park and Preserve staff attempted to conduct surveys in this area during November and December 2009, but was unable to finish them due to poor snow conditions. If snow conditions are not adequate for early winter surveys, staff will at least try to obtain population data during the late winter for 2010-2011.

The Katmai National Park and Preserve plans to conduct moose surveys in November and December 2010 and/or February and March 2011. However, the areas to be surveyed have not yet been determined.

With regard to plans for caribou surveys, I offer the following. A photocensus of the Mulchatna Caribou Herd (MCH) was planned for summer 2010 to estimate composition and population size, but was postponed due to unfavorable weather conditions. Photocensuses for the MCH are conducted every other year if possible, depending on weather and aggregation of the herd. Composition counts to determine age/sex ratios and productivity are scheduled for fall 2010. In addition, distribution surveys will continue to be conducted throughout much of the year (March through October). In addition, radio/satellite collared caribou will be monitored for movements. The Lake Clark National Park and Preserve, Togiak National Wildlife Refuge, Yukon Delta National Wildlife Refuge, and Alaska Department of Fish and Game continue to plan cooperative efforts to monitor the status of this herd.

For the Nushagak Peninsula Caribou herd, population surveys are scheduled to be conducted in late June and July 2011 via aerial telemetry. Photographing post-calving aggregations of caribou is planned for mid- to late winter (January to March depending on snow cover). If needed, the winter population survey may incorporate radio telemetry and photography. Calf production/calving chronology surveys are scheduled to be conducted in 2011 between May 20 and June 10 by aerial radio tracking all collared caribou 2-years-old or older. Sex and age composition surveys are also scheduled to be conducted in early to mid-October to provide an index of fall calf recruitment and bull to cow ratios. Distribution surveys are currently conducted each month via aerial radio tracking. Surveys for Nushagak Peninsula Caribou are done in cooperation with the Togiak National Wildlife Refuge and the Alaska Department of Fish and Game.

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For the Northern and Southern Alaska Peninsula caribou herds, fall and spring composition counts are planned for September/October and April/May. However, weather conditions often affect the success of the surveys. Fall composition counts help determine bull:cow ratios and calf:cow ratios to assess recruitment. Spring surveys help determine pregnancy rates and calf production. These data are used to evaluate the health of the populations. Due to challenging weather and lack of herd aggregations, a complete population census is rarely accomplished. Nevertheless, area biologists will continue to strive to get accurate population data. Surveys for the Northern Alaska Peninsula caribou herd are done in cooperation with the Alaska Peninsula/Becharof National Wildlife Refuge and the Alaska Department of Fish and Game. Surveys for the Southern Alaska Peninsula caribou herd are done in cooperation with the Izembeck National Wildlife Refuge, Alaska Peninsula/Becharof National Wildlife Refuge, and the Alaska Department of Fish and Game.

Issue 2: Pollock Industry—Impact of Salmon By-Catch

The commercial fisheries in the Bering Sea targeting Pollock are affecting harvest within the Bristol Bay region and other river systems in Alaska. Local residents are noticeably impacted, reporting lower harvest for users groups in the Bristol Bay region. The Council continues to urge the Federal Subsistence Board to actively seek resolution, and through conservation efforts, with North Pacific Fishery Management Council to reduce the by catch in the Bering Sea of the salmon species returning to the spawning grounds.

Response

During the past three years, the Board has been actively engaged in efforts to minimize salmon bycatch in the Bering Sea/Aleutian Islands (BSAI) commercial pollock fishery, including:

- The Board has been kept up-to-date on salmon bycatch issues through Office of Subsistence Management staff and Regional Advisory Council member attendance at several meetings of the North Pacific Fishery Management Council (NPFMC).
- During the recently completed Chinook Salmon Bycatch Environmental Impact Statement process, the Board submitted several comment letters to the NPFMC and the National Marine Fisheries Service, which included its recommendation that a Chinook salmon bycatch hard cap of 29,323 be adopted; the alternative with the least amount of bycatch (this hard cap amount was also recommended by the Bristol Bay, Seward Peninsula, Yukon-Kuskokwim Delta, Western Interior Alaska, and Eastern Interior Alaska Subsistence Regional Advisory Councils).
- The Office of Subsistence Management funded representatives from the five Regional Advisory Councils listed above to attend and testify at the June 2008 Kodiak and April 2009 Anchorage NPFMC meetings on salmon bycatch.
- As chair of the Federal Subsistence Board, I testified in person during the April 2009 NPFMC meeting in Anchorage, again advocating for the 29,323 hard cap. I also testified on the importance of Chinook salmon as a subsistence food source for many Federally-qualified subsistence users in Alaska.

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On May 19, 2010, Secretary of Commerce Gary Locke approved a plan proposed by the NPFMC to manage Chinook salmon bycatch in the Bering Sea pollock fishery. The plan, called Amendment 91, replaced the exemption conferred under Amendment 84 with specific hard caps for BSAI Chinook salmon bycatch. Under this amendment, the pollock fleet, as a whole, can fish under a hard cap of 47,591 fish, or participate in a National Marine Fisheries Service (NMFS) approved incentive program, and fish under a higher cap level of 60,000 fish. These cap limits are allocated by season and among sectors. Once a seasonal cap for a sector is reached, pollock fishing in that sector of the Bering Sea is closed for the remainder of the season. Vessels that do not choose to fish under an incentive plan agreement (IPA) would be limited to a proportion of a lower cap of 28,496 fish. Amendment 91 goes into effect in January 2011. The Record of Decision can be viewed at: http://alaskafisheries.noaa.gov/sustainablefisheries/bycatch/salmon/chinook/feis/amd91rod_0510.pdf

Under Amendment 91, the NMFS is committed to making additional and concerted efforts to account for all salmon bycatch. This is to be accomplished by monitoring and independently evaluating all salmon bycatch by each vessel in the pollock fishery through a census, 100 percent observer coverage, and an expanded biological sampling program.

The Board is currently monitoring efforts to reduce chum salmon bycatch in the BSAI, and is aware of the following upcoming events and actions scheduled to take place by the NPFMC:

- June 2010: In Sitka, the NPFMC finalized alternatives for staff analysis. Office of Subsistence Management staff attended this meeting.
- January 2011: The NPFMC will review preliminary data and analyses.
- February-March 2011: NPFMC members and/or staff plan to attend five Subsistence Regional Advisory Council meetings (Bristol Bay, Seward Peninsula, Yukon-Kuskokwim Delta, Western Interior Alaska, and Eastern Interior Alaska Subsistence Regional Advisory Councils) to give presentations on the proposed chum salmon bycatch management measures and solicit public comments.
- June 2011 (tentative): In Nome, the preliminary preferred alternative will be selected.
- October 2011 (tentative): In Anchorage; final action on the preferred alternative, which will be provided to the Secretary of Commerce. Rule making process will follow.

The Board will continue to monitor salmon bycatch issues and provide further comments and recommendations, as warranted.

Issue 3: Non-salmon Species Research

White fish, of various species, are among the subsistence resources harvested throughout the Bristol Bay region and of which the Council identified as a key subsistence resource in the region for study. Recent harvest levels have declined or changed in some communities. Fisheries Resource Monitoring Plan for the Southwest Region did not fund this particular project in the 2010 funding cycle. The Council requests the Federal Subsistence Board to fund this project to investigate contemporary harvest and use patterns by the residents of the Lake Clark region.

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Response

Whitefish harvest and use in Lake Clark communities was a specific information need identified in the request for proposals for the 2010 Fisheries Resource Monitoring Program (Monitoring Program), which funds projects to provide information for Federal subsistence fisheries management. The Board did not fund the one project that was submitted in response to this information need due to issues raised by the Technical Review Committee and reservations expressed by the local land manager. The Board recommends including this information need in the next request for proposals that will be issued in the fall of 2010 (for projects that begin in Spring 2012). Interested investigators will be encouraged to work with the National Park Service to submit a technically sound proposal.

As a reminder, at its Fall 2010 meeting the Council will be asked to review and comment on the priority information needs for the Bristol Bay Region in preparation for the 2012 request for proposals for the Monitoring Program. The Council should review the priority information needs carefully, to be sure they accurately reflect its issues and concerns as this document will provide the basis for the request for proposals. The Council will also have an opportunity to weigh in on the project proposals at its Fall 2011 meeting.

Issue 4: Climate Change

The Council is concerned on how climate change can affect subsistence resources in Alaska. The Council encourages the Office of Subsistence to brief and provide recent findings to the Council on climate change issues and how it affects the resources and implications to subsistence users. Courses of action can be taken through the Federal regulatory process to continue to provide subsistence opportunities for rural residents of Alaska.

Response

The Board recognizes and shares your concern about the effects of climate change on subsistence resources and the people in Alaska who depend upon them. As one way to address this issue, the Office of Subsistence Management specifically asked for research projects that document the effects of climate change on subsistence fishery resources and uses in its 2010 Monitoring Program request for proposals. In response, three projects were funded: one in the Yukon-Kuskokwim Delta and two in the Northern Region. As noted above, the Council will be asked to comment on the priority research needs for the Bristol Bay Region at its Fall 2010 meeting, and the Board encourages the Council to make clear its desire to address climate change and its effects on subsistence fishery resources.

The Office of Subsistence Management staff will continue to work with the Council to identify and present information on climate change and its effects on resources in the Bristol Bay region. OSM will also explore inviting a speaker to an upcoming council meeting to address effects of

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climate change. This information will also be included in consideration of regulatory proposal analyses or special action requests. The Board has provided for changes in seasons to accommodate effects of climate change, and expects to continue to do so as needed and as appropriate.

Issue 5: National Park Service Liaison

The Bristol Bay RAC recognizes the importance of a Katmai National Park local hire employee that is familiar with the surrounding communities to serve as a liaison for Katmai National Park. The employee will serve as bridge to provide information between local villages and Katmai National Park on cultural, natural resources; regulatory and other policy related issues affecting the rural residents of Bristol Bay.

The liaison position will provide the NPS rangers a point of contact to maintain an open communication and close working relationship between the NPS, local residents and the surrounding communities. The incumbent will convey other information about the NPS to villages through public meetings, council meetings, Fish and Game advisory meetings and household visits. In addition, the liaison will assist in development of policies which provide for the resource needs of the villages, while protecting those resources. This position will greatly reduce user and agency conflicts as it relates to regulations within Katmai National Park.

Response

Katmai National Park and Preserve recognizes the importance and benefits of hiring a local subsistence liaison and has made a liaison position one of its highest funding priorities. The Park has submitted a proposal to create and fund a permanent position to hire a local person to work with residents in communities neighboring Katmai National Park and Preserve and the Aniakchak National Monument and Preserve. The proposed liaison would serve as a trusted intermediary between the Park and local subsistence users on issues concerning Federal subsistence regulations, resource management and other topics of concern. The Park is committed to securing funding for a subsistence liaison and will continue to advocate for the resources to create and support a permanent liaison position in the Park's base budget.

Issue 6: Wolf and Bear Population Management

The Council will continue to maintain its concern on the low levels of moose and caribou populations within the Bristol Bay region. The Council continues to urge the Federal Subsistence Board or the U.S. Fish & Wildlife Service to review and develop management options to address the wolf and bear population which contributes to the low density and recruitment of the moose and caribou populations in the Bristol Bay region.

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Response

The Board recognizes your Council's continued interest in and concern for developing options to manage wolf and bear populations to help ensure that subsistence resources are maintained at a healthy level and are able to sustain subsistence uses. In regards to predator management, the Office of the Secretary of the Interior summarized the various agency mandates, legal requirements and policy guidelines related to this issue in a letter dated December 19, 2006 to the Eastern Interior Alaska Subsistence Regional Council Chair (enclosed). Specifically, the letter identifies the comprehensive analysis process that the Fish and Wildlife Service would have to complete prior to considering predator management as both biologically justified and the best alternative available. We have also attached a copy of the Service's Policy on Maintaining the Biological Integrity, Diversity, and Environmental Health of the National Wildlife Refuge System (enclosed).

As outlined in the letter, as part of the process, a thorough evaluation must be given to substantiate intended benefits of any predator management efforts and alternatives must be evaluated, attempted, and exhausted as a practical means of achieving such management objectives. This would most likely be accomplished through an environmental assessment since this type of management action would be considered a major Federal action. The Service will address any requests for predator management on a case by case basis. The request needs to address a specific area and species of concern.

In response to a similar request from the Eastern Interior Regional Advisory Council, Todd Logan, Regional Chief of the National Wildlife Refuge System in Alaska, provided a detailed response. A copy of that letter is enclosed for your information.

In closing, I thank the members of the Bristol Bay Subsistence Regional Advisory Council for their continued involvement and diligence in matters regarding the Federal Subsistence Management Program. I speak for the entire Board in expressing our appreciation for your efforts and our confidence that the subsistence users of the Bristol Bay Region are well represented through your work.

Sincerely,

/S/ Michael R. Fleagle

Michael R. Fleagle
Chair, Federal Subsistence Board

Enclosures

cc: BBSRAC Members
Federal Subsistence Board
Interagency Staff Committee
Peter J. Probasco, Office of Subsistence Management



United States Department of the Interior
OFFICE OF THE SECRETARY
Washington, DC 20240



DEC 19 2006

Mr. Gerald Nicholia, Chair
Eastern Interior Alaska Subsistence
Regional Advisory Council
101 12th Avenue, Room 110
Fairbanks, Alaska 99701

Dear Mr. Nicholia:

Thank you for your letter of September 22, 2006, to Secretary Dirk Kempthorne requesting that the process to implement an intensive management program with the State of Alaska, Department of Fish and Game on Federal public lands within the Eastern Interior Region of Alaska, be started immediately. I have been asked to respond to you directly.

I take the responsibility, as mandated in the Alaska National Interests Lands Conservation Act (ANILCA), of protecting the opportunity for continued subsistence uses in Alaska seriously; as well as that of conserving the nation's fish and wildlife and other natural resources on Alaska's Federal public lands, as directed by ANILCA and other Federal statutes. Each of the Department of the Interior (DOI) land management agencies within your region manage the resources entrusted to them according to these statutory mandates and the implementing regulations and policies. Consistent with these mandates, the DOI agencies will address your concerns.

I understand that staff from the Bureau of Land Management, National Park Service, and U.S. Fish and Wildlife Service (Service) gave presentations to your council at its October 2006 meeting in Delta Junction. They explained the legal requirements and policy guidelines each agency follows when considering requests for intensive management, including predator control. In addition, your council was provided written responses from the Refuge Managers of the Arctic, Yukon Flats, and Tetlin National Wildlife Refuges to your request to the Service Regional Director to initiate studies leading to control of predators of moose and caribou on these refuges.

Each DOI land management agency has differing legal requirements and policy guidelines regarding intensive management, including predator control, which are summarized below:

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Bureau of Land Management (BLM)

The BLM manages its Alaska lands primarily under the Federal Land Policy and Management Act of 1976 and ANILCA. While the agency manages land uses and habitat on its lands, management of fish and wildlife on BLM lands is conducted by the State of Alaska, consistent with the traditional role of the State in managing resident species of fish and wildlife. Essentially, predator control activities by the State of Alaska may take place on BLM lands, as long as they do not conflict with on-going or anticipated BLM authorized actions. The BLM views predator control as a State function and the agency neither supports nor condemns the predator control methods approved by the Alaska Board of Game.

U.S. Fish and Wildlife Service (Service)

The Service manages the national wildlife refuges in Alaska under the mandates of ANILCA and the Refuge Administration Act. There is nothing in ANILCA, or other applicable federal laws, regulations and policies, nor in the refuge comprehensive conservation plans, which specifically precludes predator control on national wildlife refuges in Alaska. However, these laws, regulations and policies do require comprehensive analyses prior to considering a predator control program to ensure that the action is both appropriate and biologically justified. The following are some of the general prerequisites for considering predator control on Alaska refuges.

Foremost, management actions must be biologically justified and used in a prudent and ecologically sound manner to conform to the agency's Policy on Maintaining the Biological Integrity, Diversity, and Environmental Health of the National Wildlife Refuge System (System). This policy requires that the agency 1) *identify the refuge purpose(s), legislative responsibilities, refuge role within the ecosystem, and System mission*; 2) *assess the current status of biological integrity, diversity, and environmental health through baseline... surveys and studies...*; 3) *assess historic conditions and compare them to the current condition ... This will provide a benchmark... for the relative intactness of ecosystem functions and processes; and 4) consider the refuge's importance to refuge, ecosystem, national and international landscape scales of biological integrity, diversity, and environmental health....* A thorough evaluation must be given to substantiate intended benefits of the control efforts, and alternatives to direct control must be evaluated, attempted, and exhausted as a practical means of achieving management objectives.

Because predator control of wolves and/or bears on national wildlife refuges is highly controversial, it would be considered a major Federal action subject to National Environmental Policy Act (NEPA) requirements which would include preparation of an environmental impact statement (EIS) or, at a minimum, an environmental assessment

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(EA). As part of an EIS or EA, the Service would evaluate predator control in the context of the purposes of the refuge and in consideration of the biological integrity policy. Additionally, the agency would evaluate the effects of the proposed predator control on subsistence uses and needs, as required by Section 810 of ANILCA. Section 810 requirements would be incorporated into the NEPA process and documents.

In addition, if predator control is proposed to be carried out on a refuge by an agency or others not acting as agents of the Service, the refuge manager must find the proposed control program to be consistent with the Service compatibility regulations implementing the Refuge Administration Act. These regulations require that permitted uses of the refuge be compatible with the purposes of the refuge, the mission of the national wildlife refuge system, and the resource management objectives identified in the refuge comprehensive conservation plans.

Be assured that the Service is giving serious consideration to the concerns you have raised relating to the effects of predation on subsistence uses. By copy of this letter I am requesting that the Service's staff in Alaska to explore available options to conduct the studies necessary to fully evaluate the need for and potential benefits of predator reductions to refuge resources and subsistence users, as well as alternatives to direct agency-conducted reduction of predators. In this evaluation, the Service will closely coordinate and, where possible, cooperate with the State of Alaska in its efforts to provide sustainable, harvestable surpluses for subsistence use.

National Park Service (NPS)

The NPS lands in Alaska are managed according to ANILCA and the underlying 1916 Organic Act, which established and continues to guide NPS management. The ANILCA, per sections 802(1), 808(6) and 815(1)(3), established a standard of "conservation of healthy populations" for wildlife management in Alaska's parks, monuments, and preserves. The legislative history to ANILCA clearly expresses congressional intent in regards to intensive management, including predator control. On page 171 of Senate Report 96-413, November 1979, it states:

In authorizing subsistence uses within National Parks, Monuments, Preserves, and National recreation Areas, it is the intent of the Committee that certain traditional National Park Service management values be maintained. It is contrary to the National Park Service concept to manipulate habitat or populations to achieve maximum utility of natural resources. Rather, the National Park System concept requires implementation of management policies which strive to maintain the natural abundance, behavior, diversity, and ecological integrity of native animals as part of their ecosystem, and the Committee intends that that concept be maintained... Accordingly, the Committee does not expect the National Park Service to engage in habitat manipulation or control of other species for the purpose of maintaining subsistence uses within the National Park System units.

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The same report goes on to state (pages 232-233):

The Committee recognizes that the management policies and legal authorities of the National Park System and the National Wildlife Refuge System may require different interpretations and application of the "healthy population" concept consistent with management objectives of each system. Accordingly, the Committee recognizes that the policies and legal authorities of the managing agencies will determine the nature and degree of management program affecting ecological relationships, population dynamics, and manipulations of the components of the ecosystem.

As you can see, the Congress understood and expected that the policies of the NPS were to play a significant role in interpreting how the mandate for "conservation of healthy populations" is carried out.

One of the first major actions the Secretary completed was a long and thorough review of draft NPS management policies. On August 31, 2006, the Secretary was satisfied that the policies were appropriate and struck the correct balance for NPS guidance. Those policies contain several sections (in Chapter 4) that relate to your request. In all, those sections direct the NPS to, in a manner consistent with ANILCA and its Senate history, maintain the natural population fluctuations and processes that influence the dynamics of individual plant and animal populations within their ecosystems. Section 4.4.3, *Harvest of Plants and Animals by the Public*, directly deals with the issues you have raised. Among other things, that section states: *The (National Park) Service does not engage in activities to reduce the number of native species for the purpose of increasing the number of harvest species (i.e. predator control), nor does the (National Park) Service permit others to do so on land managed by the National Park Service.*

To summarize, undertaking intensive management practices, including predator control activities as conducted by the State of Alaska, is not allowed on NPS lands.

I hope this brief summary of the DOI agencies' legal frameworks for considering predator control on their respective lands is helpful to your council's understanding of the constraints they must conform to in addressing your concerns. I would encourage your council to continue to work closely with the Federal agencies and the State in developing management options to ameliorate, to the extent possible, the adverse effects of predation on wildlife resources utilized by subsistence users. In addition to seeking predator reduction programs on Federal lands which are consistent with the legal and policy mandates of the land managing agencies, opportunities for predator management on lands under State jurisdiction should be explored, as appropriate. Additionally, the council may be able to encourage increased harvests of predators by local residents under current State hunting and trapping regulations where applicable.

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In closing, I support and applaud your efforts to ensure that subsistence uses and way of life in Alaska are protected. I appreciate your council's continuing contribution to the Federal Subsistence Program and your diligence in representing the interests of subsistence users in your region. If you have any further questions, please feel free to contact me at (202) 208-5347.

Sincerely,

/S/

Acting Assistant Secretary for Fish
and Wildlife and Parks



U.S. FISH AND WILDLIFE SERVICE TRANSMITTAL SHEET

PART 601 FW 3	SUBJECT National Wildlife Refuge System Biological Integrity, Diversity, and Environmental Health	RELEASE NUMBER 366
FOR FURTHER INFORMATION CONTACT Division of Natural Resources		DATE April 16, 2001

EXPLANATION OF MATERIAL TRANSMITTED:

This chapter provides policy for maintaining and restoring, where appropriate, the biological integrity, diversity, and environmental health of the National Wildlife Refuge System.

Acting /s/
Deputy DIRECTOR

FILING INSTRUCTIONS:

Remove:

Insert:

None

601 FW 3, 04/19/01, FWM 366, (4 sheets)

FISH AND WILDLIFE SERVICE
REFUGE MANAGEMENT

Refuge Management

Part 601 National Wildlife Refuge System

Chapter 3 Biological Integrity, Diversity, and Environmental Health

601 FW 3

3.1 What is the purpose of this chapter? This chapter provides policy for maintaining and restoring, where appropriate, the biological integrity, diversity, and environmental health of the National Wildlife Refuge System.

3.2 What is the scope of this policy? This policy applies to all units of the System.

3.3 What is the biological integrity, diversity, and environmental health policy? The policy is an additional directive for refuge managers to follow while achieving refuge purpose(s) and System mission. It provides for the consideration and protection of the broad spectrum of fish, wildlife, and habitat resources found on refuges and associated ecosystems. Further, it provides refuge managers with an evaluation process to analyze their refuge and recommend the best management direction to prevent further degradation of environmental conditions; and where appropriate and in concert with refuge purposes and System mission, restore lost or severely degraded components.

3.4 What are the objectives of this policy?

A. Describe the relationships among refuge purposes, System mission, and maintaining biological integrity, diversity, and environmental health.

B. Provide guidelines for determining what conditions constitute biological integrity, diversity, and environmental health.

C. Provide guidelines for maintaining existing levels of biological integrity, diversity, and environmental health.

D. Provide guidelines for determining how and when it is appropriate to restore lost elements of biological integrity, diversity, and environmental health.

E. Provide guidelines to follow in dealing with external threats to biological integrity, diversity, and environmental health.

3.5 What are the authorities for this policy? National Wildlife Refuge System Administration Act of 1966 as amended by the National Wildlife Refuge System Improvement Act of 1997, 16 U.S.C. 668dd-668ee (Refuge Administration Act). Section 4(a)(4)(B) of this law states that "In administering the System, the Secretary shall . . . ensure that the biological integrity, diversity, and environmental health of the System are maintained for the benefit of present and future generations of Americans . . ." This is one of 14 directives to the Secretary contained within the Refuge Administration Act.

3.6 What do these terms mean?

A. Biological Diversity. The variety of life and its processes, including the variety of living organisms, the genetic differences among them, and communities and ecosystems in which they occur.

B. Biological Integrity. Biotic composition, structure, and functioning at genetic, organism, and community levels comparable with historic conditions, including the natural biological processes that shape genomes, organisms, and communities.

C. Environmental Health. Composition, structure, and functioning of soil, water, air, and other abiotic features comparable with historic conditions, including the natural abiotic processes that shape the environment.

D. Historic Conditions. Composition, structure, and functioning of ecosystems resulting from natural processes that we believe, based on sound professional judgment, were present prior to substantial human related changes to the landscape.

E. Native. With respect to a particular ecosystem, a species that, other than as a result of an introduction, historically occurred or currently occurs in that ecosystem.

3.7 What are the principles underlying this policy?

A. Wildlife First. The Refuge Administration Act, as amended, clearly establishes that wildlife conservation is the singular National Wildlife Refuge System mission. House Report 105-106 accompanying the National Wildlife Refuge System Improvement Act of 1997 states "... the fundamental mission of our System is wildlife conservation: wildlife and wildlife conservation must come first." Biological integrity, diversity, and environmental health are critical components of wildlife conservation.

B. Accomplishing refuge purposes and maintaining biological integrity, diversity, environmental health of the System. The Refuge Administration Act states that each refuge will be managed to fulfill refuge purpose(s) as well as to help fulfill the System mission, and we will accomplish these purpose(s) and our mission by ensuring that the biological integrity, diversity, and environmental health of each refuge are maintained, and where appropriate, restored. We base our decisions on sound professional judgment.

C. Biological integrity, diversity, and environmental health in a landscape context. Biological integrity, diversity, and environmental health can be described at various landscape scales from refuge to ecosystem, national, and international. Each landscape scale has a measure of

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biological integrity, diversity, and environmental health dependent on how the existing habitats, ecosystem processes, and wildlife populations have been altered in comparison to historic conditions. Levels of biological integrity, diversity, and environmental health vary among refuges, and often within refuges over time. Individual refuges contribute to biological integrity, diversity, and environmental health at larger landscape scales, especially when they support populations and habitats that have been lost at an ecosystem, national, or even international scale. In pursuit of refuge purposes, individual refuges may at times compromise elements of biological integrity, diversity, and environmental health at the refuge scale in support of those components at larger landscape scales. When evaluating the appropriate management direction for refuges, refuge managers will consider their refuges' contribution to biological integrity, diversity, and environmental health at multiple landscape scales.

D. Maintenance and restoration of biological integrity, diversity, and environmental health. We will, first and foremost, maintain existing levels of biological integrity, diversity, and environmental health at the refuge scale. Secondly, we will restore lost or severely degraded elements of integrity, diversity, environmental health at the refuge scale and other appropriate landscape scales where it is feasible and supports achievement of refuge purpose(s) and System mission.

E. Wildlife and Habitat Management. Management, ranging from preservation to active manipulation of habitats and populations, is necessary to maintain biological integrity, diversity, and environmental health. We favor management that restores or mimics natural ecosystem processes or functions to achieve refuge purpose(s). Some refuges may differ from the frequency and timing of natural processes in order to meet refuge purpose(s) or address biological integrity, diversity, and environmental health at larger landscape scales.

F. Sound Professional Judgment. Refuge managers will use sound professional judgment when implementing this policy primarily during the comprehensive conservation planning process to determine: the relationship between refuge purpose(s) and biological integrity, diversity, and environmental health; what conditions constitute biological integrity, diversity, and environmental health; how to maintain existing levels of all three; and, how and when to appropriately restore lost elements of all three. These determinations are inherently complex. Sound professional judgment incorporates field experience, knowledge of refuge resources, refuge role within an ecosystem, applicable laws, and best available science including consultation with others both inside and outside the Service.

G. Public Use. The priority wildlife-dependent public uses, established by the National Wildlife Refuge System Improvement Act of 1997, are not in conflict with this policy

when determined to be compatible. The directives of this policy do not generally entail exclusion of visitors or elimination of public use structures; e.g., boardwalks and observation towers. However, maintenance and/or restoration of biological integrity, diversity, and environmental health may require spatial or temporal zoning of public use programs and associated infrastructures. General success in maintaining or restoring biological integrity, diversity, and environmental health will produce higher quality opportunities for wildlife-dependent public use.

3.8 What are our responsibilities?**A. Director.**

(1) Provides national policy, goals and objectives for maintaining and restoring the biological integrity, diversity, and environmental health of the System.

(2) Ensures that national plans and partnerships support maintaining and restoring the biological integrity, diversity, and environmental health of the System.

(3) Ensures that the national land acquisition strategy for the System is designed to enhance the biological integrity, diversity, and environmental health of the System at all landscape scales.

B. Regional Director.

(1) Provides regional policy, goals and objectives for maintaining and restoring the biological integrity, diversity, and environmental health of the System, including guidance to resolve any conflicts with biological integrity, diversity, and environmental health at an individual refuge versus at the larger landscape scales.

(2) Ensures that regional and ecosystem plans, and regional partnerships support maintaining and restoring the biological integrity, diversity, and environmental health of the System.

(3) Resolves conflicts that arise between maintaining biological integrity, diversity, and environmental health at the refuge level landscape scale versus at larger landscape scales.

C. Regional Chief.

(1) Ensures that individual refuge comprehensive conservation plans support maintaining and restoring the biological integrity, diversity, and environmental health of the System.

(2) Reviews and ensures those refuge management programs that occur on many refuges (e.g., fire management) are consistent with this policy.

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D. Refuge Manager.

- (1) Follows the procedure outlined in paragraph 3.9.
- (2) Incorporate the principles of this policy into all refuge management plans and actions.

3.9 How do we implement this policy? The Director, Regional Directors, Regional Chiefs, and Refuge Managers will carry out their responsibilities specified in paragraph 3.8. In addition, refuge managers will carry out the following tasks:

- A.** Identify the refuge purpose(s), legislative responsibilities, refuge role within the ecosystem, and System mission.
- B.** Assess the current status of biological integrity, diversity, and environmental health through baseline vegetation, population surveys and studies, and any other necessary environmental studies.
- C.** Assess historic conditions and compare them to current conditions. This will provide a benchmark of comparison for the relative intactness of ecosystems' functions and processes. This assessment should include the opportunities and limitations to maintaining and restoring biological integrity, diversity, and environmental health.
- D.** Consider the refuge's importance to refuge, ecosystem, national, and international landscape scales of biological integrity, diversity, and environmental health. Also, identify the refuge's roles and responsibilities within the Regional and System administrative levels.
- E.** Consider the relationships among refuge purpose(s) and biological integrity, diversity and environmental health, and resolve conflicts among them.
- G.** Through the comprehensive conservation planning process, interim management planning, or compatibility reviews, determine the appropriate management direction to maintain and, where appropriate, restore, biological integrity, diversity, and environmental health, while achieving refuge purpose(s).
- H.** Evaluate the effectiveness of our management by comparing results to desired outcomes. If the results of our management strategies are unsatisfactory, assess the causes of failure and adapt our strategies accordingly.

3.10 What factors do we consider when maintaining and restoring biological integrity, diversity, and environmental health? We plan for the maintenance and restoration of biological integrity, diversity, and environmental health while considering all three in an integrated and holistic manner. The highest measure of biological integrity, diversity, and environmental health is viewed as those intact and self-

sustaining habitats and wildlife populations that existed during historic conditions.

A. Biological Integrity.

(1) We evaluate biological integrity by examining the extent to which biological composition, structure, and function has been altered from historic conditions. Biological composition refers to biological components such as genes, populations, species, and communities. Biological structure refers to the organization of biological components, such as gene frequencies, social structures of populations, food webs of species, and niche partitioning within communities. Biological function refers to the processes undergone by biological components, such as genetic recombination, population migration, the evolution of species, and community succession [see 602 FW 3.4C(1)(e), Planning Area and Data Needs].

(2) Biological integrity lies along a continuum from a biological system extensively altered by significant human impacts to the landscape to a completely natural system. No landscape retains absolute biological integrity, diversity, and environmental health. However, we strive to prevent the further loss of natural biological features and processes; i.e., biological integrity.

(3) Maintaining or restoring biological integrity is not the same as maximizing biological diversity. Maintaining biological integrity may entail managing for a single species or community at some refuges and combinations of species or communities at other refuges. For example, a refuge may contain critical habitats for an endangered species. Maintaining that habitat (and, therefore, that species), even though it may reduce biological diversity at the refuge scale, helps maintain biological integrity and diversity at the ecosystem or national landscape scale.

(4) In deciding which management activities to conduct to accomplish refuge purpose(s) while maintaining biological integrity, we start by considering how the ecosystem functioned under historic conditions. For example, we consider the natural frequency and timing of processes such as flooding, fires, and grazing. Where it is not appropriate to restore ecosystem function, our refuge management will mimic these natural processes including natural frequencies and timing to the extent this can be accomplished.

(5) We may find it necessary to modify the frequency and timing of natural processes at the refuge scale to fulfill refuge purpose(s) or to contribute to biological integrity at larger landscape scales. For example, under historic conditions, an area may have flooded only a few times per decade. Migratory birds dependent upon wetlands may have used the area in some years, and used other areas that flooded in other years. However, many wetlands have been converted to agriculture or other land uses, the remaining wetlands

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must produce more habitat, more consistently, to support wetland-dependent migratory birds. Therefore, to conserve these migratory bird populations at larger landscape scales, we may flood areas more frequently and for longer periods of time than they were flooded historically.

B. Biological Diversity.

(1) We evaluate biological diversity at various taxonomic levels, including class, order, family, genus, species, subspecies, and--for purposes of Endangered Species Act implementation--distinct population segment. These evaluations of biological diversity begin with population surveys and studies of flora and fauna. The System's focus is on native species and natural communities such as those found under historic conditions [see 602 FW 3.4C(1)(e)]. The Natural Heritage Network databases for respective States should prove a valuable tool for this initial evaluation.

(2) We also evaluate biological diversity at various landscape scales, including refuge, ecosystem, national, and international. On refuges, we typically focus our evaluations of biological diversity at the refuge scale; however, these refuge evaluations can contribute to assessments at larger landscape scales.

(3) We strive to maintain populations of breeding individuals that are genetically viable and functional. We provide for the breeding, migrating, and wintering needs of migratory species. We also strive to maximize the size of habitat blocks and maintain connectivity between blocks of habitats, unless such connectivity causes adverse effects on wildlife or habitat (e.g., by facilitating the spread of invasive species).

(4) At the community level, the most reliable indicator of biological diversity is plant community composition. We use the National Vegetation Classification System to identify biological diversity at this level.

C. Environmental Health.

(1) We evaluate environmental health by examining the extent to which environmental composition, structure, and function have been altered from historic conditions. Environmental composition refers to abiotic components such as air, water, and soils, all of which are generally interwoven with biotic components (e.g., decomposers live in soils). Environmental structure refers to the organization of abiotic components, such as atmospheric layering, aquifer structure, and topography. Environmental function refers to the processes undergone by abiotic components, such as wind, tidal regimes, evaporation, and erosion. A diversity of abiotic composition, structure, and function tends to support a diversity of biological composition, structure, and function [see 602 FW 3.4 C (1)(e), Planning Area and Data Needs].

(2) We are especially concerned with environmental features as they affect all living organisms. For example, at the

genetic level, we manage for environmental health by preventing chemical contamination of air, water, and soils that may interfere with reproductive physiology or stimulate high rates of mutation. Such contamination includes carcinogens and other toxic substances that are released within or outside of refuges.

(3) At the population and community levels, we consider the habitat components of food, water, cover, and space. Food and water may become contaminated with chemicals that are not naturally present. Activities such as logging and mining or structures such as buildings and fences may modify security or thermal cover. Unnatural noise and light pollution may also compromise migration and reproduction patterns. Unnatural physical structures, including buildings, communication towers, reservoirs, and other infrastructure, may displace space or may be obstacles to wildlife migration. Refuge facility construction and maintenance projects necessary to accomplish refuge purpose(s) should be designed to minimize their impacts on the environmental health of the refuge.

3.11 How do we apply our management strategies to maintain and restore biological integrity, diversity, and environmental health?

A. We strive to manage in a holistic manner the combination of biological integrity, diversity, and environmental health. We balance all three by considering refuge purpose(s), System mission, and landscape scales. Considered independently, management strategies to maintain and restore biological integrity, diversity, and environmental health may conflict.

B. For example, physical structures and chemical applications are often necessary to maintain biological integrity and to fulfill refuge purpose(s). We may use dikes and water control structures to maintain and restore natural hydrological cycles, or use rotenone to eliminate invasive carp from a pond. These unnatural physical alterations and chemical applications would compromise environmental health if considered in isolation, but they may be appropriate management actions for maintaining biological integrity and accomplishing refuge purpose(s).

C. We may remove physical structures to promote endangered species recovery in some areas, or we may remove plants or animals to protect structures, depending upon refuge purpose(s). Unless we determine that a species was present in the area of a refuge under historic conditions, we will not introduce or maintain the presence of that species for the purpose of biological diversity. We may make exceptions where areas are essential for the conservation of a threatened or endangered species and suitable habitats are not available elsewhere. In such cases, we strive to minimize unnatural effects and to restore or maintain natural processes and ecosystem components to the extent practicable without jeopardizing refuge purpose(s).

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3.12 How do we incorporate information from historic conditions into our management decisions?

A. Maintaining biological integrity, diversity, and environmental health requires an ecological frame of reference. A frame of reference allows us to contrast current conditions of our resources with historic conditions. The reference guides us in two ways. It provides information on how the landscape looked prior to changes in land use that destroyed and fragmented habitats and resulted in diminished wildlife populations and the extirpation or extinction of species. It also allows us to examine how natural ecosystems function and maintain themselves. We use these conditions as a frame of reference in which to develop goals and objectives.

B. We use historical conditions as the frame of reference to identify composition, structure, and functional processes that naturally shaped ecosystems. We especially seek to identify keystone species, indicator species, and types of communities that occurred during the frame of reference. We also seek to ascertain basic information on natural ecosystem structure such as predator/prey relationships and distribution of plant communities. Finally, we seek to identify the scale and frequency of processes that accompanied these components and structures, such as fire regimes, flooding events, and plant community succession. Where appropriate and feasible, we also pursue biological integrity, diversity, and environmental health by eliminating unnatural biotic and abiotic features and processes not necessary to accomplish refuge purpose(s).

C. We do not expect, however, to reconstruct a complete inventory of components, structures, and functions for any successional stage occurring during the frame of reference. Rather, we use sound professional judgment to fit the pieces to create a conceptual picture of our resources under historic conditions.

D. We ensure that our management activities result in the establishment of a community that fits within what we reasonably believe to have been the natural successional series, unless doing so conflicts with accomplishing refuge purpose(s). We may choose to maintain nonclimax communities pursuant to refuge purpose(s) or for maintaining biological integrity, diversity, and environmental health at the regional, national, or international landscape scale. We favor techniques such as fire or flooding that mimic or result in natural processes to maintain these nonclimax communities. However, where it will support fulfillment of refuge purpose(s), we allow or, if necessary, encourage natural succession to proceed.

3.13 Where do we get information on historic conditions?

A. Information on historic conditions may be historical, archeological, or other. Historical information includes the written and, in some cases, the pictographic accounts of Native Americans, explorers, surveyors, traders, and early settlers. Archeological information comes from collections of cultural artifacts maintained by scientific institutions. We may obtain other data from a range of sources, including research, soil sediments, and tree rings.

B. We obtain information on historic conditions from our investigations and from partners in academia, conservation organizations, and other Federal, State, Tribal, and local government agencies. In many cases, we use historical vegetation maps to provide data. Such historical maps are usually drawn at relatively coarse scales, perhaps to the level of vegetation alliance. Generally a comprehensive historical list of plant and animal species is not available or necessary. We will base the determination of natural species and ecosystem composition on sound professional judgment. We periodically update our information on historic conditions with results from ongoing historical, archeological, and other studies.

3.14 How do we manage populations to maintain and restore biological integrity, diversity, and environmental health?

A. We encourage cooperation and coordination with State fish and wildlife management agencies in setting refuge population goals and objectives. To the extent practicable, our regulations pertaining to fishing or hunting of resident wildlife within the System are consistent with State fish and wildlife laws, regulations, and management plans.

B. We maintain, or contribute to the maintenance of, populations of native species. We design our wildlife population management strategies to support accomplishing refuge purpose(s) while maintaining or restoring biological integrity, diversity, and environmental health. We formulate refuge goals and objectives for population management by considering natural densities, social structures, and population dynamics at the refuge level, and population objectives set by national plans and programs – such as the North American Waterfowl Management Plan – in which the System is a partner.

C. Natural densities are relatively stable for some species and variable for others. We manage populations for natural densities and levels of variation, while assuring that densities of endangered or otherwise rare species are sufficient for maintaining viable populations. We consider population parameters such as sex ratios and age class distributions when managing populations to maintain and restore where appropriate biological integrity, diversity, and environmental health.

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D. On some refuges, including many of those having the purpose of migratory bird conservation, we establish goals and objectives to maintain densities higher than those that would naturally occur at the refuge level because of the loss of surrounding habitats. We more closely approximate natural levels at larger landscape scales, such as flyways, by maintaining higher densities at the refuge level.

E. We do not, however, allow densities to reach excessive levels that result in adverse effects on wildlife and habitat. The effects of producing densities that are too high may include disease, excessive nutrient accumulation, and the competitive exclusion of other species. We use planning and sound professional judgment to determine prudent limits to densities.

F. Where practical, we support the reintroduction of extirpated native species. We consider such reintroduction in the context of surrounding landscapes. We do not introduce species on refuges outside their historic range or introduce species if we determine that they were naturally extirpated, unless such introduction is essential for the survival of a species and prescribed in an endangered species recovery plan, or is essential for the control of an invasive species and prescribed in an integrated pest management plan.

3.15 How do we manage habitats to maintain and restore biological integrity, diversity, environmental health?

A. We will, first and foremost, maintain existing levels of biological integrity, diversity, and environmental health at the refuge scale. Following that, we will restore lost or degraded elements of biological integrity, diversity, and environmental health at all landscape scales where it is feasible and supports fulfillment of refuge purposes.

B. Our habitat management plans call for the appropriate management strategies that mimic historic conditions while still accomplishing refuge objectives. For example, prescribed burning can simulate natural fire regimes or water level management can mimic natural hydrological cycles. Farming, haying, logging, livestock grazing, and other extractive activities are permissible habitat management practices only when prescribed in plans to meet wildlife or habitat management objectives, and only when more natural methods, such as fire or grazing by native herbivores, cannot meet refuge goals and objectives.

C. We do not allow refuge uses or management practices that result in the maintenance of non-native plant communities unless we determine there is no feasible alternative for accomplishing refuge purpose(s). For example, where we do not require farming to accomplish refuge purpose(s), we cease farming and strive to restore natural habitats. Where feasible and consistent with refuge purpose(s), we restore degraded or modified habitats in the pursuit of biological integrity, diversity, and environmental

health. We use native seed sources in ecological restoration. We do not use genetically modified organisms in refuge management unless we determine their use is essential to accomplishing refuge purpose(s) and the Director approves the use.

3.16 How do we manage non-native species to maintain and restore biological integrity, diversity, and environmental health?

A. We prevent the introduction of invasive species, detect and control populations of invasive species, and provide for restoration of native species and habitat conditions in invaded ecosystems. We develop integrated pest management strategies that incorporate the most effective combination of mechanical, chemical, biological, and cultural controls while considering the effects on environmental health.

B. We require no action to reduce or eradicate self-sustaining populations of non-native, noninvasive species (e.g., pheasants) unless those species interfere with accomplishing refuge purpose(s). We do not, however, manage habitats to increase populations of these species unless such habitat management supports accomplishing refuge purpose(s).

3.17 How does this policy affect the acquisition of lands for the System?

A. We consider the mission, goals, and objectives of the System in planning for its strategic growth. We will take a proactive approach to identifying lands that are critical for maintaining or restoring the biological integrity, diversity, and environmental health of the System at all landscape scales. We will integrate this approach into all Service strategies and initiatives related to the strategic growth of the System. We incorporate the directives of this policy when evaluating an area's potential contribution to the conservation of the ecosystems of the United States.

B. We use the Land Acquisition Priority System to rank potential acquisitions once the Director approves significant expansions or new refuges. Our Land Acquisition Priority System includes components that gauge the contributions of refuges to maintaining and restoring biological integrity, diversity, and environmental health.

3.18 What is the relationship between biological integrity, diversity, and environmental health and compatibility?

When completing compatibility determinations, refuge managers use sound professional judgment to determine if a refuge use will materially interfere with or detract from the fulfillment of the System mission or the refuge purpose(s). Inherent in fulfilling the System mission is protection of the biological integrity, diversity, and environmental health of the System. Specific policy for compatibility is found in 603 FW 2.

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3.19 What is the relationship between biological integrity, diversity, and environmental health and comprehensive conservation planning?

A. We integrate the principles of this policy into all aspects of comprehensive conservation planning, including pre-planning guidance (see 602 FW 3.4C(1)(e)) as we complete plans to direct long-range refuge management and identify desired future conditions for proposed refuges (see 602 FW 1.7D).

B. Refuge purpose(s) and the System mission serve as the basis for goals and objectives at all levels of the System (e.g., System, Regional, ecosystem, and refuge level). When we develop refuge goals and objectives during the Comprehensive Conservation Plan process we include goals and objectives for maintaining and restoring the biological integrity, diversity, and environmental health of the refuge.

C. While developing Comprehensive Conservation Plans, we make management decisions based on sound professional judgment. We subsequently evaluate the effectiveness of these decisions by comparing results to desired outcomes. If the results are unsatisfactory, we assess the causes of failure and adapt our management decisions accordingly. In part, we base management decisions on natural resource-related research that has been conducted on refuges. This type of research adds to the general body of information related to natural resource management and aids us in continually adapting our management decisions. We generally encourage natural resource-related research on refuges.

3.20 How do we protect biological integrity, diversity, and environmental health from actions outside of refuges? Events occurring off refuge lands or waters may injure or destroy the biological integrity, diversity, and environmental health of a refuge. Given their responsibility to the public resources with which they have been entrusted, refuge managers should address these problems. It is critical that they pursue resolution fully cognizant and respectful of legitimate private property rights, seeking a balance between such rights and the refuge manager's own responsibility to the public trust. While each situation will be different, the following is a suggested procedure which emphasizes our desire for cooperative resolutions. The time and effort expended, and the rate at which a refuge manager escalates the process, will depend on the severity of threat and the resources at risk.

A. We first seek resolution by directly contacting the landowner(s), corporation, agency or other entity from which the problem originates.

B. Where direct discussions fail, managers might seek resolution through collaborative discussions with State or local authorities or other organizations that can help in cooperative resolution of the problem.

C. An appropriate next step might be to pursue resolution at the local level through planning and zoning boards or other regulatory agencies at the city and county level. Failing that, the manager may seek avenues through State administrative and regulatory agencies. Regulatory solutions are a serious step, and a manager should take this route only after careful consideration and in close consultation with the Regional Offices.

D. If the above efforts fail, we may take action within the legal authorities available to the Service and with full respect to private property rights. In such cases, refuge managers will consult with the Office of the Solicitor for assistance in identifying appropriate remedies and obtain concurrence from the Regional Director.



IN REPLY REFER TO
NWR5710-127

United States Department of the Interior

FISH AND WILDLIFE SERVICE

1011 E. Tudor Road
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JUL 07 2010

Susan Entsminger
Chair, Eastern Interior Alaska Subsistence Regional Advisory Council
c/o U.S. Fish & Wildlife Service
1011 E. Tudor Road
Anchorage, Alaska 99503

Dear Ms. Entsminger:

You wrote Federal Subsistence Board Chair Michael Fleagle on February 26, 2010, asking for support and guidance on a variety of issues. The first issue outlined in your letter was "Intensive Wildlife Management" relative to Service management of lands in Alaska. I was asked to respond to this issue.

The State of Alaska and the U.S. Fish and Wildlife Service have different mandates related to providing hunting opportunity on lands under their respective jurisdictions. Under the State's intensive management law, the Board of Game may identify areas where consumptive use of big game is a preferred use and implement intensive management actions to achieve high levels of human harvest. On Alaska's National Wildlife Refuges, on the other hand, we are obligated under the Alaska National Interest Lands Conservation Act to manage fish, wildlife, and habitats for natural diversity. Our obligations to provide continued subsistence opportunity must be consistent with natural diversity. If these mandates conflict, we must find balance between managing for natural diversity and providing subsistence opportunity. We are legally precluded from managing with a singular focus on human harvest as defined by the State's intensive management law.

With subsistence as a legal purpose of all Alaska Refuges except Kenai, we are concerned when refuge lands do not meaningfully provide for subsistence uses of rural residents. A scarcity of fish or game may be due to wildlife population declines from previous levels due to habitat changes, over harvest, disease, weather events, or natural predator/prey cycles. Alternatively, sometimes wildlife populations like caribou redistribute onto lands less accessible to established communities. When fuel costs are high, traditional hunting areas can become inaccessible for economic reasons. Subsistence uses may also increase over time when village populations expand. Our responsibility to manage Alaska Refuge lands for fish, wildlife, and habitats in their natural diversity, while also providing continued subsistence opportunity consistent with natural diversity, is complex.

When subsistence resources become scarce, we have a variety of actions we can take, often without exhaustive study. We can restrict or curtail non-subsistence use. If needed, restrictions on



Susan Entsminger

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subsistence harvest may follow to allow game populations to stabilize and recover. We can increase law enforcement to reduce illegal take of fish and wildlife. We can work with local communities to protect critical components of a wildlife population such as pregnant females or birds late in the nesting season. We can propose and/or support expanded predator hunting and trapping seasons. Lastly, we may be able to offer trapping clinics in rural communities to encourage the return of predator trapping levels that supported higher game populations in the past. Actions such as these have been taken around the state, and will continue to be important tools to help us fulfill our subsistence responsibilities on Refuges.

Actions beyond the above, such as active predator control programs, require considerable additional review. First, we need to assess the complex interplay between predators (including humans), prey populations, and habitat conditions. We must answer questions such as “Do current conditions represent a natural part of an ecological cycle, or has natural diversity somehow been compromised?” and “How does human harvest affect the prey population? Have levels of harvest, and their effects on the prey population, changed over time?”

If we find that a natural cycle is at play, but game populations are so low as to preclude subsistence harvest, we need to evaluate the efficacy and potential consequences of disrupting the natural system to provide for subsistence uses. These topics and alternative actions we could take, need to be evaluated following guidance from the National Environmental Policy Act. To comply with the National Environmental Policy Act, we prepare an environmental assessment or environmental impact statement with opportunity for public involvement. Such assessments are both time consuming and costly, but are essential to thoroughly analyze complex issues and comply with law. As you know, predator control is an extremely volatile issue and any proposed action would be subject to intense public scrutiny and potential litigation.

You asked in your letter if any evaluation of predator control to enhance subsistence on Alaska refuges has been completed. Yes. We have had several requests to allow or conduct predator management on refuges in recent years. In each of these cases we concluded such actions were not justified based on existing biological data. Most recently, however, the State has proposed wolf control actions on Unimak Island, part of Alaska Maritime National Wildlife Refuge, to enhance caribou numbers. Due to declining population levels, hunting of this herd was curtailed in 2009. In this case we have begun detailed analysis of the issue. Working with the State, we are currently drafting a Unimak Island caribou management plan, which will identify both caribou and predator parameters that would need to be achieved to reopen subsistence hunting of Unimak caribou. Once the plan is complete, we will draft an environmental assessment to evaluate alternatives to achieve the proposed condition and actions. We will then decide if additional management actions are appropriate, and if so, develop a plan to implement them. We expect to complete this decision making process in early 2011.

Finally, you asked for copies of the Service’s legal requirements and policy guidelines that we use when considering requests for predator management. I have enclosed a page with the web site addresses for the applicable statutes and policies.

Susan Entsminger

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Thanks for the opportunity to explain the role of intensive management on Alaska National Wildlife Refuges and procedures needed to consider predator control.

Sincerely,

/S/ Todd J. Logan

Regional Chief,
National Wildlife Refuge System-Region 7

Attachment

Statutes, Regulations, and policies guiding management of the National Wildlife Refuge System – Alaska in considering predator management.

Alaska National Interest Lands Conservation Act (16 U.S.C. 1602-1784)
(<http://www.r7.fws.gov/asm/analca/toc.html>)

National Wildlife Refuge System Administration Act, of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997. (16 U.S. C. 668dd-ee)
<http://epw.senate.gov/nwrsa.pdf>

The Biological Integrity, Diversity, and Environmental Health Policy
<http://www.fws.gov/policy/601fw3.html>

National Environmental Policy Act of 1969 (NEPA)(42 U.S.C. 4321-4347) and the Council of Environmental Quality' (CEQ) Regulations for Implementing the procedural Provisions of NEPA, 40 CFR 1500-1508
U.S. EPA (<http://es.epa.gov/oeca/ofa/nepa.html>)
http://ceq.hss.doe.gov/nepa/regs/ceq/toc_ceq.htm

FP11-10 Executive Summary	
General Description	<p>Proposal FP11-10 requests that all drainages in the Chignik Area be opened to the harvest of salmon by seine, gillnet, spear, and hook and line that may be attached to a rod or pole or with gear specified on a subsistence fishing permit, except that hook and line gear may not be used in Chignik River. The proposal also would: 1) restrict power purse seine gear from Mensis Point downstream; 2) permit hand seining only in Chignik River and Chignik Lake; 3) permit gillnet to be used only in Chignik River, Chignik Lake, and in the waters of Clark River and Home Creek, from each of their confluences with Chignik Lake to a point one mile upstream; and 4) restrict a gillnet from being staked or anchored or otherwise fixed in a stream, slough, or side channel to where it obstructs more than one half the width of that stream, slough or side channel. <i>Submitted by the Chignik Lake Traditional Council</i></p>
Proposed Regulation	<p><i>§ __.27(i)(8)(ii) Salmon may be taken by seine, gillnet, spear, and/or hook and line that may be attached to a rod or pole or with gear specified on a subsistence fishing permit, except that hook and line gear may not be used in Chignik River and power purse seine gear is permitted only in Chignik River from Mensis Point downstream and hand seining is permitted only in Chignik River and Chignik Lake and gillnets may be used only in Chignik River, Chignik Lake, and in the waters of Clark River and Home Creek, from each of their confluences with Chignik Lake to a point one mile upstream. A gillnet may not be staked or anchored or otherwise fixed in a stream, slough or side channel to where it obstructs more than one half the width of that stream, slough or side channel.</i></p>
OSM Preliminary Conclusion	<p>Support Proposal FP11-10 with modification. The suggested modifications support additional subsistence fishing opportunities in this area. The OSM preliminary conclusion is to combine some of the regulations requested in Proposal FP11-10 while leaving in place some of the current regulations. OSM suggested modifications to Proposal FP11-10 include: 1) to open the areas of Black Lake and its tributaries to certain subsistence gear types; 2) to remove the requested restriction for using “hook and line” gear in the Chignik River; 3) to leave in the current restrictions to taking salmon in the Chignik River from upstream of the ADF&G weir; and 4) to leave in the restrictions for taking salmon in Clark River and Home Creek; 5) to move language from subsection (vi) to subsection (ii) which should not alter the effect of the regulation. Restrictions on hand seines and purse seines in Chignik Lake and Chignik River are consistent with the proposed regulation. Inconsistencies in the language regarding fishing permits have also been made consistent in the modifications, such that either a continuation of the State subsistence fishing permit and/or a Federal permit could be implemented.</p>

continued on next page

WP10-01 Executive Summary (continued)	
OSM Preliminary Conclusion <i>(Continued)</i>	<i>See the analysis for the proposed regulatory language.</i>
Bristol Bay Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	Defer until the proposal is addressed by the Alaska Board of Fisheries.
Written Public Comments	None

DRAFT STAFF ANALYSIS FP11-10

ISSUES

Proposal FP11-10, submitted by the Chignik Lake Traditional Council, requests that all drainages in the Chignik Area be opened to the harvest of salmon by seine, gillnet, spear, and hook and line that may be attached to a rod or pole or with gear specified on a subsistence fishing permit, except that hook and line gear may not be used in Chignik River. The proposal also would: 1) restrict power purse seine gear from Mensis Point downstream; 2) permit hand seining only in Chignik River and Chignik Lake; 3) permit gillnet to be used only in Chignik River, Chignik Lake, and in the waters of Clark River and Home Creek, from each of their confluences with Chignik Lake to a point one mile upstream; and 4) restrict a gillnet from being staked or anchored or otherwise fixed in a stream, slough, or side channel to where it obstructs more than one half the width of that stream, slough or side channel.

DISCUSSION

The proponent requests that all drainages in the Chignik Area be opened to the harvest of salmon by Federally qualified subsistence users. Currently State sport fishing regulations allow for sport fishing throughout the Chignik Area, including sections of Chignik River, Clark River and Home Creek, Black Lake and its tributaries, and other areas which are closed to Federally qualified subsistence users. The proponent requests that these tributaries be opened to Federally qualified users and not just open to those fishing under State sport fishing regulations. These restrictions to Federally qualified users were adopted by the Federal Subsistence Board (Board) from State regulations in 1999 when the Federal Subsistence Management Program assumed management authority for subsistence fisheries in Federal public waters. The proponent states the proposal would put into regulation existing fishing practices of local residents, while providing additional harvest opportunities. These areas are only utilized by a limited number of individuals, for example, only one family currently uses Black Lake and access is difficult and possible only by airboat (Lind 2010, pers. comm.).

The proponent also requests that in the Chignik River power purse seine gear be permitted only from Mensis Point downstream. Finally the proponent requests that hook and line gear be prohibited in the Chignik River, in order to exclude a method used in sport fishing. However, in the Chignik Area, Federally recognized methods and means for subsistence include snagging (by handline or rod and reel), using a spear, bow and arrow, or capturing by bare hand.

Existing Federal Regulations

§ __.27(c) Subsistence taking of fish: methods, means, and general restrictions

(4) Except as otherwise provided for in this section, you may not obstruct more than one-half the width of any stream with any gear used to take fish for subsistence uses.

(10) You may not take fish for subsistence uses within 300 feet of any dam, fish ladder, weir, culvert or other artificial obstruction, unless otherwise indicated.

§__ .27(i)(8) Subsistence taking of fish: Chignik Area

(i) You may take fish other than salmon, rainbow/steelhead trout, or char at any time, except as may be specified by a subsistence fishing permit. For salmon, Federal subsistence fishing openings, closings and fishing methods are the same as those issued for the subsistence taking of fish under Alaska Statutes (AS 16.05.060), unless superseded by a Federal Special Action.

(ii) You may not take salmon in the Chignik River, from a point 300 feet upstream of the ADF&G weir to Chignik Lake from July 1 through August 31. You may not take salmon in Black Lake or any tributary to Black or Chignik Lakes, except those waters of Clark River and Home Creek from their confluence with Chignik Lake upstream 1 mile.

(A) In the open waters of Clark River and Home Creek you may take salmon by gillnet under the authority of a State permit.

(B) In the open waters of Clark River and Home Creek you may take salmon by snagging (handline or rod and reel), spear, bow and arrow, or capture by hand without a permit. The daily harvest and possession limits using these methods are 5 per day and 5 in possession.

(iii) You may take salmon, trout, and char only under the authority of a subsistence fishing permit [see Appendix A].

(iv) You must keep a record on your permit of subsistence-caught fish. You must complete the record immediately upon taking subsistence-caught fish and must return it no later than October 31.

(v) If you hold a commercial fishing license, you may only subsistence fish for salmon as specified on a State subsistence salmon fishing permit.

(vi) You may take salmon by seines, gillnets, rod and reel, or with gear specified on a subsistence fishing permit, except that in Chignik Lake, you may not use purse seines. You may also take salmon without a permit by snagging (by handline or rod and reel), using a spear, bow and arrow, or capturing by bare hand.

(vii) You may take fish other than salmon by gear listed in this part unless restricted under the terms of a subsistence fishing permit.

Proposed Federal Regulations

§__ .27(i)(8)(ii) Salmon may be taken by seine, gillnet, spear, and/or hook and line that may be attached to a rod or pole or with gear specified on a subsistence fishing permit, except that hook and line gear may not be used in Chignik River and power purse seine gear is permitted only in Chignik River from Mensis Point downstream and hand seining is permitted only in Chignik River and Chignik Lake and gillnets may be used only in Chignik River, Chignik Lake, and in the waters of Clark River and Home Creek, from each of their confluences with Chignik Lake to a point one mile upstream. A gillnet may not be staked or anchored or otherwise fixed in a stream, slough or side channel to where it obstructs more than one half the width of that stream, slough or side channel.

Existing State Regulation

5 AAC 01.010 General regulations

(e) You may not take fish for subsistence uses within 300 feet of any dam, fish ladder, weir, culvert or other artificial obstruction, unless otherwise indicated.

5AAC 01.470 Lawful gear and gear specifications: Chignik Area

(a) Salmon may be taken by seines and gillnets, or with gear specified on a subsistence fishing permit, except that in Chignik Lake salmon may not be taken with purse seines. A gillnet may not be set, staked, anchored, or otherwise fixed in a stream while it obstructs more than one-half of the width of the waterway and any channel or side channel of the waterway.

5 AAC 01.475. Waters closed to subsistence fishing: Chignik Area

Salmon may not be taken

(1) from July 1 through August 31, in the Chignik River from a point 300 feet upstream from the Chignik weir to Chignik Lake;

(2) in Black Lake, or any tributary to Black Lake or Chignik Lake, except the waters of Clark River and Home Creek, from each of their confluences with Chignik Lake to a point one mile upstream.

5 AAC 01.480. Subsistence fish permit: Chignik Area

Salmon, trout and char may only be taken under the authority of a subsistence fishing permit [see Appendix A].

Not more than 250 salmon may be taken for subsistence purposes unless otherwise specified on the subsistence fishing permit.

A subsistence fishermen (sic) shall keep a record of the number of subsistence fish taken by that subsistence fisherman each year. The number of subsistence fish taken shall be recorded on the reverse side of the permit. The record must be completed immediately upon landing subsistence-caught fish, and must be returned to the local representative of the department by December 31 of the year the permit was issued. Other Relevant State Regulations

State sport fishing regulations

The Chignik River is open to Chinook salmon sport fishing January 1–August 9 (an extension of Alaska Peninsula Fresh Water regulations that otherwise have an open season of January 1–July 25). Daily bag/possession limits are 10/10 for Chinook salmon, less than 20” and 2/2 for those 20” or longer. There is an annual limit of no more than 5 Chinook salmon 20” or longer. Spawning grounds are usually closed to

sport fishing: “All fresh waters in the Alaska Peninsula/Aleutian Islands area (except the Chignik River) are closed to king salmon fishing July 26–December 31” (ADF&G 2010a).

Extent of Federal Public Waters

For purposes of this discussion, the phrase “Federal public waters” is defined as those waters described under 36 CFR 242.3 and 50 CFR 100.3. Federal public waters within the Chignik Management Area include all waters south of the Alaska Peninsula that are within the area and within or adjacent to the Alaska Peninsula National Wildlife Refuge, Aniakchak National Monument and Preserve, and Alaska Maritime National Wildlife Refuge (**Map 1**). Chignik Lake, Chignik River, Black Lake, Clark River, and Home Creek are all within the boundary of the Alaska Peninsula National Wildlife Refuge (**Map 2**). The Chignik and Black Lake drainages are within the external boundary of the Alaska Peninsula National Wildlife Refuge. As such, the Federal Subsistence Management Program has responsibility and jurisdiction to provide for subsistence uses for Federally qualified users.

Customary and Traditional Use Determinations

Residents of the Chignik Area which include the communities of Perryville, Chignik Bay, Chignik Lagoon, Chignik Lake, and Ivanof Bay, have a customary and traditional use determination to harvest salmon in the Chignik Area (**Map 2**). Ivanof Bay has no residents at present.

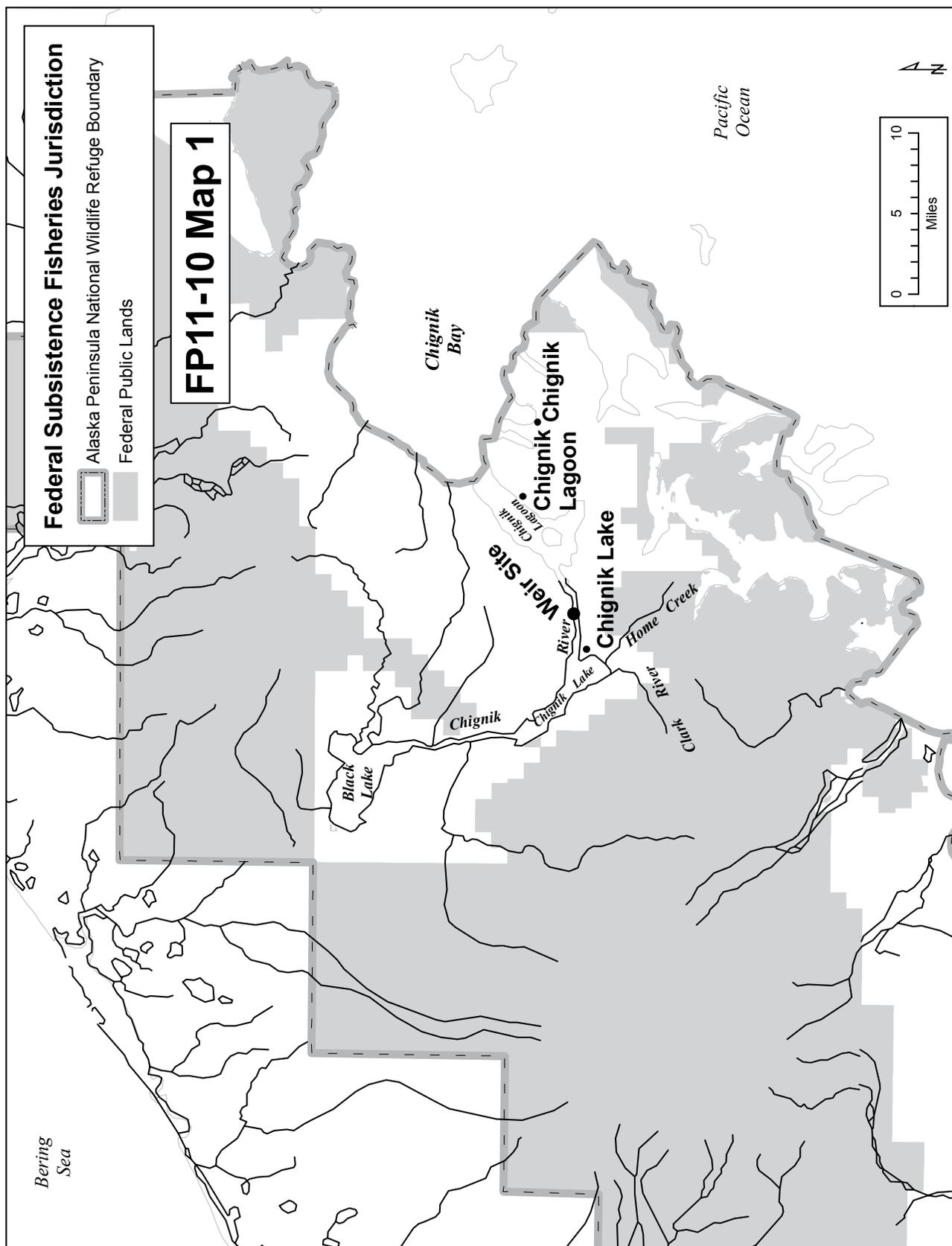
Regulatory History

The State has not allowed subsistence fishing in some Chignik Area waters prior to 1985, including upstream of the weir in Chignik River and in Chignik Lake, Black Lake or any tributary to these lakes (Alaska Legal Resource Center 2010, Morris 1987). Other State subsistence fishing regulations for the Chignik Area were adopted in 1985 and were amended in 1993, 2005, and 2008 (ADF&G 2008). The State Fisheries Management Report for the Chignik Area for 2008 (Jackson & Anderson 2009: 10–11) stated that from 2004 to 2008, large pulses of salmon did not build in Chignik Lagoon or pass through the weir. Early-season subsistence fishing opportunities were also limited by the slow movement of fish. In 2005, in order to provide additional subsistence fishing opportunity for sockeye salmon, the Alaska Board of Fisheries (BOF) opened the Chignik River to subsistence fishing above the weir, but kept this area closed between July 1 through August 31 to protect Chinook salmon.

According to ADF&G staff comments at the 2008 Alaska Board of Fisheries meeting (ADF&G 2008), subsistence users had reported difficulties in obtaining late season sockeye salmon and also wanted a means to harvest an occasional fresh salmon for immediate consumption. In 2008, ADF&G opened Clark River and Home Creek upstream to one mile from their confluence with Chignik Lake. This allowed additional subsistence fishing opportunity while still protecting salmon spawning areas above the fishing area. ADF&G further stated that local residents have traditionally used both the Clark River and Home Creek for subsistence fishing.

The State fisheries regulations were adopted by the Federal Subsistence Management Program in 1999, including the existing closures to subsistence fishing.

In 2008, Proposal FP09-11 was submitted to the Federal Subsistence Board (Board) by the Bristol Bay Regional Advisory Council (Council) that sought to align Federal with State regulations by allowing Federally qualified subsistence users to fish for salmon in Clark River and Home Creek upstream one mile from their confluence with Chignik Lake. At the Council meeting, ADF&G staff stated that, “There



was a lot of discussion about Black River, Alec River, Black Lake, to open that up, and it was rejected by the Board of Fish” (BBRAC 2008: 264). The Council recommended adopting FP09-11 with a small modification (removal of the word “linear”). Following the Council’s recommendations, the Board adopted the regulatory change with an amendment at its January 2009 meeting. The Board amendment allowed the harvest of salmon in Clark River and Home Creek one mile upstream from its confluence with Chignik Lake without a permit when snagging (using handline or rod and reel), or when using spear, bow and arrow, or capture by hand. To address concerns with the lack of reporting by allowing fishing without a permit, the Board further modified the regulation to include a daily harvest and possession limit of 5 salmon per day and 5 in possession when snagging (handline or rod and reel), or using spear, bow and arrow, or capture by hand without a permit.

There have been discussions by the Council, the Board, and the Alaska Board of Fisheries about opening up Black Lake and its tributaries to subsistence fishing (see BBRAC 2007: 34; BBRAC 2008: 242). However regulations that allow subsistence fishing in these areas have not been adopted by either the Board or the Alaska Board of Fisheries.

This year, a parallel proposal to FP11-10 was submitted to the Alaska Board of Fisheries by the Chignik Lake Traditional Council (Pappas 2010, pers. comm.). The Alaska Board of Fisheries will meet January 16–19, 2011 to review Chignik proposals.

Background

The village of Chignik Lake is one of several communities located in the Chignik Management Area on the Alaska Peninsula. In 1990, the community had 34 households (Hutchinson-Scarborough and Fall 1996). Ten years later, the number of households had risen to 40, with a total population of 145 (U.S. Census Bureau 2010). By 2003, the population had dropped to 110 persons in 31 households. Davis (2006) suggests that between 2000 and 2003, some residents left the area seeking jobs and access to better health care. Since 2003, the population appears to have been relatively stable. Other communities in the area include Chignik Bay, Chignik Lagoon, Perryville, and Ivanof Bay. Ivanof Bay, currently, has no residents.

Chignik Lake lies in between Bristol Bay/Bering Sea to the north and the Pacific Ocean to the south (Alaska Community Database 2010; **Map 1**). The Chignik River is the main drainage system in the management area (Wright et al. 1985). The area is also marked by constant wind blowing off the waters. These winds are denoted in the place name Chignik, which means “windy place” in the Alutiiq language (Davis 2006). The proximity to these waters, the maritime climate, and the abundance of harvestable species have influenced and shaped the local communities both in the archaeological and historic past as well as in the present.

Every household in the Chignik Management Area harvested subsistence foods in 2003 and in prior years (Davis 2006). Sockeye salmon is an especially important species, accounting for over 50% of the subsistence harvest in 1984 and 1989. Residents of Chignik Lake, Chignik Bay, and Chignik Lagoon focus on sockeye because of its availability and personal preference. Residents of Perryville (and, formerly, Ivanof Bay) harvest mostly coho, pink and chum salmon; sockeye are rarely found in rivers near these villages. Some residents of Perryville spend portions of spring and summer at Chignik Lake or at fish camps on Chignik Lagoon, where they subsistence fish for sockeye and Chinook salmon (Hutchinson-Scarborough and Fall 1996).

Subsistence harvesting of salmon by residents of Chignik Lake occurs in the waters of Chignik Lake, Chignik River and its tributaries (including Home Creek and Clark River) as well as in Black Lake and

its tributaries (Morris 1987, Hutchinson-Scarborough and Fall 1996, Lind, pers. comm. 2010). Subsistence fishing also occurs in these waters when people are participating in other subsistence activities. Hunting of caribou, moose, waterfowl, and bear occurs especially along waterways—suggesting the potential importance of small scale subsistence fishing in these streams at these times (Wright et al. 1985). On occasion, a few local residents use Black Lake and its tributaries for subsistence fishing (Lind 2010, pers. comm.). Transcripts for the Council and for the Federal Subsistence Board indicate that Black Lake and its tributaries have had limited use (BBRAC 2007, 2008, 2009; FSB 2009a, b).

The residents of Chignik Lake, Chignik Bay, Chignik Lagoon, and Perryville are primarily “Alutiiq” (Hutchinson-Scarborough and Fall 1996, Fall 2006, Partnow 1993). The present day Alutiiq ethnicity arose out of a shared common language and ethnic identity (Sugpiaq or Sugcestun) and the many years of interaction with non-indigenous people (i.e., Russians and Americans) (Partnow 1993; Crowell et al. 2001; Luehrmann 2008).

Language, alongside subsistence foods, represents an important theme in characterizing Alutiiq identity and ethnicity (Partnow 1993, Crowell et al. 2001). Partnow describes the importance of Native foods in area celebrations, rituals, and gatherings. These foods go beyond subsistence and are a link to Alutiiq identity and a link to the land and sea from which they are obtained (Partnow 1993: 320). Partnow insists that these foods act as more than subsistence as they bring together people, strengthen social ties and are symbolic of elements of culture that are “seen to be endangered” (Partnow 1993: 320). Some of the foods may or may not be used entirely for subsistence purposes, but are linked to tradition, ancestors, and people’s pasts. As Virginia Aleck, a resident of Chignik Lake noted, “my Dad always told me that before you go out on any kind of hunt, you have to cleanse yourself. And this was like a ritual. And you kept yourself quiet. In order to catch what you’re going to get, you have to get your whole body, mind and soul ready” (Crowell & Laktonen 2001: 142). Food and the subsistence activities used to obtain food are in and of themselves an important part of local beliefs, identity, and ties to Alutiiq culture. Reflecting on Alutiiq life, Shauna Lukin expressed that, “I have come to understand that although my family gathers and preserves our subsistence food differently than my ancestors used to, we are still sustaining a main component of our Alutiiq culture” (Lukin 2001: 178).

Biological Background

All five species of salmon spawn in the Chignik Area, but sockeye salmon usually comprised most of the harvests for both subsistence and commercial fisheries (Jackson and Anderson 2009). Salmon escapement is monitored at a site in the lower Chignik River using a weir and associated video equipment, while spawner distribution is documented through aerial surveys of the drainage. The Chignik River drainage produces most of the sockeye salmon in the Chignik Area, and the spawning population consists of both an early and late run. Since the Chignik River weir is not operated throughout the duration of the late run, which extends into September, total escapement has been estimated using time-series analysis. ADF&G has set separate sustainable escapement goals for these runs (early run: 350,000–400,000 sockeye salmon; late run: 200,000–400,000 sockeye salmon) as well as in-river run goals to support subsistence fishing for the late run (August: 25,000 sockeye salmon; September: 25,000 sockeye salmon). However, no escapement goals have been set for individual tributaries or lakes within the system. While sockeye salmon also spawn within other Chignik Area systems, their numbers are relatively small (less than 1,000 sockeye salmon are usually counted during aerial surveys), and no escapement goals have been set.

In 2009, the total escapement into the Chignik River system was 720,062 sockeye salmon, and was comprised of 391,476 early-run and 328,586 late-run sockeye salmon. The 2009 early-run escapement was slightly below the 1999–2008 average of 429,235 sockeye salmon, while the 2009 late-run

escapement was slightly above the 1999–2008 average of 302,944 sockeye salmon (Anderson 2009). Both 2009 escapements were within the desired escapement goal ranges.

Within the Chignik River system, sockeye salmon spawn in Chignik Lake and its tributaries and Black Lake and its tributaries. Aerial surveys of Black Lake and its tributaries have documented concentrations of early-run spawning sockeye salmon in the Alec River. The most recent five-year average escapement estimate for sockeye salmon in Black Lake tributaries (151,688) has been less than either the ten- (274, 844) or twenty- (293, 927) year averages (Jackson and Anderson 2009). Due to sedimentation, Black Lake is declining in volume and dissolved oxygen levels over the winter months have been low (Westley et al. 2010). This has created problems for juvenile survival in Black Lake, and a portion of the juveniles produced from spawning in Black Lake has been migrating to Chignik Lake to rear (Westley et al. 2010, Simmons 2009). This is probably a factor contributing to greater fluctuations observed in adult returns. Although spawning and rearing conditions have been changing due to sedimentation of Black Lake, no conservation concerns have been identified for either run.

The Chignik River is also the only notable stream in the Chignik Area with Chinook salmon production, and the run extends from about mid-June to late August with a peak in mid-July. ADF&G has set a biological escapement goal of 1,300–2,700 Chinook salmon for this run (Jackson and Anderson 2009). The 2009 escapement of 1,680 Chinook salmon was within the escapement goal range, although subsistence and sport harvests above the weir will not be known until this fall (Anderson 2009). The 2009 escapement was well below the 1999–2008 average of 4,259 Chinook salmon. No conservation concerns have been identified for Chinook salmon.

Coho salmon spawn in drainages throughout the Chignik Area, and runs extend from mid-August through November (Anderson 2009). In 2009, the number of coho salmon counted through the Chignik River weir was 7,670. Annual counts for the period 1999–2009 have ranged from 103 to 37,113 coho salmon, and the 1999–2008 mean was 12,486 coho salmon. Since the run is often still increasing when the weir is dismantled for the season, time-series analysis cannot usually be used to estimate the total run. ADF&G has not set an escapement goal for the Chignik River coho salmon run. While aerial surveys have been used to monitor escapements into other systems within the Chignik Area, the total number counted is usually less than 2,000 coho salmon. ADF&G considers coho salmon runs to be at sustainable levels in the Chignik Area.

Both pink and chum salmon spawn in drainages throughout the Chignik Area, and runs generally reach their peak abundance in August (Jackson and Anderson 2009). While both species are counted at the Chignik River weir, most spawning is scattered among numerous drainages monitored by aerial surveys. Pink salmon runs can greatly vary in abundance between odd- and even-years, and ADF&G has set area-wide sustainable escapement goals of 200,000 to 600,000 pink salmon for even years and 500,000 to 800,000 pink salmon for odd years. For the period 1999–2009, the number of pink salmon counted through the Chignik River weir has ranged from 1,464 to 20,464 for odd-years and from 2,243 to 22,341 for even-year runs (Anderson 2009). In 2009, the area-wide escapement was estimated to be 856,190 pink salmon. For chum salmon, the number counted through the Chignik River weir has ranged from 48 to 483 for the period 1999–2009. ADF&G has set an area-wide sustainable escapement goal of 57,400 chum salmon. In 2009, the area-wide escapement was estimated to be 214,850 chum salmon, which was well above the escapement goal.

Dolly Varden and rainbow trout/steelhead are also found in the Chignik Management Area. Stickleback and pond smelt are also present in the Chignik Lake system (Witteveen et al 2007; Westley 2010). Data

on populations of these resident and anadromous species is very limited, and none of these species is actively managed.

Harvest History

Methods and Means of Harvesting Salmon

Residents of local communities take salmon through subsistence, commercial, and sport fish opportunities with seines, gillnets, and/ or rod and reel (Hutchinson-Scarborough and Fall 1996). A 2003 ADF&G survey revealed that subsistence methods account for 71% of salmon harvested for subsistence purposes in Chignik Lake, while 29% was removed from commercial catches (**Table 1**). The 2003 survey also revealed that the following methods were used to harvest salmon for subsistence in usable weight: 69% by set gillnets, 16% from commercial catches, 9% by seine, and 5% via rod and reel.

Table 1: Method of salmon harvest by residents of Chignik Area by usable weight in 2003 (Fall 2006).

Method	% by usable weight			
	Chignik Bay	Chignik Lagoon	Chignik Lake	Perryville
Commercial Catch	*	36	29	*
Other/Subsistence Method:	*	60	71	*
Set Gillnet	*	*	69	*
Seine	*	*	9	*
Rod & Reel	*	4	8	*

* Data not available

Commercial fishing of salmon occurs in Chignik Bay and Chignik Lagoon and seines are the only legal commercial fishing gear allowed in the area (Hutchinson-Scarborough and Fall 1996). The involvement of Chignik Lake community residents in commercial fishing has varied over the past few decades. Some of the most prominent factors affecting participation in commercial fishing include the impacts of the Exxon Valdez oil spill, the establishment of a fishing co-operative (co-op), and then the subsequent dissolution of the co-op. Prior to the implementation of the co-op in 2002, ADF&G managed the fishery as a competitive limited entry permit system (Fall et al. 2009). Before the co-op, subsistence fishing would occur in early June, preceding the commercial opening. As such, subsistence fishers who also participated in commercial fishing were able to harvest and smoke early-run sockeye salmon before flies hatched and ruined the fish.

Between 2002–2006, the Chignik commercial salmon fishery was managed based on a harvest allocation between the competitive fishery and the co-op fishery. After the co-op was established, the key early June subsistence fishing pattern changed. During the co-op period, ADF&G did not require a minimum of 40,000 sockeye salmon escapement and a strong build up of sockeye in Chignik Lagoon before opening the commercial fishing season. The removal of these requirements resulted in a smaller, steadier passage of fish and not the larger pulses of fish that subsistence users in the Chignik Area had traditionally targeted. Therefore, commercial fishing opened earlier in June leading to “a decrease in efficiency and an increase in effort for harvesting subsistence salmon in Chignik Lagoon” (Fall et al. 2009: 78). Because the co-op fishery opened during a key subsistence fish processing period (drier weather), it was reported

that traditional subsistence harvest patterns were disrupted to allow for commercial (co-op) fishing. Some residents stated that commercial fishing was taking precedence over subsistence uses. Additionally, people who pooled resources to participate in the co-op had to fish much more or much less than other participants in the co-op depending on the resources they pooled. However, some participants felt that they had lost their commercial permits when they essentially became ‘inactive’ (Kenner & Krieg 2006). Those not participating in the co-op faced other limitations including reduced fishing time. Additionally, some residents blamed the co-op for further conservation based regulations after co-op members were said to use leads (nets or fish-traps) across streams (Kenner & Krieg 2006).

It is likely that the removal of fish from commercial harvests has varied in importance to subsistence harvesters. The ratio of salmon taken for subsistence by commercial removal has decreased over the past few decades (see Davis 2006:325–327 for detailed analysis). In 1984, 20% of subsistence harvest came from commercial removal and 15% in 1989 and remained at that level through 2003 (16%) (Davis 2006: 327). Participation in removal of salmon from commercial catches by household has also decreased from 67% of households in 1991 to 29% of households in 2003 removing fish (Davis 2006). In 2007, commercial fishing tickets revealed 285 sockeye, 56 coho, 16 Chinook, 1 chum, and 0 pink salmon were taken for subsistence use from commercial catches. This is compared to overall subsistence totals of 10,191 sockeye, 1,936 coho, 84 Chinook, 996 pink, and 165 chum salmon for the entire management area (Fall et al. 2009). The ability to access home packs was affected by the co-op fishery and later commercial fishing enterprises, potentially leading subsistence users to seek new subsistence areas.

Subsistence harvesting of salmon is done with seines, gillnets, and rod and reel in the areas described above (Wright et al. 1985). The most recent household survey by ADF&G in 2003 suggests there has been a “significant effect on the subsistence economy of the average household in Chignik Lake” due to salmon harvest decreases in pounds per capita (see Davis 2006). “Salmon harvests decreased 32% from 203.7 pounds per capita in 1991 to 138.4 pounds in 2003” (Davis 2006: 326). Subsistence methods for harvesting have become increasingly important since commercial harvesting by residents has decreased. ADF&G reports also suggest that rod-and-reel fishing has decreased between 1991–2003 (see Davis 2006). Households surveyed in 2003 revealed that salmon use was affected by decreased salmon returns, in part, caused by oil spill contamination. Overharvesting by commercial fishing (and the co-op) was also given as a reason for decreased subsistence harvests (Davis 2006). “The large decreases in salmon and caribou harvests drastically reduced the amount of subsistence food available to the average household” (Davis 2006: 327). While salmon harvested via commercial removal decreased from 1991–2003 (23% to 16% of salmon coming out of commercial harvests) there was a corresponding increase in subsistence methods used to harvest salmon. This period overlaps with the co-op and it is likely the co-op impacted both commercial and subsistence harvests. The ADF&G household survey in 2003 also revealed 67% of households retained fish from commercial catches in 1991 versus only 29% of households in 2003. Approximately 71% of households used beach seine and set gillnet and 35% of households used rod and reel in both 1991 and 2003.

Subsistence Harvests

In 2006, the State subsistence salmon harvest was below both the recent 5 and 10 year averages (**Table 2**) (Stichert 2007). Subsistence users reported difficulty in obtaining late season salmon. Addressing these concerns, the Alaska Board of Fisheries (January 2008) adopted a proposal to allow for subsistence salmon fishing in the Chignik Lake tributaries of Clark River and Home Creek. A significant increase in the subsistence harvest was not anticipated. In 2007, above average subsistence harvests in the Chignik Management Area were estimated to be 13,372 fish. The subsistence harvests in 2007 included 76%

sockeye, 14% coho, 7% pink, and 1% Chinook salmon (see Fall et al. 2009). However, the 2008 harvests were under the historical (11,000) and 5 year average (12,000) at approximately 8,000 fish (**Table 2**).

Table 2: Chignik Management Area—number of subsistence permits issued and returned and estimated subsistence harvest, by species and year, 1980-2008.

Year	Permits		Estimated Salmon Harvest					
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	Total
1977	NA	NA	50	9,700	2,400	600	1,800	14,550
1978	NA	NA	50	6,000	500	600	2,100	9,250
1979	NA	NA	14	7,750	34	0	262	8,060
1980	82	37	6	12,475	32	169	478	13,160
1981	29	7	0	2,049	0	0	0	2,049
1982	59	15	3	8,532	12	0	2	8,548
1983	32	21	0	3,078	1,319	850	1,250	6,497
1984	77	64	23	8,747	464	204	330	9,768
1985	59	48	1	7,177	50	25	26	7,279
1986	74	38	4	10,347	205	77	98	10,730
1987	NA	NA	10	7,021	278	204	261	7,774
1988	80	34	9	9,073	1,455	142	54	10,733
1989	68	23	24	7,551	384	147	81	8,187
1990	72	23	103	8,099	210	115	470	8,996
1991	95	58	42	11,483	13	81	275	11,893
1992	98	19	55	8,648	709	145	305	9,862
1993	201	141	122	14,710	3,765	642	1,265	20,503
1994	219	122	165	13,978	4,055	382	1,720	20,300
1995	111	95	98	9,563	1,191	150	723	11,726
1996	119	104	48	7,357	2,126	355	2,204	12,089
1997	126	103	28	13,442	2,678	840	2,035	19,024
1998	104	72	91	7,750	1,390	186	1,007	10,424
1999	106	88	243	9,040	1,679	136	1,191	12,290
2000	130	112	163	9,561	1,802	517	1,185	13,227
2001	135	122	171	8,633	1,859	213	2,787	13,663
2002	120	86	74	10,092	1,401	23	390	11,980
2003	146	127	267	10,989	2,256	286	1,597	15,394
2004	104	57	88	7,029	1,981	202	1,047	10,347
2005	119	100	224	8,171	2,112	353	730	11,590
2006	113	79	259	8,079	1,539	275	1,035	11,187
2007	128	83	84	10,191	1,936	165	996	13,372
2008	89	69	41	7,189	877	57	619	8,783
5-year average 2004-2008	111	78	139	8,132	1,689	211	885	11,056
10-year average 1999-2008	119	92	161	8,897	1,744	223	1,158	12,183
Historical average 1977-2008	103	70	80	8,859	1,272	254	885	11,351

Source: Scarbrough-Hutchinson 2010. See also Stichert 2007, Stichert et al. 2009; and Quimby and Owen 1994 for 1976-1979 and 1987. Note: NA = data not available. Information regarding the number of permits issued and returned was collected; however, the records containing this information no longer exist. Harvest data for these years are also recorded in ADF&G Division of Commercial Fisheries and Division of Sport Fish area management reports.

In 2008, the subsistence salmon harvest was below both the previous 5 and 10 year average. Also in 2008, there were only 89 subsistence permits issued by ADF&G, the lowest number issued or returned since 1990 (Jackson and Anderson 2009). The 2009 subsistence harvest numbers are not yet available. During the last five years, large pulses of salmon did not build up in Chignik Lagoon and there was a slow

movement of fish upriver which limited early-season subsistence opportunities (Jackson and Anderson 2009).

Federal regulations require that Federally qualified subsistence users have a subsistence fishing permit (issued by the State of Alaska) to take salmon with seines or gillnets in the Chignik Management Area. However, Federally qualified subsistence users are not required to have a State permit to take salmon by snagging (hand line, rod and reel), spear, bow and arrow, or capture by hand in the Chignik Management Area, because State regulations do not allow the subsistence take of salmon by these methods. However, according to residents and managers, subsistence salmon harvests using these methods are likely low since most people use these methods to catch an occasional fresh fish (BBRAC 2008: 238–240; Lind pers. comm. 2010).

Available data on subsistence uses of other anadromous and resident species is very limited. In 2003, the most recent year for which data could be found, the combined harvest of Dolly Varden/char and rainbow trout/steelhead was 18 pounds per person for the communities of Chignik Bay, Chignik Lagoon, and Chignik Lake (ADF&G 2010b).

Effects of the Proposal

If this proposal is adopted, Federally qualified subsistence users would be provided additional opportunities to harvest salmon for subsistence in areas currently closed to fishing under both State and Federal subsistence regulations, but which are open to sport fishers such as Black Lake and its tributaries. Local responses to harvest surveys expressed that subsistence harvests have decreased over the past few decades (see Fall et al. 2006). Additionally, harvest averages of the past five years are below the 10 year and historical average for sockeye (and the recent 5 year average of Chinook salmon is below the 10 year average). Opening more areas for subsistence fishing would provide additional opportunities for subsistence harvests, but is not expected to significantly increase the harvest because of the anticipated low numbers of people accessing these areas.

If adopted as proposed, the use of hand seines in Chignik Lake has the potential of increasing the efficiency of harvest of sockeye salmon, however, it is not anticipated to increase the overall harvest.

If the proposal is adopted as proposed it would require a permit for subsistence activities which do not currently need permitting as it removes the language in § _____.27(i)(8) (vi) which allows for subsistence fishing without a permit in certain areas. As proposed, the restrictions on power purse seine gear in Chignik River from Mensis Point downstream would only affect Federally qualified subsistence users, but would not address concerns about non-Federally qualified subsistence or other uses.

If the proposal is adopted, subsistence fishing for salmon would be allowed in the Chignik River from a point 300 feet upstream of the ADF&G weir to Chignik Lake from July 1 through August 31. When the Chignik River was opened for fishing opportunities in 2005, this restriction was added to address conservation concerns for spawning Chinook salmon.

If adopted, a restriction would be added on “hook and line” gear in Chignik River, which would create more restrictive regulations for Federally qualified users than for non-Federally qualified users. Snagging by use of a handline or rod and reel—which is essentially the same as “hook and line” (under the Federal definition)—is already allowed in Federal subsistence regulations.

If adopted, opening Black Lake and its tributaries to additional fishing opportunities is not expected to have any significant effect on resident species, including Dolly Varden and rainbow trout. However,

the potential exists that the use of gillnets in these tributaries could create a conservation concern for these species, and other salmon species, which cannot withstand the same high exploitation as the more abundant sockeye salmon.

The State currently administers subsistence fishing permits for this area. This proposal would lead to significant differences between the State and Federal subsistence fishing regulations. Federally qualified subsistence users who wished to use gear types or fish in areas that are not allowed under State regulations would likely need to obtain a Federal subsistence permit. Requiring separate Federal and State subsistence fishing permits may complicate enforcement, increase confusion, and encumber Federally qualified subsistence users. The Federal Subsistence Management Program would need to administer this permit. A dual Federal/State permit could be issued to reduce the burden on subsistence users.

OSM PRELIMINARY CONCLUSION

Support Proposal FP11-10 with modification. The suggested modifications support additional subsistence fishing opportunities in this area. The OSM preliminary conclusion is to combine some of the regulations requested in Proposal FP11-10 while leaving in place some of the current regulations. OSM suggested modifications to Proposal FP11-10 include: 1) to open the areas of Black Lake and its tributaries to certain subsistence gear types; 2) to remove the requested restriction for using “hook and line” gear in the Chignik River; 3) to leave in the current restrictions to taking salmon in the Chignik River from upstream of the ADF&G weir; and 4) to leave in the restrictions for taking salmon in Clark River and Home Creek; 5) to move language from subsection (vi) to subsection (ii) which should not alter the effect of the regulation. Restrictions on hand seines and purse seines in Chignik Lake and Chignik River are consistent with the proposed regulation. Inconsistencies in the language regarding fishing permits have also been made consistent in the modifications, such that either a continuation of the State subsistence fishing permit and/or a Federal permit could be implemented.

The modified regulation should read:

§ ____ .27(c) Subsistence taking of fish: methods, means, and general restrictions

(4) Except as otherwise provided for in this section, you may not obstruct more than one-half the width of any stream with any gear used to take fish for subsistence uses.

(10) You may not take fish for subsistence uses within 300 feet of any dam, fish ladder, weir, culvert or other artificial obstruction, unless otherwise indicated. § ____ .27(i)(8)

Subsistence taking of fish: Chignik Area

(i) You may take fish other than salmon, rainbow/steelhead trout, or char at any time, except as may be specified by a subsistence fishing permit. For salmon, Federal subsistence fishing openings, closings and fishing methods are the same as those issued for the subsistence taking of fish under Alaska Statutes (AS 16.05.060), unless superseded by a Federal Special Action.

(ii) You may take salmon by seine, ~~gillnet~~, spear, and/or snagging (handline or rod and reel) or with gear specified on a subsistence fishing permit. You may also take salmon without a permit by snagging (by handline or rod and reel), using a spear, bow and arrow, or capturing by bare hand. You may not take salmon in the Chignik River from a point 300 feet upstream of the ADF&G weir to Chignik Lake from July 1 through August 31. You may not take salmon in Black Lake or any tributary to Black or Chignik Lakes.

(A) You may take salmon by gillnet in Chignik River, Chignik Lake, and in the open waters of Clark River and Home Creek under the authority of a State subsistence fishing permit;

(B) In the open waters of Clark River and Home Creek you may take salmon by snagging (handline or rod and reel), spear, bow and arrow, or capture by hand without a permit. The daily harvest and possession limits using these methods are 5 per day and 5 in possession.

(C) You may not use purse seines in Chignik Lake.

(iii) You may take salmon, trout, and char only under the authority of a subsistence fishing permit unless otherwise indicated.

(iv) You must keep a record on your permit of subsistence-caught fish. You must complete the record immediately upon taking subsistence-caught fish and must return it no later than October 31.

(v) If you hold a commercial fishing license, you may only subsistence fish for salmon as specified on a State subsistence salmon fishing permit.

(vi) You may take salmon by seines, gillnets, rod and reel, or with gear specified on a subsistence fishing permit, except that in Chignik Lake, you may not use purse seines. You may also take salmon without a permit by snagging (by handline or rod and reel), using a spear, bow and arrow, or capturing by bare hand.

(vii) You may take fish other than salmon by gear listed in this part unless restricted under the terms of a subsistence fishing permit.

Justification

Adoption of Proposal FP11-10 would allow Federally qualified subsistence users to continue long-established fishing practices while providing additional harvest opportunities in Black Lake and the tributaries of Black and Chignik lakes. Federally qualified subsistence users would be allowed to access areas in all drainages in the Chignik Area to harvest salmon from January 1 to December 31, and additional gear types, excluding gillnets, would be legal, except where noted in the regulations (notably from July 1 through August 31 on the Chignik River above the weir). Opening these areas to Federally qualified users would allow them to access areas (currently open to those fishing under State sport fishing regulations) while upholding a subsistence priority.

The OSM preliminary conclusion suggests that the language in subsection (ii) be moved from subsection (vi) and does not alter the effect of the regulation. Adopting the OSM preliminary conclusion for this proposal would allow Federally qualified subsistence users to harvest fish by snagging, which is a recognized method of subsistence fishing. Restricting subsistence users from harvesting fish with a hook and line would be an unnecessary restriction to Federally qualified subsistence users and it would not limit sport fishing.

The OSM preliminary conclusion suggests removing the proposed language to restrict using power purse seine gear in the Chignik River from Mensis Point downstream, because it is outside of Federal jurisdiction for subsistence fishing, as only Federally qualified subsistence users would be restricted. The expressed goal of limiting non-Federally qualified users would not be achieved with this restriction.

The proposed language regarding the subsistence permit is inconsistent in current regulations, where permits are referred to as “State permit,” “State subsistence fishing permit,” “State subsistence salmon fishing permit,” and “subsistence fishing permit.” This language is confusing and inconsistent. Creating a Federal permit has been discussed in the past by the Council and the Board. Language suggested in the OSM preliminary conclusion would provide the flexibility for a State, Federal, or dual State/Federal permit.

The State currently administers subsistence fishing permits for this area. This proposal would lead to significant differences between the State and Federal subsistence fishing regulations, unless similar changes are also adopted by the Alaska Board of Fisheries. Federally qualified subsistence users who wished to use gear types or fish in areas that are not allowed under State regulations would likely need to obtain a Federal subsistence permit. Requiring separate Federal and State subsistence fishing permits may complicate enforcement, increase confusion, and encumber Federally qualified subsistence users. The Federal Subsistence Management Program would need to administer this permit. A dual Federal/State permit could be issued to reduce the burden on subsistence users.

Because the potential exists that the use of gillnets in Black Lake and its tributaries could create a conservation concern, the OSM preliminary conclusion suggests that gillnet use remains restricted to Chignik River, Chignik Lake, and in the open waters of Clark River and Home Creek.

The existing closure of the Chignik River from a point 300 feet upstream of the ADF&G weir to Chignik Lake from July 1 through August 31 should continue as it addresses conservation concerns posed by the State in 2005. Although the proponent asked that power purse seine gear be prohibited in Chignik Lake, this restriction already occurs in current regulations and is not needed. The proponent also requested that hand seining be permitted only in Chignik River and Chignik Lake. The OSM preliminary conclusion suggests that the prohibition of purse seines (both power and hand) in Chignik Lake remain. These restrictions address concerns for potential overharvest with a specific gear type.

The proposed opening of Black Lake and its tributaries, and Chignik Lake tributaries would coincide with areas traditionally used by local residents. Since harvests have diminished over the past decade, this proposal, as modified, would increase subsistence opportunities for the residents of Chignik Lake, by allowing Federally qualified subsistence users in the area more time and locations to harvest fish. Increasing subsistence opportunities would also allow residents of Chignik Lake to maintain and strengthen critical components of their Alutiiq identity, culture, and relationships.

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SELECT SUBSISTENCE FISHING REGULATIONS

These listed regulations are not inclusive of all the regulations that apply to subsistence salmon fishing in the Chignik Area.

5 AAC 01.015. SUBSISTENCE FISHING PERMITS AND REPORTS. (b)(3) Permits must be retained in the possession of the permittee and be readily available for inspection while taking fish. A person who transports subsistence-taken fish shall have a subsistence fishing permit in their possession.

5 AAC 01.460. FISHING SEASONS. Fish, other than rainbow trout and steelhead trout, may be taken at any time, except as may be specified by a subsistence fishing permit. Rainbow trout and steelhead trout, taken incidentally in other subsistence finfish net fisheries, are lawfully taken and may be retained for subsistence purposes.

5 AAC.01.470. LAWFUL GEAR AND GEAR SPECIFICATIONS. (a) Salmon may be taken by seines and gillnets, or with gear specified on a subsistence fishing permit, except that salmon in Chignik Lake may not be taken with purse seines. A gillnet may not be set while staked, anchored, or otherwise fixed in a stream while it obstructs more than one-half of the width of the waterway and any channel or side channel of the waterway.

5 AAC 01.475. WATERS CLOSED TO SUBSISTENCE FISHING. Salmon may not be taken (1) from July 1 through August 31, in the Chignik River from a point 300 feet upstream from the Chignik weir to Chignik Lake; (2) in Black Lake or any tributary to Black Lake or Chignik Lake except in the waters of Clark River and Home Creek from their confluence with Chignik Lake to a point one mile upstream.

5 AAC 01.480. SUBSISTENCE FISHING PERMITS. (a) Salmon, trout and char may only be taken under the authority of a subsistence fishing permit.

- (b) Not more than 250 salmon may be taken for subsistence purposes unless otherwise specified on the subsistence fishing permit.
- (c) A record of subsistence-caught fish must be kept on the reverse side of the permit. The record must be completed immediately upon taking subsistence-caught fish and must be returned to the local representative of the department no later than December 31 of the year issued.

5 AAC 01.485. RESTRICTIONS ON COMMERCIAL FISHERMEN. (a) In the Chignik Area, a commercial salmon fishing license holder may not subsistence fish for salmon during the 12 hours before the first commercial salmon fishing period and the 12 hours following the closure of a commercial salmon fishing period. However, a commercial salmon fishing license holder may subsistence fish for salmon during a commercial salmon fishing period.

SPECIAL PERMIT PROVISIONS

1. The adipose fin must be removed from all subsistence-caught salmon immediately upon capture.
2. A commercial license holder may not fish for both subsistence and commercial salmon at the same time. Further, a commercial salmon vessel may not carry both subsistence and commercially caught salmon at the same time.
3. A commercial fishing vessel may not simultaneously carry both commercial seine and subsistence gillnet gear.
4. Commercial fishermen may always remove salmon from their commercial catch for home pack. Mark the number of salmon taken by species for home pack use on your fish ticket.
5. This permit can be withdrawn at any time.

NOTICE TO FISHERS:

Before you fish, be sure you know whose land you are on and check the regulations: State regulations apply on all state, private, and federal lands where authorized. Private landowners may restrict entry on their land. Federal lands may be closed to fishing except by certain rural residents. Persons standing on state or private lands should be sure their fishing activities are legal under state regulations. If you have questions regarding the federal subsistence fisheries, please contact the Federal Office of Subsistence Management at (800) 478-1456.

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Alaska Department of Fish and Game
Comments to Regional Advisory Council

Fisheries Proposal FP 11-10: Remove closure for federal subsistence fishing in Chignik River watershed and liberalize legal gear types used for subsistence harvest of salmon.

Introduction: Chignik Traditional Council submitted this proposal to:

1. Open the entire Chignik River watershed to federal subsistence fishing, except in waters more than one mile upriver from Chignik Lake in both Clark River and Home Creek.
2. Expand legal gear types for federal subsistence fishing in tributaries of Black and Chignik lakes (except not in Clark River and Home Creek) to include spear, hook and line that may be attached to a pole, or other gear as specified on a subsistence fishing permit.
3. Restrict use of hand seines to Chignik River and Chignik Lake and use of gillnets to Chignik River, Chignik Lake, and the lower one mile of Clark River and Home Creek.
4. Prohibit fishing with hook and line for federal subsistence in Chignik River and prohibit use of a power purse seine upstream of Mensis Point in Chignik River.
5. Eliminate the July 1 through August 31 subsistence fishery closure in Chignik River from a point 300-feet upstream of the department weir to Chignik Lake, which was originally established to protect spawning Chinook salmon.

Impact to Subsistence Users: If adopted as proposed, federally qualified subsistence users would be allowed to subsistence fish in the Chignik River watershed with gear types that include spear, hook and line attached to a pole, or other gear specified on a subsistence fishing permit. If adopted, federal subsistence users who choose to use a power purse seine would be restricted to fishing downstream from Mensis Point, and those who fish with a gillnet would be restricted to Chignik River, Chignik Lake, and the lower one mile of Clark River and Home Creek. The Federal Subsistence Board authorized expanded methods and means and eliminated some permit and reporting requirements in the Chignik River watershed. If this proposal is adopted, federal regulations would allow federally qualified subsistence users to utilize methods and means significantly different from those allowed under state regulations in the tributaries of Chignik and Black lakes (with the exception of Clark River and Home Creek, neither of which require a federal subsistence permit or other reporting method). Though this proposal does not request that all gear types be allowed for federal subsistence fishing in the tributaries of Chignik and Black lakes, as allowed in the Clark River and Home Creek, state regulations prohibit using spears and hook and line for subsistence fishing. Adoption of this proposal would expose federally qualified users to state citation because there are no federal public lands in the accessible Chignik River watershed. Fishermen using methods and means not authorized under state law or who fish in areas closed to subsistence fishing in state regulations would risk being cited while standing on state and private land, including state-owned submerged lands and shorelands.

Opportunity Provided by State: Gillnets and purse seines are allowable gear under state subsistence regulations. The State of Alaska provides a subsistence preference on all lands and provides liberal salmon subsistence fisheries on the Alaska Peninsula. Subsistence fisheries in the Chignik area provide an annual household limit of 250 fish, and subsistence fishermen can be authorized to take more if needed. For the Chignik area subsistence salmon fishery, gear types

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allowed include gillnets and seines, except purse seines may not be used in Chignik Lake. Gillnets may be used in Clark River and Home Creek one linear mile upstream from their confluences with Chignik Lake. Additional gear types can be added to the state subsistence permit (5 AAC 01.470).¹

State subsistence permits for each management area carry stipulations specific to that area, such as timing restrictions to separate subsistence and commercial fishing, gillnet length limits in areas open to commercial fishing, and waters closed to subsistence fishing. Commercial salmon license holders and Commercial Fisheries Entry Commission (CFEC) salmon permit holders may subsistence fish for salmon during a commercial salmon fishing period (5AAC01.485) but may not subsistence fish 12 hours before or 12 hours after each commercial fishing period. Commercial salmon license holders and CFEC permit holders in the Chignik Management Area that subsistence fish in Chignik Lagoon, Lake, or River are required to contact department staff at the Chignik weir in order to separate the reporting of subsistence and commercial harvests.

The Alaska Board of Fisheries established a combined amount reasonably necessary for subsistence for communities in the Alaska Peninsula area as 34,000—56,000 salmon annually. The combined amount necessary for subsistence for the Chignik Area (Chignik Bay and the Central and Eastern districts of the Chignik Management Area) is 7,700—14,250 salmon annually. Liberal state subsistence fisheries are allowed on all lands (state, federal, and private), so adoption of this proposal is not necessary to provide a meaningful subsistence opportunity.

Conservation Issues: No salmon stocks on the Alaska Peninsula are currently listed as a “stock of concern” by the Alaska Board of Fisheries. Recent late-run sockeye salmon returns, which return primarily to Chignik Lake and its tributaries, have recently slightly decreased. If the Federal Subsistence Board approves this proposal but does not require a federal permit, increases in undocumented in-tributary exploitation would not be detectable due to the lack of a federal reporting requirement. Significant increases of unreported harvest in Chignik River watershed may lead to conservation issues that would not be detected in a timely manner and may require severe fishery restrictions when detected.

The July 1 through August 31 subsistence fishery closure was established by the Alaska Board of Fisheries in Chignik River many years ago to prevent inadvertent harvest and harassment of spawning Chinook salmon. Reopening the Chignik River to subsistence fishing with gillnets and hand seines would have immediate impacts on the Chinook salmon population that spawns in approximately 80% of the 1.8 river miles that extends from the outlet of Chignik Lake downstream to the department’s Chignik weir and near the outlet of Chignik Lake. Chinook salmon have not been found to habitually transit beyond Chignik Lake outlet.

The Federal Subsistence Board recently liberalized allowable methods and means for federal subsistence fisheries and eliminated permitting and reporting requirements for federally qualified

¹ **5 AAC 01.470. Lawful gear and gear specifications**

(a) Salmon may be taken by seines and gillnets, or with gear specified on a subsistence fishing permit, except that in Chignik Lake salmon may not be taken with purse seines.

(b) Fish other than salmon may be taken by gear listed in 5 AAC 01.010(a), unless restricted under the terms of a subsistence fishing permit.

ADF&G Comments on FP11-10
August 24, 2011; Page 3 of 3

users who utilize rod and reel, bow and arrow, spear, bare-hand capture, and snagging. Elimination of permitting and reporting requirements by federally qualified users causes the department serious concern about localized depletion of sockeye salmon stocks in Chignik River watershed tributaries, especially if a significant increase of harvest results. Since the Federal Subsistence Board does not monitor the federal subsistence fishery in this area, authorizing additional freshwater subsistence fisheries that target unmonitored wild stocks is not consistent with principles of sound management and conservation of fish and wildlife resources.

Three Federal Subsistence Board members discussed their support of proposal FP08-11 at the December 2007 meeting because the expected increase in harvest was estimated to be reasonably small and the proponent's intent was to harvest one or two fish at a time (Federal Subsistence Board Transcripts, December 20, 2007, pages 228 and 229). Further discussion by the Federal Subsistence Board and Regional Advisory Council chairs also focused on liberalizing federal subsistence users' methods and means to allow for harvests of individual salmon for immediate sustenance while traveling light in the course of camping, berry picking, or hunting. Discussions did not consider impacts that adoption of FP08-11 would have on sockeye salmon stocks within Clark River and Home Creek, because both were closed to federal subsistence fishing at the time. The impacts of cumulative unreported harvests from creeks that are near communities and easily accessible were also not considered by the Federal Subsistence Board.

The Federal Subsistence Board approved FP08-11, which liberalized methods and means to allow snagging, bare-hand capture, and similar means for light travelers on the Alaska Peninsula and eliminated reporting requirements, based on information that suggested the level of harvest would be a small number of fish by subsistence users traveling light in the field. During 2008, the department received reports of federal subsistence users harvesting their winter supply of salmon from these tributaries of concern by federal methods and means and without the benefit of permits and harvest reporting. As stated in objections to FP08-11, the department has serious conservation concerns with unreported harvests and the liberalized methods and means. Those concerns increase with consideration of FP09-11 and FP11-10 and the potential of significant federal subsistence harvests in Home Creek and Clark River.

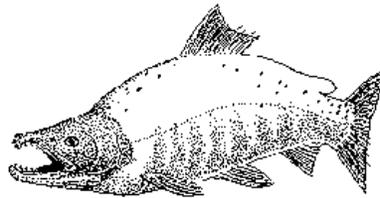
Jurisdiction Issues: While standing on state and private lands (including state-owned submerged lands and shorelands), persons must comply with state laws and regulations. If this proposal is adopted, detailed maps are needed that depict land ownership and specific boundaries of areas where federal regulations are claimed to apply in order to reduce risk of violation for federal subsistence fishermen. During the December 2007 Federal Subsistence Board meeting, Alaska wildlife trooper testimony (Federal Subsistence Board Transcripts December 11, 2007, pages 89-91) explained the importance of users understanding and knowing jurisdiction and land status. When an enforcement officer encounters an individual conducting an activity that is prohibited by state regulations while standing on state or private lands, including state-owned submerged lands, the person may be cited.

Other Issues: An identical proposal was submitted to the Alaska Board of Fisheries for consideration during the January 16—18, 2011, meeting in Anchorage.

Recommendation: Defer until the proposal is addressed by the Alaska Board of Fisheries.

PRIORITY INFORMATION NEEDS

FEDERAL SUBSISTENCE FISHERIES



2012 FISHERIES RESOURCE MONITORING PROGRAM

Office of Subsistence Management
U.S. Fish and Wildlife Service
1011 E. Tudor Road
Anchorage, Alaska 99503-6199

1-800-478-1456 or 907-786-3888 Voice
907-786-3612 Fax

July 23, 2010

The Office of Subsistence Management (OSM) invites the submission of proposals for fisheries investigation studies to be initiated under the 2012 Fisheries Resource Monitoring Program (Monitoring Program). Taking into account funding commitments for ongoing projects, we anticipate approximately \$2.7 million available in 2012 to fund new monitoring and research projects that provide information needed to manage subsistence fisheries for rural Alaskans on Federal public lands. Funding may be requested for up to four years duration.

Although all proposals addressing subsistence fisheries on Federal public lands will be considered, the 2012 Request for Proposals is focused on priority information needs. The Monitoring Program is administered by region, those being the Northern, Yukon, Kuskokwim, Southwest, Southcentral, and Southeast regions. Strategic plans developed by workgroups of Federal and State fisheries managers, researchers, Regional Advisory Council members and other stakeholders, have been completed for three of the six regions: Southeast, Southcentral (excluding Cook Inlet Area), and Southwest Alaska. These plans identify prioritized information needs for each major subsistence fishery and can be viewed on or downloaded from OSM's website: <http://alaska.fws.gov/asm/index.cfml>. Independent strategic plans were completed for the Yukon and Kuskokwim regions for salmon in 2005, and jointly for whitefish in 2010. For the Northern Region and the Cook Inlet Area, priority information needs were developed with input from Regional Advisory Councils, the Technical Review Committee, Federal and State managers and staff from OSM.

This document summarizes priority information needs for 2012 for all six regions and a multi-regional category that addresses priorities that may extend to more than one study region. Investigators preparing proposals for the 2012 Monitoring Program should use this document and relevant strategic plans, and the Request for Proposals, which provides foundational information about the Monitoring Program, to guide proposal development. While Monitoring Program project selections may not be limited to priority information needs identified in this document, proposals addressing other information needs must include compelling justification with respect to strategic importance.

Monitoring Program funding is not intended to duplicate existing programs. Agencies are discouraged from shifting existing projects to the Monitoring Program. Where long-term projects can no longer be funded by agencies, and the project provides direct information for Federal subsistence fisheries management, a request to the Monitoring Program of up to 50% of the project cost may be submitted for consideration. For Monitoring Program projects for which additional years of funding is being requested, investigators should justify continuation by placing the proposed work in context with the ongoing work being accomplished. For projects with broad overlap of Federal and State management authority, a substantial match in funding must be included in order to be considered for Monitoring Program funding.

Because cumulative effects of climate change are likely to fundamentally affect subsistence fishery resources, their uses, and how they are managed, investigators are requested to consider examining or discussing climate change effects as a component of their project. Investigators conducting long-term stock status projects will be required to participate in a standardized air and water temperature monitoring program. Calibrated temperature loggers and associated equipment, analysis and reporting services, and access to a temperature database will be provided. Finally, proposals that focus on the effects of climate change on subsistence fishery resources and uses, and that describe implications for subsistence management, are specifically requested. Such proposals must include a clear description of how the project would measure or assess climate change impacts to subsistence fishery resources, uses, and management.

Projects with an interdisciplinary emphasis are encouraged. The Monitoring Program seeks to combine ethnographic, harvest monitoring, traditional ecological knowledge, and biological data to aid in finding effective management approaches to fisheries. Investigators are encouraged to combine interdisciplinary methods, theories, and data to address information needs. Consideration should be given to the cultural context of key research topics.

Collaboration and cooperation with rural communities is encouraged at all stages of research planning and implementation of projects that directly affect those communities. The Request for Proposals describes the collaborative process in community-based research and in building partnerships with rural communities.

The following sections provide specific regional and multi-regional priority information needs for the 2012 Monitoring Program. They are not listed in priority order.

Northern Region Priority Information Needs

The Northern Region is divided into three areas which reflect the geographic areas of the three northern Regional Advisory Councils (Seward Peninsula, Northwest Arctic, and North Slope). Together, the three areas comprise most of northern Alaska, and contain substantial Federal public lands. Since 2001, the three northern Regional Advisory Councils have identified important fisheries issues and information needs for their respective areas. The Seward Peninsula and Northwest Arctic Councils have identified salmon and char fisheries as being the most important fisheries for their areas. The North Slope Council identified char, whitefish, and Arctic grayling fisheries as most important for its area. In addition, the effects of climate change on subsistence fishery resources has been identified as a priority research need. The Multi-regional priority information needs section at the end of this document includes climate change research needs.

For the Northern Region, the 2012 Request for Proposals is focused on the following priority information needs:

- Baseline harvest assessment and monitoring of subsistence fisheries in the Northwest Arctic and North Slope regions.
- Historic trends and variability in harvest locations, harvests and uses of non-salmon fish.
- Iñupiaq taxonomy of fish species, Iñupiaq natural history of fish, land use, place name mapping, species distribution, and methods for and timing of harvests. Species of interest include sheefish, northern pike, or other subsistence non-salmon fish in the Northwest Arctic region.
- Spawning distribution, timing, and stock structure of Selawik River whitefish species.

Yukon Region Priority Information Needs

Since its inception, the Monitoring Plan for the Yukon Region has been directed at information needs identified by the three Yukon River Regional Advisory Councils (Yukon-Kuskokwim Delta, Western Interior, and Eastern Interior) with input from subsistence users, the public, Alaska Native organizations, Federal and State agencies, and partner agencies and organizations. The U.S./Canada Yukon River Salmon Joint Technical Committee Plan has been used to prioritize salmon monitoring projects in the Alaskan portion of the Yukon River drainage. Additionally, a research plan for whitefish has identified priority information needs for whitefish species in the Yukon and Kuskokwim river drainages.

For the Yukon Region, the 2012 Request for Proposals is focused on the following priority information needs:

- Reliable estimates of Chinook and chum salmon escapements (e.g., weir and sonar projects).
- Effects on salmon stocks and users of fishery management practices implemented to conserve Chinook salmon (e.g. gillnet mesh size, gillnet depth, and windowed openings).
- Methods for including “quality of escapement” measures in establishing Chinook salmon spawning goals and determining the reproductive potential of spawning escapements.
- Trends in Yukon River Chinook salmon production relative to other spawning stocks of the Bering Sea and Gulf of Alaska.
- Contemporary economic strategies and practices in the context of diminished salmon runs. Topics may include an evaluation of barter, sharing, and exchange of salmon for cash, as well as other economic strategies and practices that augment and support subsistence activities. Of particular interest are distribution networks, decision making, and the social and cultural aspects of salmon harvest and use.
- Description of the use of gillnets to harvest salmon species by residents of the Yukon River drainage.
- Location and timing of Bering cisco spawning populations in the Yukon River drainage.
- Complete genetic baseline sampling and population marker development for sheefish spawning populations in the Yukon River drainage.
- Harvest, use, and associated contextual information for whitefish by species in lower Yukon River drainage communities.

Kuskokwim Region Priority Information Needs

Since 2001, the Yukon-Kuskokwim Delta and Western Interior Regional Advisory Councils, with guidance provided by the Kuskokwim Fisheries Resource Coalition, have identified a broad category of issues and information needs in the Kuskokwim Region. These include collection and analysis of traditional ecological knowledge; harvest assessment and monitoring; salmon run and escapement monitoring; non-salmon fish population monitoring; and marine/coastal salmon ecology. Additionally, a research plan for salmon and a research plan for whitefish have been used to prioritize monitoring projects for salmon and whitefish. These were reviewed to ensure that remaining priority information needs were considered.

For the Kuskokwim Region, the 2012 Request for Proposals is focused on the following priority information needs:

- Reliable estimates of Chinook, chum and coho salmon escapement (e.g. weir projects).
- Harvest, use, and associated contextual information for whitefish by species in upper Kuskokwim River drainage communities. Communities of interest include McGrath, Telida, Nikolai, Takotna, and Lime Village.

- Traditional ecological knowledge of whitefish by species in central Kuskokwim River drainage communities. Communities of interest include Upper Kalskag, Lower Kalskag, Aniak, Chuathbaluk, Red Devil, Sleetmute, Stony River, and Crooked Creek. The findings from this research will supplement harvest and use information from previous research.
- Harvest, use, and associated contextual information for whitefish by species in lower Kuskokwim River drainage communities. Specific groups of communities of interest are Kwethluk, Akiachak, Napaskiak, and Tuluksak, or Chefornak, Kipnuk, Kongiganak, and Kwigillingok.
- Broad whitefish population assessment, including distribution and age structure.
- Location and timing of Bering cisco spawning populations in the Kuskokwim River drainage.
- Complete genetic baseline sampling and population marker development for sheefish spawning populations in the Kuskokwim River drainage.
- Status of sheefish spawning population in Highpower Creek, an upper tributary of the Kuskokwim River (this could be part of the genetic baseline study listed directly above).

Southwest Region Priority Information Needs

Separate strategic plans were developed for the Bristol Bay-Chignik and Kodiak-Aleutians areas, corresponding to the geographic areas covered by the Bristol Bay and Kodiak/Aleutians Regional Advisory Councils. These strategic plans were reviewed to ensure that remaining priority information needs were considered.

For the Southwest Region, the 2012 Request for Proposals is focused on the following priority information needs:

- Trends in whitefish harvest and use from Lake Clark communities.
- Environmental, demographic, regulatory, cultural, and socioeconomic factors affecting harvest levels of salmon for subsistence use in the Kodiak Area. Researchers should consider evaluating factors influencing use patterns and describing the socioeconomic impacts of other fisheries.
- Harvest of salmon for subsistence use by residents of the Aleutian Islands Area, including current and traditional harvest methods and means by species, and current and traditional uses and distribution practices.

Southcentral Region Priority Information Needs

A strategic plan was developed for Prince William Sound-Copper River and an abbreviated strategic planning process was employed for Cook Inlet. These sources were reviewed to ensure that remaining priority information needs were considered.

For the Southcentral Region, the 2012 Request for Proposals is focused on the following priority information need:

- Historical and current subsistence use areas for harvest of salmon and non-salmon fish species by residents of Ninilchik, Hope, and Cooper Landing. Research should including intensity of use and use on Federal public lands and waters.

Southeast Region Priority Information Needs

A strategic plan was developed for Southeast Region in 2006 and was reviewed to ensure that priority information needs are identified. The 2012 Request for Proposals is focused on priority information needs for sockeye salmon and steelhead trout. It should be noted that current Department of Agriculture funding levels for the monitoring program in Southeast Alaska are fully committed to continuation of projects initiated in 2010. However, this request for proposals includes solicitation for the Southeast Region so as to maintain options for 2012 should additional funding become available.

For the Southeast Region, the 2012 Request for Proposals is focused on the following priority information needs:

- Reliable estimates of sockeye salmon escapement. Stocks of interest include: Gut Bay, Red, Kah Sheets, Salmon Bay, Sarkar, Lake Leo, and Hoktaheen.
- In-season subsistence harvest of sockeye salmon. Stocks of interest include: Hatchery Creek, Gut Bay, Red, Kah Sheets, Salmon Bay, Sarkar, Kanalku, and Hoktaheen.
- Contribute to the genetic stock identification baseline of Chatham Strait sockeye salmon.
- Reliable estimates of steelhead escapement, especially for systems on Prince of Wales Island.

Multi-Regional Priority Information Needs

The Multi-regional category is for projects that may be applicable in more than one region. For the Multi-Regional category, the 2012 Request for Proposals is focused on the following priority information needs:

- Changes in subsistence fishery resources and uses, in the context of climate change where relevant, including but not limited to fishing seasons, species targeted, fishing locations, harvest methods and means, and methods of preservation. Include management implications.
- An indexing method for estimating species-specific whitefish harvests on an annual basis for the Kuskokwim and Yukon drainages. Researchers should explore and evaluate an approach where sub-regional clusters of community harvests can be evaluated for regular surveying with results being extrapolated to the rest of the cluster, contributing to drainage-wide harvest estimates.
- Evaluation of conversion factors used to estimate edible pounds from individual fish, and from unorthodox units such as tubs, sacks, or buckets.

Meeting Summary
Unit 9 Moose Working Group
April 28-29, 2010
FAA Facility
King Salmon, Alaska

Meeting Objectives/Purpose

The purpose of the meeting was to gather; to get to know one another and begin working together to find solutions to moose harvest opportunities in Game Management Unit 9 (GMU 9); to share information to help the working group participants understand existing management approaches by the agencies present; to explain regulations and their intent and provide clarity on different regulatory responsibilities; to define the roles and authorities of the Alaska Department of Fish and Game (ADFG), the Board of Game (BOG), and the Federal Subsistence Board (FSB) in addressing the issues; to identify issues surrounding moose harvest opportunities in GMU 9; to develop ideas for resolving the identified issues; and to provide an opportunity for public comment for those observing the meeting who desired to give input.

Working Group Members Present

- Aaron Bloomquist, *Anchorage Advisory Committee/Non-Local Alaskan Hunters*
- Bill Schaff, *Manager of Peninsula and Becharof National Wildlife Refuges*
- Bobby Fithian, *Guiding Industry and Professional Alaska Hunters Association*
- Chuck Ardizzone, *Wildlife Subsistence Chief, Office of Subsistence Management and federal coordinator for Unit 9 Moose Working Group*
- Dale Myers, *Bristol Bay Subsistence RAC, Guiding Industry*
- Dan Kingsley, *Lower Bristol Bay Advisory Committee*
- Davin Holen, *Subsistence Resource Specialist, Division of Subsistence, Alaska Dept Fish and Game*
- Frank Woods, *Bristol Bay Native Association*
- Geoff Beyersdorf, *Subsistence Coordinator, Bureau of Land Management*
- Lem Butler, *Area Biologist for GMU 9 and 10, Division of Wildlife Conservation, Alaska Department of Fish and Game*
- Ralph Moore, *Superintendent of Katmai National Park and Preserve, National Park Service*
- Richard Wilson, *Bristol Bay Subsistence RAC*

Working Group Members Unable to Attend

Due to weather conditions the following were unable to attend the meeting:

- Donny Lind, *State Advisory Committee Chignik*
- Thomas Hedland, *Bristol Bay Subsistence RAC, Guiding Industry, Lake Clark Subsistence Resource Council, State Advisory Committee Iliamna Lake (Units 9B/C)*

Note: Thomas Hedland sent comments via email and those were delivered to Dale Myers and Richard Wilson and presented during the meeting at the appropriate times.

Support Staff present

- Mark Burch, *Assistant Management Coordinator, Division of Wildlife Conservations, Alaska Department of Fish and Game, and state coordinator for Unit 9 Moose Working Group*
- Teri Arnold, *Facilitator, Raven's Way Consulting, Planning and Facilitation Services, Seward, Alaska*

- Meghan Riley, *Notetaker, Assistant Area Biologist GMU 9 and 10, Division of Wildlife Conservation, Alaska Department of Fish and Game*

Meeting Opening, Introductions, Meeting Process and Agenda Review

Mark Burch opened the meeting and explained the general purpose was to share management information about Unit 9 and discuss issues surrounding moose harvest opportunities in the area, to understand the issues and then develop ideas for solutions that all could agree to. He explained this group's authority was advisory in nature only, and that recommendations from this meeting would go on to the appropriate agency or to boards through the State Advisory Committee (AC) and Federal Regional Advisory Committee (RAC) processes. He encouraged everyone that there were high expectations for this group to perform in a short period of time. He introduced the facilitator, Teri Arnold, and explained the choice to use a facilitator for the meeting was so that everyone present had an equal voice and to assist with the meeting process to help the participants achieve the objectives of the meeting by the end of the second day.

Teri Arnold reviewed the agenda for the following two days and explained some process ideas for helping members in working together more smoothly. She reminded them all that they were here at this meeting representing a group of user's interests and for all to remember to give input from that position. The members of the working group then introduced themselves, including the user group they represented, or agency affiliation, and their location.

Working Group Background

Chuck Ardizzone explained the Federal Subsistence Board requested the formation of this working group to consider the issues surrounding moose in Unit 9 and submit recommendations through the RAC process. He relayed that while GMU 9 is generally considered an area of low density moose population, in recent years local residents have reported that moose are harder to find in traditional hunting areas. This concern has led to requests to the BOG and the FSB to change moose management regulations including shortening the Federal season and excluding non local hunters from all or parts of GMU 9. The BOG considered, but did not adopt, proposals to that effect in March 2007, and the FSB deferred similar proposals at its May 2008 meeting. The Bristol Bay RAC considered similar proposals that called for closure of all federal lands within a two mile buffer on either side of waterways to hunting of moose by non-federally qualified users in Units 9C and 9E. The RAC tabled the proposals pending recommendations from a working group. The FSB and ADF&G recommended the formation of this working group to consider the issue and submit recommendations through the RAC and AC processes.

Chuck encouraged members to discuss the issues to gain an understanding of each group's point of view, their concerns, the mandates the agencies had to work within and to find common ground and develop solutions that all could support at this meeting.

Presentations - GMU 9B&C Moose Population and Harvest, Regulations, Roles and Authorities

Teri Arnold explained the role of the working group participants during the presentations was to listen carefully to understand each agencies mission or responsibility in terms of moose management, to understand the authorities or mandates they operate under, and to also listen for their position on predator control. Finally to listen for each agencies ideas for solutions surrounding the issue, and conversely for those things they could not support. She said there would be a period for questions after each presentation for understanding of the information given.

Each agency was asked in their presentation to:

1. address the situation from their agencies unique point perspective with data where possible (e.g. harvest numbers and use areas where applicable)

2. present the guidelines they must work under (e.g. regulations, management mandates), including position on predator control
3. give ideas for solutions their agency could support, and those they could not support, if any
4. provide handouts of the important information presented (especially maps) so these could be used later in the meeting for discussions

ADFG, Moose Population and Harvest, Lem Butler, Area Biologist

- Introduction
 - ADFG wants to provide opportunities to use resources in the region to various user groups.
 - Collect data to help guide the institution of regulations for harvest.
 - Everything is on the table as solutions to this issue, but they must go through a public process with the BOG as the ultimate decision-maker.
 - We try to offer as much opportunity as possible for harvest while protecting the populations of harvested species.
 - It's a BOG year, so now's a great time to submit proposals regarding moose harvest.
 - GMU 9 moose issues have been ongoing for many years.
 - Lem wants to help everyone shape their proposals to the BOG with the best biological information and data possible.
- Moose Harvest in 9B and 9C
 - Main hunting areas in Lake Clark Preserve, scattered BLM lands, Alagnak Wild and Scenic, Katmai Preserve
 - ADFG is the primary wildlife manager in these areas
 - Moose are fairly new to this area (population colonized in 1910 and exploded in the 1940's)
 - Moose population eruption due to the unexploited resources in the newly colonized area
 - Here, moose population peaked in the 1960's, then decreased until 1980, leveling off.
 - Population limited by availability of moose habitat (lots of open tundra but poor for moose), low calf ratios (18 calves: 100 cow)
 - We must conserve this population as it is and it will never be as high as it was in the 1960's. The population is low density and spread out over large areas inaccessible to people.
 - ADFG primarily does trend surveys to keep track of bull: 100 cow ratios and population productivity.
 - We want to have about 40 bulls: 100 cow to improve the hunting experience. Additionally, killing cows will hurt the already poor calf recruitment and calf: 100 cow ratio.
 - No changes detected in moose density between 1985 and 2005 overall (although there could be changes in the local area partly due to movement of animals in the area).
 - Bull ratio is fluctuating around 40 bulls: 100 cows in 9B and 9c
 - Biologically, we are not concerned with the population's viability (although poor calf recruitment is worth tracking and thinking about).
 - Hunter effort and success can help augment trend surveys to follow the population.
 - Hunting success has not changed significantly between 1985 and 2008.
 - Years with more hunters lead to more moose being harvested.

- Hunter success in GMU 9 is in the top 30th percentile for the state.
- Local hunter success rates are above average for subunits 9E and 9B, with 9C slightly below average.
- Years with lots of local hunters are correlated with high local moose harvest and years with few hunters is correlated with low moose harvest. Therefore, low moose harvest does not necessarily mean the moose population is decreasing.
- There will be local variation in moose population stability throughout each subunit.
- There is a general decline in number of hunters attempting to harvest moose in the area.
- Population Conservation
 - Killing cows means killing all the offspring she can have in her lifetime.
 - Therefore, conserving cows is critical to sustaining the population.
- Conclusion
 - Moose populations will never return to historical highs.
 - Biologically, there is no indication that moose populations are currently declining.

Questions on Moose Population and Harvest – Lem Butler

- Has the number of days to harvest changed over the last 5 years or so? (No)
- BOG looks at the declining trend in nonresident hunters and questions what excluding nonresidents will actually do for local hunters in terms of increasing moose numbers.
- Nonlocal success tends to be better because they are using airplanes and guides.
- Why is hunting dropping off? (with the Mulchatna caribou herd in decline, it's not worth the bother for nonlocals to come here to hunt moose)
- Do you have historic numbers for the NAPCH? (peaked at 20,000; not cyclic, but we're down to 2,500 now)
- What kind of local harvest was there in the NAP? (tough figure to pin down due to lack of reporting; peak harvest reported= 1,200 but likely closer to 1,700)
- Estimated unreported harvest on moose? (about 100 in GMU 9; people are hunting without harvest tickets; worry that locals don't value management so they don't report; getting the message out to communities that reporting harvest is critical to successful management is difficult)
- Do successful hunters report more often than unsuccessful? (hard to say)
- Lower Bristol Bay Advisory Committee (LBBAC) wants to know why there haven't been moose surveys done on the same scale as they were done historically. How many surveys are being done and what effort is put in? (this area is difficult in terms of weather, sightability, and snow-cover for mounting surveys; detecting trend is very hard when surveys are done in different months; surveys have been poor in the last few years due to logistical issues; 9C and 9B surveys have been done more consistently in recent years due to the involvement of the federal government; may adapt survey techniques to do a composition survey in the fall, adding a measure of density over a larger area in the spring)
- How long has the moose population been more or less stable? (since the 1980's)

- How many calves does a single cow moose add to the population? (her contribution/reproductive output is exponential; basic component of biology that females are more valuable than males for population viability)
- Are there any plans for 9B to do education on the detrimental effects of harvesting cows? (effort has been limited thus far, but Geoff Beyersdorf has written funding proposals for educational outreach; Geoff has seed-money for developing a state-wide, interagency education effort; effort will be small to start in a couple of key villages to assess whether the program works and how to improve it)

ADFG, Subsistence Harvest and Land Ownership, Davin Holen, Subsistence Resource Specialist

- Introduction
 - Division of Subsistence does research only, providing information to BOG.
 - Davin covers entire southern half of the state.
 - This presentation deals with harvest surveys.
 - Funding has increased in the last few years.
 - All data is reviewed with communities before publishing.
- 9B
 - The information from 9B is more current than that from 9E
 - Amount necessary for subsistence (ANS) is 100-140 moose for 9A, 9B, 9C, and 9E.
 - Recent findings for 9B include villages in GMU 9 and 17 (Lime Village, Port Alsworth, Pedro Bay, Nondalton, Newhalen, Kokhanok, Igiugig, Levelock, King Salmon, Naknek, South Naknek, etc.)
 - Survey's done right after the end of the calendar year (February and March).
 - 2004 data on Iliamna, Nondalton, Newhalen, Pedro Bay, Port Alsworth.
 - Majority of houses used moose, but not many harvested. Therefore, there was a lot of sharing between houses.
 - A total of 34 moose were harvested, mostly from Nondalton.
 - People tend to hunt close to home or along waterways (Iliamna, Newhalen).
 - People hunt inland using ORV's (Nondalton).
 - Port Alsworth uses a small area for hunting, but much meat is distributed by guides.
 - 2005 data on Igiugig, Kokhanok, Koligenek, Levelock, and New Stuyahok.
 - Majority of houses used moose; about 40% harvested moose; considerable sharing occurred.
 - Average harvest was ½ a moose per household.
 - Hunting activity is (again) highly localized.
 - 2004 Harvest locations
 - Harvesting by 9B residents tends to be in 9B (slight spill-over into GMU 17)
 - Harvest occurs on both federal and state lands
 - River systems are key travel corridors for local subsistence users. However, this is not exclusive (4-wheelers and snowmachines are important too).
 - 2007 data on King Salmon, Naknek, and South Naknek
 - Lots of harvest effort extended into 9B.

- 36% households used moose; 5 % harvested moose; a little bit of sharing went on.
- Per capita moose harvest (in pounds) was low.
- 19 moose harvested between the 3 communities.
- Historical 9B Harvest data (1973-2005)
 - Data is spotty until 1983.
 - Data is best in 2001 (0.17 moose per capita)
 - Nondalton had a high harvest in 2001-02 (this number is partly due to the fact that all households that harvested were surveyed; also, the salmon run was poor that year)
 - Nondalton harvest decreased to 17 moose in 2004

Questions on Subsistence Harvest and Land Ownership, Davin Holen

- What does the questionnaire entail? Is need for harvest and hunting effort changing over time? Is harvest occurring year-round? (most people hunt in the fall; effort is only measured by whether or not people are attempting to harvest and by how large an area the community is using in hunting efforts; people say they are able to harvest less moose than in recent years which implies their needs are not being met; issues involved in the decreasing harvests include high fuel costs and climate change)
- If this research can be used to increase regulations against subsistence users, then responses to the questionnaire will be less reliable. In that case, these subsistence reports might need to be privileged. (people will not report if they don't think ADFG management does not benefit them; education is important to start engaging people in reporting)
- Has the Subsistence Division ever asked sex of harvested animals? (Typically this is asked, but was left off the 2004, 2005 questionnaires for some reason; people seem to be honest about the sex and age of their animal)
- Is there any information on when meat comes from sources outside the community? (this was done in 2000 during a dedicated large land mammal harvest study; it's an important question, but it hasn't been addressed in the baseline subsistence questionnaires recently; local transporters in Iliamna when asked in 2005 said meat donations have dropped off recently)
- Any plans to do research in 9E and down the peninsula? (No)
- When non locals were excluded from one area, donated meat disappeared and fuel costs went way up.
- 2004- study year was funded jointly by NPS and Stephen R. Braund and Associates (SRB&A), a contractor to the Pebble Project, 2005 and 2007 study years were funded entirely by SRB&A..
- Will you be able to share a copy of the questionnaire with us? (Yes, in a report that's present at the meeting)
- Does funding change from year to year? Is there a baseline study budget? (Dependable funding is strictly for operational and office costs. Research studies are funded entirely through outside grants. There are far more communities to be surveyed than researchers to survey them.)

USFWS, Management on Refuges Legislative Parameters, Bill Schaff Refuge Manager

- Introduction
 - Manage from south boundary of Katmai to Chignik

- Agency objectives
 - Refuges have been around since 1903.
 - Conserve wildlife, plants, and habitat in refuges.
 - Maintain diversity and health of the system in refuges.
 - Coordinate and interact with adjacent landowners.
 - Maintain water quality and quantity.
 - “BIG 6” uses
 - Hunting, fishing, photography, environmental education, public use (stress on wildlife dependent uses)
 - Provide increased opportunities for families.
 - Monitor the status and trends of wildlife fish and plants (cooperative efforts with the state).
 - Provide quality recreational opportunities.
 - (In Alaska) Provide subsistence opportunities on the refuge.
- Opportunities on the refuge occur predominantly in 9E (with a small portion of Becharof in 9C).
- One potential game-changer is climate change
 - Vegetational shifts will correlate with wildlife changes
 - The changes are very hard to predict, but we can be sure habitat and species compositions will change.
 - Let’s consider this when we make decisions here.
- The refuges are biological banks for the future.

Questions on USFWS, Legislative Parameters, Bill Schaff

- What agreements does USFWS have with the state regarding predator control? (there are no agreements now; things are in the works, but lots of bureaucracy must be dealt with first; an agreement will take time)

BLM, Management on BLM Lands, Geoff Beyersdorf, Subsistence Coordinator

- Geoff covers the whole southern half of the state for BLM out of Anchorage.
- BLM does have some lands in the area (although USFWS and NPS have the most).
- BLM mission and mandates
 - Sustain health, diversity, and productivity of public lands
 - (BLM PRIORITY) To cultivate community-based conservation, citizen-centered stewardship, and partnership through consultation, cooperation, and communication. Examples below are from work BLM is doing with ADFG/FWS in GMU 21E:
 - Moose surveys in spring
 - Included locals on the surveys to discuss survey methodology and understand traditional knowledge
 - Local understanding of migration routes was differently from biologists.
 - Funding was procured to collar over 50 moose to address migration corridors, wintering grounds, and calving sites.
 - Collars are GPS collars and BLM is working with ADFG/FWS and the Yukon Kuskokwim School district to develop an “adopt-a-moose” program and use this

- as a platform to discuss applications of technology to wildlife management, moose biology, predators, wildlife regulations, conservation, and harvest reporting.
- Federal Land Policy and Management Act (FLPMA) Establish public land policy and guidelines (multi-use compared to USFWS).
 - Alaska National Interests Land Conservation Act (ANILCA) Manage fish and wildlife for subsistence uses.
 - No guide use areas, but there are special recreation permits
 - Commercial
 - Competitive uses (sled-dog races)
 - Vending (goods and services sold on public land)
 - Organizations like Boy Scout camps
 - Commercial filming and photography
 - All guide outfitters on public lands must be authorized.
 - How many guides is BLM permitting?
 - BLM has land associated with 4 guide use areas in GMU 9, but only 1 guide taking clients out for brown bears
 - Predator policy
 - Unless predator control conflicts with other management plans or is a threat to public safety, BLM does not support or deny predator control on their lands (it's ADFG's prerogative).

Questions on Management on BLM Lands, Geoff Beyersdorf

- Historic use on BLM lands when there were more guides? (it's been a mix of moose, caribou, and brown bear; 5 of the 6 guides terminated their permits in 2004-2005)
- Process of conveying BLM lands to the state was supposed to be done by 2011, but it's pretty well done in GMU 9.
- BLM will become a very financially strapped agency in the state of Alaska very soon.
- Since the new BLM predator policy came out, has ADFG approached BLM about doing predator control? (No; BLM mostly has marginal habitat lands that moose and caribou avoid.)

USFWS, Office of Subsistence Management, Chuck Ardizzone, Wildlife Division Supervisor

- The Federal Subsistence Management Program took over the responsibility for managing subsistence uses on Federal lands in 1990.
- Predator Management Policy
 - Wildlife management activities on Federal public lands other than the subsistence take and use of fish and wildlife, such as predator control and habitat management, are the responsibility of and remain within the authority of the individual land management agencies. Predator control is the responsibility of these agencies BLM, USFWS, ADFG.
- The board regulates seasons and dates, methods and means, harvest limits, and customary & traditional use determinations for the subsistence take of fish and wildlife
- Closure Policy
 - The board proceeds on a case-by-case basis to address each particular situation regarding closures.

- The board will consider recommendations of the RAC's and consider comments and recommendations from the State and the public before making a decision.
- When fish and wildlife populations are insufficient for everyone to take them, non-federally qualified users will be restricted first, followed by federal subsistence users, and finally the whole harvest can be closed.
- Board must review closures every 3 years.
- Closure will end when the population can sustain a harvest.

Questions for Office of Subsistence Management, Chuck Ardizzone

- Hunting regulations under federal restrictions are fairly liberal (for predators).
- Submitting proposals to the board is very involved procedurally, so the average person is unlikely to be able to get their proposal before the board.
 - It is correct the process can look daunting, however anyone can submit a proposal to the Federal subsistence board, an individual, organization or the State
- The next board meeting is the 3rd week in May where 108 proposals will be addressed. However, moose proposals will probably be deferred until later based on the recommendations of the Bristol Bay RAC and the work we're doing here at the working group.

National Park Service, Ralph Moore, Superintendent of Katmai National Park and Preserve

- 4.6 million acres of NPS land in GMU 9
- Hunting is important in the preserves under NPS jurisdiction
- The media makes a lot out of animosity between federal and state agencies. However, despite differences in mandates, all the agencies are committed to seeking solutions for the public.
- NPS missions and mandates
 - There is great diversity in the lands governed by NPS, but missions and mandates are established broadly at a high level.
 - “Preserve unimpaired for future generations”
 - Management mandates must be reworked by individual park units to make the broad mandate applicable to the specific conditions present locally.
 - Katmai was established for preservation of unique geological features (Valley of Ten Thousand Smokes) and wildlife.
 - Protect populations and manage for natural processes. In general:
 - NPS does NOT manage for abundance of any one species.
 - NPS does NOT manage to suppress natural fires.
 - Congress gave preserves the same mandates as for parks except that the taking of wildlife is allowed on preserves for subsistence, trapping, and sport-hunting.
 - NPS works closely with ADFG and USFWS for surveys and data gathering.
 - NPS strives to preserve a continuation of natural processes on their lands.
- NPS does a lot of education with the Park visitors to expose them to the need for hunting and subsistence use of animals.
- Adjacent to Katmai National Park to the north is Katmai National Preserve, where hunting is allowed. The NPS manages both areas.

- NPS is working with the State to determine how to manage the western boundary of the park and make it more obvious to local folks where hunting is permitted and where it is not.
- IN CONCLUSION: It's not that one agency is right or wrong. There are just different mandates they have to operate under.
- EXAMPLE OF USER CONFLICT: Preserve is managed for bear-viewing and bear sport-hunting.
 - The 2 user groups have very different approaches to using the resource.
 - Ultimately though, both groups want to sustain high bear populations.
 - People will see things differently, but there is always common ground if you look for it.

Questions on Park Service Presentation, Ralph Moore

- Regulations for different areas within NPS lands will be different depending on a number of variables. (Katmai National Park is closed to hunting, but Katmai National Preserve and Lake Clark National Park and Preserve are open; this based on when the parks were established.) Both Lake Clark NPP and the Preserve portion of Katmai were established in 1980.)
- Does the park work with an AC? (No, but that would be a good thing to have.)
- For the Kamishak Special Use Area, was there a land swap between the state and NPS? (No, the swap did not take place and is no longer on the table.)
- Are there any collared wolves in Katmai? (No)
- USFWS QUESTION: Guides cannot exclude locals from hunting on their areas; they can only exclude other guides (on refuges).
- Guides in Katmai? (There are 2 concession contracts for hunting guides with permits to guide on NPS lands in the Katmai National Preserve.)

The following additional presentations were requested by Working Group members during the meeting and presented at the beginning of Day 2.

ADFG, Bear and NAP Caribou Herd Trends in 9E, Lem Butler

- NAP herd has fluctuated historically on approximately a 40-year interval.
 - Highs of 20,000 in 1920, 1940, 1980's (numbers from 1920 and 1940 are less quantifiable since they come from journals and anecdotal evidence).
 - The herd WILL fluctuate no matter how intensively we manage.
 - Only one place in Alaska (along the road network) has been able to reliably hold a caribou herd steady at 40,000 (Nelchina Caribou Herd). This would be impossible on the remote Alaska Peninsula.
 - When the herd gets to high population size, it becomes impossible to control the trajectory towards overexploitation of the habitat and an inevitable caribou crash.
 - Hunting was liberalized in the 1980's to try to increase harvest and limit herd size.
 - Herd didn't respond to high harvest until the mid-1990's.
 - Herd decline began and harvest was made more restricted.
 - The current low numbers are an artifact of the moose population exceeding the carrying capacity in the 1980's, which had negative effects on habitat, resulting in a lower moose numbers and poor nutrition..

- Given the biology of the population at the time, GMU managers had a reasonable response to try to maintain the resource for subsistence use (liberalizing harvest to stem population growth past carrying capacity).
- When population numbers are high, unreported/excessive harvest likely increases (surplus of animals + liberal season = some folks taking advantage or forgetting how many animals they harvested).
- Brown bears
 - Stream surveys were done at Black Lake in 9E for brown bears.
 - General positive trend through the 1990's and 2000's.
 - There's lots of anecdotal information on bear trends, but the stream surveys give us the best information.
 - Hunting was heavy in the 1960's and 1970's (both legally with guides and illegally by poachers).
 - The alternate year hunt strategy was employed in the 1970's when it was discovered that the harvest was so heavy.
 - The population has recovered to a more natural, multi-age structure and is viewed as a conservation success story.
 - We're trying to avoid an intensively managed permit hunt here as is in effect on Kodiak.
 - The peninsula has the largest bear hunt in the state.
 - If we lose the large bears and alternate year hunt, it is questionable how many hunters will want to come here and pay large fees to hunt in the region.
 - Densities are much higher on the Pacific side of the Peninsula, but GMU 9 does have high numbers of brown bears.

Questions addressed on Bear and NAP Caribou Herd Trends in 9E, Lem Butler

- Regarding caribou:
 - Calf: 100 Cow ratios are looking better currently.
 - Indices of nutritional quality of the habitat look promising compared to a few years ago (based on pregnancy rates and calf weights).
 - Poor summer range quality seemed to be limiting nutrition in the mid 2000's.
 - Body condition is average and has improved since 2005 though the NAP is worse off than other peninsula herds.
 - Predator control could increase the calf: 100 cow ratio, but it would have to be done at a much larger scale than for other peninsula herds (no concentrated calving grounds used by the NAP; calving is spread over a wide area).
 - Unfortunately, we lack a long term data set that used consistent monitoring techniques (monitoring took place historically, but we cannot compare old results to those of today with any confidence).
 - The sheer scale of the area and lack of local plane owners makes predator hunting/control by locals infeasible.
- Regarding bears:
 - If we do wolf predator control, how much will bears keep the moose population from increasing? (Bears take calves opportunistically when they encounter them, but they don't seem to be specializing on moose calves. You'd probably have to kill 60 bears to

- save the number of calves you'd save by shooting 1 wolf for caribou. This figure should play out similarly for moose. Wolves are simply more specialized as predators.)
- The bear population being so high will decrease caribou populations, moose populations, and increase public safety concerns. (The wolf population doesn't seem to be starving to death. Predator populations will regulate themselves based on the prey base. However, this is complicated by prey-switching and a decrease in caribou won't necessarily result in a wolf decrease. Public safety issue is separate from the moose issue and is better addressed through proper storage of attractants. Predator control of bears is logistically very difficult. Additionally, reducing bear numbers decreases the income they bring to the peninsula through hunting and bear-viewing.)
 - One gentleman saw 4 moose calves killed by a bear. (That's not surprising. It would be important to do a calf mortality study on moose. Just remember that bears are covering large areas searching for very diverse foods and the 4 moose calves mentioned were just in the wrong place at the wrong time.)
 - As communities start to clean up the bear attractants, DLP's disappear.

ADFG, Predator Control, Lem Butler

- Good to have a frank conversation of this issue.
- There are many facets to this issue and it is complex (even for ADFG).
- Lem doesn't have the data he needs to put together a predator control project for moose that would pass BOG.
 - Needs calf mortality study
- 90% of moose are on federal lands, so predator control may not have much impact.
 - Most of the good habitat for wildlife wound up in federal lands.
 - State land doesn't have great moose habitat.
- Predator control plans are in place for caribou
 - 9C
 - 9D
 - 9E
 - Unimak Island
- The state is mandated by intensive management regulation
 - Specific populations are identified as important for producing high yield for human consumptive use
 - This is true for moose in 9B, 9C, and 9E
 - Not 9A or 9D
 - Mulchatna caribou herd must be looked at more closely
- Lem is very limited in where he can apply calf mortality studies due to the high cost and complicated logistics involved (Currently finishing up study of SAP in 9D; trying to look at Mulchatna next).
- Predator control for caribou in 9E should help moose populations in 9E.
- 9C and 9E would be a predator control program where residents get special permits to shoot wolves. State employees would go in and shoot from aircraft to clean up.
 - Broad scale application over numerous years.

- This is how moose predator control would have to be done as well given their calving biology.
- Many calving areas are on federal lands, complicating predator control.
- We only want to do predator control when we can be sure we'll be successful/have enough data. If we are unsuccessful it gives fodder to anti-predator control activists and kills wolves for no reason.

Questions and comments addressed on Predator Control, Lem Butler

This question session resulted in a discussion about predator control as a tool for increasing moose harvest opportunities.

- Are there concrete plans in place to do predator control this year? (State implemented program down by Cold Bay will be done this spring.)
- How successful has the Cold Bay program been? (Amazingly successful. Small numbers of wolves were removed and there were great returns in calf survival. However it couldn't be applied in the same way in the northern part of the peninsula because of widely dispersed calving by the NAP.)
- What time frame are we looking at? (Bill – Getting the necessary paperwork through will take at least 2 years for cooperation on federal land.)
- Can I go onto refuge lands to trap and hunt? (Bill – Yes.)
- Could we put out a bounty on wolves? (Lem- The state can't, but private groups can.)
- Bill commented that he can put on trapping clinics and help locals harvest wolves on refuges. Aerial predator control, on the other hand, is very difficult to get approval for.
- With high fuel costs, a monetary incentive for hunting/trapping wolves could help.
- Geoff pointed out that a \$250,000 grant was awarded to a tribal council, one facet of this funding was utilized for wolf-trapping and maintaining traditional knowledge (potlatch).
- Can people get special use permits for bringing 4-wheelers onto the refuge? (Bill – Yes, 4-wheelers need special use permits. Also, snowmachines are allowed without a permit when there's snow cover. He just can't condone anything in violation with USFWS regulations.
- A subsidy program for trappers and hunters was part of a proposal put forward.
- Are private bounties legal? (Yes.)
- The state used to have someone offering trapping clinics. USFWS would like to help in that sort of educational respect.
- Can the state put up money for an incentive? (Lem – No, only for research. ADFG can pay trappers for wolves if there's a legitimate reason to collect biological samples for research.)

Identifying the Issues and Additional Data/Information Needs

The Working Group identified issues, grouped them into categories for efficiency in discussion and developing solutions.

Note: Numbers listed beside each issue are the result of a multi-dot assessment process used to designate the priority level for purposes of beginning the discussion. Highest number equals highest priority in order. Each participant was given four dots to place on the issue (or group of issues) of their choice.

Issues Identified

- [Perceived] lack of cooperation between agencies NPS, USFWS, ADFG [Field level people believe that cooperation is good on the ground.]
- Too many federal agencies with different mandates to manage resource
- Non-understanding by users of management plans, statutes and limitations of the plans
- Not enough funding for agencies to conduct management efforts they are responsible for
- Insufficient predator management and predator control in 9E
- Dwindling efforts by trappers and predator hunters
- (9)Problems with data collection of population and harvest: the way we are trying to get real numbers on a regular basis and always a problem of some kind, weather, funding, time and timing
- (6)Grouped together:
 - Not enough reporting information from harvest tickets – human management
 - Very little public participation in AC system (lack of trust in public process?)
- (5)grouped together:
 - Economics – high cost of fuel, method and means to go into field
 - Access issues for local people, such as availability of access in wintertime
 - Disparity between local observations and what is being reported
 - Lower moose population near the villages
 - Low density moose populations – not enough calves per cow
 - Lack of clarity on desired outcome
- (5)grouped together:
 - May not have common understanding of how much population can be expected to improve
 - Unknown if habitat is sufficient to sustain larger population of moose
- (4)Insufficient conservation education information
- (2)Grouped together:
 - Competition along river corridors where locals hunt
 - Lack of understanding of other user groups
 - Lack of agreement of what needs to be done by all users
 - Lack of trespass enforcement and weak trespass laws on private lands (Native Corp lands)
 - Lack of published information for public awareness of where private (Native Corp) lands are located
 - Perceived competition issue between nonresident, non locals coming into the areas
- (1)State biologists have hands tied where legislature mandates to manage Unit 9 for optimum brown bear harvest opportunities
- (0)Lack of acknowledgement of value and respect of Traditional and Ecological Knowledge (TEK)
- (0)Less meat being brought to villages due to dwindling number of nonresident hunters
- (0)Caribou population down resulting in more dependence on moose
- (0)Less resource with higher demand by sports, subsistence, recreations – user conflict

Data Needs Identified

- Understanding of how much moose population can be expected to increase(are expectations set too high)
- Requirement by legislature to manage Unit 9 for optimum brown bear harvest opportunities along with high densities
- Lack of conservation education among hunters- more data info to users/communities
- Less moose available than can support the demand by sport, subsistence, and recreational hunters – what is actual demand?

- Lower moose density near villages – may require more exact harvest/survey data
- Possible monitoring of browse available to determine if habitat could support increased population

Developing Ideas to Resolve Issues

The Working Group developed a list of ideas to resolve the issues based on their discussions in the group and from ideas they had brought with them from their representative user groups. The following is a list of their ideas.

Ideas for Solving the Issues (no order is implied, this is a brainstormed listing)

- TEK – biologists used to go into villages and deliver permits and talk with community members for a day about their observations in the area regarding population.
- Consider a registration permit system for moose. Intent of the registration permit is important – is it to keep non locals hunters out or to promote better harvest management.
- Community support for more funding to do surveys perhaps from local government or local community groups.
- Allow villagers or community members as passengers in survey planes to see the moose population themselves from the air and be additional eyes in the sky for counting purposes. The USFWS did something like this in the past that was a successful program.
- Togiak Moose Management Plan – the registration hunt was a very good one, but it involved a moratorium on hunting for a time period.
 - Private land specific registration hunt – instead of a fine for trespass, must have a registration permit
 - Look at mistakes made in other areas for input
- Unalakleet – did good work on their registration hunt (2 permit system-state and federal) including a newsletter that was very successful (Geoff Beyersdorf has copies).
- Support a wolf predation [management] program
 - Would need to determine if predation is by agencies or includes public hunters
- Bear predators – the state could allow local residents to utilize bear parts for sale to increase local desire for harvest take
- Trophy boar brown bear change management strategy to increase moose and caribou – liberalize bear hunting.
- Local governments look for alternative funding sources to help build their natural resources management capacity and infrastructure.
- Tie research projects into the local community so they can be benefited and invest in the work (i.e. educational outreach in schools)
- Adult education on moose population dynamics along with trapping workshops to get people more involved in managing the resource from their level
- Build infrastructure of local tribal entities to help with education.
- Put political pressure on USFWS to start the NEPA process for predator control
- Increase money for surveys through tribal grants
- Increase funding for ADFG to be put towards more surveying
- ADFG to increase staffing/Unit 9 is too much area for one biologist (there was a reminder note that an assistant area biologist has been hired)
- Increase the number of overall state wildlife staff in Unit 9 (there was a note here that the creation of the new Region IV for the state will do exactly that in the near future)
- Put in place predator control plans that have already been approved (Lem noted that there are predator control plans in place in 9C and 9E that are pending due to need for federal cooperation)

- Create websites with education on hunting and subsistence with NPS links for all parks. Important to emphasize education of users who don't understand management in Alaska (a note was made that the increase in wolves in the Lower 48 may help with this concept).
- Moratorium on hunting for a period of time such as has been done with success in other areas
- Newsletter to increase educational outreach

Recommendations

In addition to the ideas for solutions generated, which the agency representatives all took notes on to take back to their respective offices as suggestions, the Working Group reached formal consensus on the following recommendations:

1. Submit a proposal to the Board of Game/Federal Subsistence Board on utilizing a state registration permit for Unit 9. Joint state and federal registration.
 - Make sure the permit references where private lands are and what the penalties are for trespassing.
 - 2 permits
 - 1 general permit (in areas lacking conflict between user groups)
 - Permits available online as well as other locations.¹
 - 1 specific area permit (in areas where there is user group conflict)
 - Essentially, permits can be tailored by area to ease conflicts
 - Drafting of permits is based on Area Biologist's discretion
 - Bag limit, open season dates, hunter quotas, etc.
 - The registration permit is flexible enough that any communities that don't want to be involved won't be roped into it.
 - Local RAC's and AC's give input towards hunt details¹

Discussion Points

The following ideas were discussed by the Working Group members. These were not necessarily consensus items.

Create a registration hunt in Unit 9

- Must get permits out to user easily, including over the Internet
- Not meant to restrict users in GMU 9, may provide options for managing hunters in areas predominately on private lands without having to limit hunters on public lands where moose are lightly harvested.
- Will assist in gathering more accurate hunt/harvest data
- This will be simpler than community harvests
- Could focus on 9B as a starting point (this is an area of management distrust and build a relationship with locals)
- Need funding to make sure Lem can get to the communities to distribute permits (ADFG has lowest budget of all agencies), increases his ability to talk to local hunters and gather anecdotal information and build relationships
- Need support for funding requests
- Consider allowing a village entity to distribute permits
- Need to be able to distribute hunting license at same time as permit distribution

¹ The details of registration hunt administration and continuing public involvement were not fully developed during the meeting. There was some controversy following the meeting about how to articulate the outcomes in this report. These details remain unresolved.

- This could be a joint agency effort
- Determine who is eligible on federal land and coordinate state and federal hunting (look at Chignik area)
- Separate permits for various private lands
- Want result of registration hunt to be better education, better data, better hunting opportunity
- Post season report to ADFG from guides to include more anecdotal information
- Unit wide hunt
 - Strong language to encourage recipient to be aware of private lands and trespass penalties
- Find a way to show how this will increase the population to get local support
- 2 permits: 1 general permit (in areas lacking conflict between user groups) and 1 specific area permit (in areas where there is user group conflict [Especially in areas of private land ownership.]
- Permit Conditions would be based on Area Biologist's discretion; harvest quotas, season dates, permit availability, limit number of permits issued, etc. and the permit is flexible enough that any communities that don't want it won't feel forced into it.
- Local RAC's and AC's give input towards hunt details.
- RAC's should tie the suggestions back to proposals being sent to FSB in December

Education programs in GMU 9

Considerations discussed:

- Background information to the proposal to include the struggles of locals to harvest moose, and wolf predation as one issue
- Moose harvest conservation education GMU 9
- Newsletter to user groups
 - Predator/prey biology information including life cycles
 - Cow moose "wheel" diagram.
 - Sustained yield and harvestable surplus management
 - Survey methods
 - TEK and use
 - Predator control information
 - User articles
 - Mirror to ADFG newsletter in the Unalakleet area
- Build trust/relationships through education efforts in local rural schools by bringing in the different agency educational specialists; ADFG, NPS, USFWS
 - They will teach about some of the different issues identified by this user group and mold curriculum around local issues
 - Help education specialists to understand the concerns and the needs of the people in the communities they go to
 - Make sure educators themselves understand the value of hunting
 - Support young people in the villages to investigate become a guide as a way to address local economy issues
 - Encourage young people to be involved in resource management meetings
 - Educate about the importance of cow moose.
- Allow community members as passengers in survey planes to help them learn about the population status as see moose from the air
- NPS has a program already in the school in Naknek that could be looked at for more ideas
- USFWS has science camps

Trapping support and seminars

- Educate adults and youth through trapping seminars
 - ADF&G, NPS, USFWS

- Provide private support for trappers
 - Fuel Subsidies
 - Bounties
 - Trapping supplies
 - Funded through BBNA, APHA, Grants

Public Comments

Three individuals spoke during the public commenting session.

- Spencer Rearden (OSM)
 - Likes the direction taken with the registration hunt.
 - The RAC is still concerned over user conflict.
 - The registration hunt may not satisfy people in the villages who want more meat in their freezer and have the perception that nonresidents are harvesting moose in local areas.
 - How can we directly alleviate concerns over user conflict?
 - The registration hunt may not be enough to satisfy RAC's.
- Molly Chythlook (Bristol Bay Native Association and RAC chair)
 - This has been very educational because she is more familiar with GMU 17 than GMU 9.
 - What worked in 17A was done in the mid 1970's
 - Togiak was having the same problems as we've discussed here such as harvest of cows because people in the area were desperate for meat.
 - A task force was formed in Togiak.
 - People were given ownership of the resource through the management plan.
 - The resources grew under local management.
 - Both communities that were harvesting in Togiak were educated by the task force.
 - SUGGESTION: Develop management plans through the regional council.
 - Without the man-power to address trespassing issues, it's been ignored in Togiak.
 - Liked our discussion of respecting private lands through inclusion in the registration permits.
- Ted Krieg (Subsistence Division)
 - Started working with BBNA in 1992 and was ANILCA specialist.
 - There was a rural preference through the federal process and locals saw this as an opportunity to benefit their situation.
 - Has been involved with RAC from the beginning.
 - People as disconnected from the system.
 - There will always be a conflict between the state system and the federal system.
 - This working group process has been really good. A good start.
 - The dual-management issue will always be present.

Meeting Conclusion

Mark Burch and Chuck Ardizzone concluded the meeting by asking everyone present who was involved with a RAC or AC take the information generated at this meeting and present it to their councils to keep everyone informed and to help them with generating proposals. Chuck will take the information to the FSB and see that it is distributed to the RAC's. Mark said at this point it appeared another meeting will not be necessary since the participants were able to conclude their work at this meeting.

On behalf of ADFG, Mark will coordinate distribution of the meeting summary to everyone in the Working Group, to members not present, and the appropriate AC groups.

Everyone was thanked for their sincere participation and the meeting was adjourned.

UPDATE ON THE BROWN BEAR CLAW HANDICRAFT WORKING GROUP

The Brown Bear Claw Handicraft Working Group met on July 29, 2010 in Anchorage. Representatives of seven of the ten Regional Advisory Councils participated in person, and representatives of Eastern and Southcentral Regional Advisory Councils participated by teleconference. Staff from Alaska Department of Fish and Game and Federal agencies also attended. The meeting, chaired by Larry VanDaele with ADF&G and Helen Armstrong, OSM, was held in the OSM Board Room and lasted most of the day.

To begin with, discussion focused on a central question, namely, whether or not there is a need for changes to regulations that allow the sale of handicrafts that incorporate brown bear claws; and if so, can a regulation or regulations be developed that would be non-burdensome for subsistence users.

Other related questions had to do with existing laws or requirements that may affect subsistence users wanting to sell handicrafts that incorporate bear claws, including:

- CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement created to ensure that international trade in wild animals and their parts does not threaten the survival of the species worldwide. Although brown bears are not endangered in Alaska, they are listed as endangered in the lower 48 states of the U.S. and worldwide. Therefore, products from brown bears require CITES permits for international trade (as well as black and polar bears). Under CITES, both tag numbers and permits can be issued.
 - When a bear is sealed, a CITES tag number is attached to the bear hide.
 - A CITES permit is needed to take a handicraft that includes a brown bear part, such as a claw, into another country. To do that, a CITES tag number would need to be provided to a law enforcement officer to get a CITES permit (cost is \$25). This is the responsibility of the buyer, not the seller, unless the seller is exporting the item out of the country (in which case they are required to pay for an export license).
- Sealing of brown bears was also discussed; of particular concern was where bears could be sealed. The existing Federal regulations require modification to allow brown bears to be sealed in villages rather than regional centers. ADF&G representatives assured the Council members that subsistence users would not have to leave the community to get a bear sealed.

Following this discussion, the working group discussed options with regard to regulatory action to bring to the Federal Subsistence Board. The working group was in consensus that:

- Deferred Proposal WP08-05 should be rejected by the Federal Subsistence Board. State representatives at the working group meeting concurred that the Deferred Proposal WP08-05 should be rejected.
- A new proposal should be submitted. The new proposed regulation would require sealing the brown bear if the subsistence user intends to sell a handicraft incorporating the claw(s). A CITES tag number, which is provided when the hide is sealed, would then accompany the handicraft. The new proposal would be submitted by OSM staff.

- Further details regarding how a CITES tag number would accompany a handicraft (a certificate or sticker or some other mechanism) are being developed by staff. These details will be provided to the working group at a later date and will be included in the proposal when it is submitted.
- The proposed regulation would apply only to Federally qualified subsistence users who sell handicrafts incorporating brown bear claw(s). There would be no change for those who take brown bears, make handicrafts for personal use, and do not intend to sell such a handicraft.
- Further details for the proposed regulation still need to be developed addressing how the CITES tag number would accompany the handicraft as well as changes to the regulations regarding the ability to seal the hide in villages rather than regional centers. The working group reached consensus on the following language (additions are bolded). For Federally qualified subsistence users:

You may sell handicraft articles made from the skin, hide, pelt, or fur of a brown bear (including claws) taken from Units 1-5, 9A-C, 9E, 12, 17, 20, 22, 23, 24B (only that portion within Gates of the Arctic National Park), 25, and 26.

If you intend to sell a handicraft incorporating a brown bear claw(s), the hide must be sealed, which includes a CITES tag number. The CITES tag number must accompany the handicraft.

The analysis of this proposal will be presented to all Councils for their recommendations at the fall 2011 meetings, and will be considered by the Federal Subsistence Board at its January 2012 meeting.

QUESTIONS AND ANSWERS REGARDING THE BROWN BEAR CLAW HANDICRAFTS WORK GROUP

Why was this working group formed?

At the May 2008 Federal Subsistence Board meeting, the idea of a working group was suggested by the State as a way to address some of their concerns with Federal regulations that allow the sale of handicrafts that include brown bear claws. The Federal Subsistence Board endorsed the formation of a working group, and clarified that its membership needed to include representatives of the Regional Advisory Councils. The Federal Board also deferred action on a statewide proposal submitted by Alaska Department of Fish and Game (ADF&G) that addressed Federal regulations, pending the outcome of the working group.

What is the charge of the work group?

The draft charge of the working group was developed at a meeting of State and Federal staff in January 2009. The charge is as follows:

Develop a method(s) to recommend to the Federal Subsistence Board and the Board of Game for tracking brown bear claws made into handicrafts that is enforceable and culturally sensitive, commensurate with the need to provide conservation of this wildlife resource.

Who is in the working group and how often has it met?

The brown bear claws handicraft tracking working group includes representatives of the ADF&G, Alaska Wildlife Troopers, Office of Subsistence Management, US Fish and Wildlife Service, US Forest Service, and nine of the ten Regional Advisory Councils. Federal and state agency staff met five times between January and August 2009, but RAC representatives were only able to attend one of these meetings by teleconference (June 2009).

What is currently allowed under Federal subsistence regulations with regard to brown bear parts?

Under Federal subsistence regulations, Federally qualified subsistence users may sell handicraft articles made from the skin, hide, pelt or fur of a brown bear (including claws) taken from Units 1-5, 9A-C, 9E, 12, 17, 20, 23, 24B (only that portion within Gates of the Arctic National Park), 25 and 26. In Units 1-5, Federally qualified subsistence users may sell handicraft articles made from the skin, hide, pelt, fur, claws, bones, teeth, sinew or skulls of a brown bear taken in Units 1, 4 or 5. Raw claws may not be sold to anyone, including other subsistence users.

Will the working group change Federal Subsistence regulations?

Only the Federal Subsistence Board can change Federal subsistence regulations, and it is not the goal of the working group to rescind Federal regulations that allow for the sale of handicrafts that incorporate brown bear claws. The working group is looking for a non-burdensome way to track legally harvested claws that protects the artist, the buyer, and the resource, and is supported by the Councils.

If the working group can devise a way to track brown bear claws used in handicrafts, how would this protect subsistence users?

Illegally-harvested brown bears are resources that are being taken away from subsistence users. In some cases, poaching for bear parts is incorrectly attributed to legitimate hunters, unfairly affecting peoples' opinions of hunting and subsistence. Developing a mechanism to track legally harvested claws could protect handicraft makers by showing the claws that are used were legally harvested. It could also protect the buyer by developing a mechanism to document and track, which will allow buyers to legally import the handicrafts into other states and countries. This will protect the resource and enhance the value of legitimately obtained handicrafts by making the legal claws identifiably separate from the illegal claws on the market.

What are some of the concerns over the sale of brown bear claws in Alaska?

Although brown bear populations are generally healthy and productive in Alaska, this is not the case in other parts of the United States and the world. There is a demand for bear parts in foreign and domestic markets that poachers and traffickers fill by obtaining brown bears for their parts (primarily paws, claws and gall bladders) and shipping them to illegal markets. These illegal activities threaten populations of brown bears in other parts of the US and world and could eventually affect Alaskan bear populations.

What drives the illegal trade in brown bears and their parts?

Prices for individual claws are highly variable. There have been reports of brown bear paw soup costing \$800 per bowl in Asia, and brown bear claw necklaces costing over \$3,000. These high prices drive the trade in illegal brown bear parts. In the past ten years, agents from US Fish and Wildlife Service and the Alaska Wildlife Troopers have documented over 150 cases where they have found dead bears with

only the claws, paws or gall bladders removed. These cases do not reflect findings by other enforcement agencies that have different ways of organizing individual cases. Illegal harvests are considered poaching and are not reflective of the legal harvests of subsistence users.

What options are there for tracking claws?

The Brown Bear Claw Working Group is looking at existing programs that track animal parts in different countries using such mechanisms as tags, seals, stickers or permits that stay with the animal part. While a technical solution such as individually identifiable microchips inserted in each claw would be possible, such marking and tracking is not wide spread, and such marking of individual claws might not be effective on a global scale.

Would it work to have documentation for claws?

We think so, as long standing programs for other resources have worked. CITES (Convention of International Trade of Endangered Species) has an established and successful documentation and tracking program to track the legal and illegal movement of threatened or endangered species. Alaska brown bears are already protected under CITES and between 1975-2003, there were over 6,500 reports of legal brown bear claw exports.

To take advantage of this program, the Federal Subsistence Management Program could use the existing ADF&G procedures for sealing when the hunter plans on using the claws for making a handicraft to sell in the future. The existing ADF&G procedures is to attach a CITES tag to the bear hide when the bear is sealed. The appropriate forms to document and track brown bear claws taken by Federally qualified subsistence users could be incorporated into the sealing process when the hide is sealed, thereby minimizing paperwork and burden on the hunter. A numbered sticker or permit could then be issued and would stay with the handicraft as proof the claws came from a legally harvested Alaskan brown bear. The Federal government manages CITES permit distribution.

The handicrafts made from brown bear claws legally harvested in Alaska by Federally qualified subsistence users should be distinct from all other sources of brown bear claws to identify that the handicrafts came from sustainably managed bear populations and from Federally protected Alaskan subsistence users. This will protect the resource and enhance the value of legitimately obtained handicrafts. Possession of a CITES permit would allow the buyer to legally take brown bear claw handicrafts into other countries.

In which units is sealing of brown bear currently not required?

Sealing brown bear skins and skulls harvested by Federally qualified subsistence users on Federal public lands is not required (unless you remove the skin or skull from the unit) in Units 5, 9B, 17, 18, portions of 19A, 19B (downstream of and including the Aniak River drainage), 21D, 22 (except 22C), 23 (except the Baldwin Peninsula north of the Arctic Circle), 24, and 26A. *These are the only units or portions of units where new sealing requirements would have an effect, and only when the intent is to sell the brown bear claw handicraft.*

In which units would the proposed regulation have no effect?

The proposed regulations would have no effect on those units where sealing is already required. These units are: 1-4, 6-8, 9A, 9C—9E, 10-16, portions of 19A, 20, 21A—C, 21E, 22C, 25, 26B and 26C.

BRIEFING ON THE NEW FEDERAL SUBSISTENCE PERMIT SYSTEM

The Federal Subsistence Management Program issues permits to Federally qualified subsistence users where specified in regulations.

- Recognizing limitations of the existing system, beginning in February 2010, a new Federal Subsistence Permit System (FSPS) was developed and the wildlife harvest component was brought on line in mid-April.

OSM staff undertook the project to improve efficiencies by:

- Building the latest security measures into the new FSPS in order to protect personal information of permit holders as well as the integrity of the harvest data
- Allowing for in-season tracking of harvests, thereby allowing for more responsive in-season management and conservation of species
- Standardizing terminology and improving accuracy of the issued permits and also harvest reporting data subsequently entered and managed within the system
- Allowing Federal managers to generate tailored, functional reports to provide staff biologists and anthropologists with solid basis for subsequent regulatory analyses and actions
- Streamlining the process of issuing permits to Federally qualified users, as well as tracking the returns of the harvest information reports.

Since April, OSM personnel have trained more than 96 Federal agency staff how to issue permits using the new system

- More than 3,200 permits have been issued since then

Feedback from users is overwhelmingly positive:

- Public users – much quicker process to receive permits, less time waiting in line
- Agency staff – far more useful than before

What's in store for the future?

- The fisheries management component of the permit system is under development and is expected to be available for use in the 2011 season.
- Web based harvest reporting

UPDATE ON SALMON BYCATCH IN THE BERING SEA/ALEUTIAN ISLANDS POLLOCK FISHERY

Chinook Salmon Bycatch Management

- Consistent with the briefing provided to the Regional Advisory Councils in Winter 2010, the rulemaking process was concluded on the Chinook salmon bycatch issue in the Spring of 2010.
- Bycatch limits established for Chinook salmon were 60,000 if the fishery participants form one or more incentive plan agreements, or 47,591 if there are no incentive plan agreements. Full details of the Record of Decision can be found at: http://alaskafisheries.noaa.gov/sustainablefisheries/bycatch/salmon/chinook/feis/amd91rod_0510.pdf

Chum Salmon Bycatch Management

- June 2010: In Sitka, the North Pacific Fishery Management Council (NPFMC) finalized management alternatives for staff analysis.
- June-December 2010: Preparation by NPFMC staff of the analysis for preliminary review.
- Mid-January 2011: Preliminary review draft to be available.
- Early-February 2011: In Seattle, NPFMC to review preliminary data/analysis.
- February-March 2011: NPFMC members and staff plan to attend five Federal Subsistence Regional Advisory Council meetings, give presentations on the proposed chum salmon bycatch management measures and solicit public comments.
- June 2011: In Nome, the NPFMC to select the preliminary preferred alternative, which must be within the range of alternatives analyzed.
- October 2011 (tentative): In Anchorage, NPFMC final action to select final preferred alternative, which will be provided to the Secretary of Commerce for decision. Rule making process to follow.
- January 2012 (tentative): Chum salmon management measures implemented in the Bering Sea/Aleutian Islands Pollock fishery.



IN REPLY REFER TO:

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Togiak National Wildlife Refuge
P.O. Box 270
Dillingham, Alaska 99576
Phone 907-842-1063
Fax 907-842-5402

INFORMATION BULLETIN - August 2010

***Variation in Salmon Abundance Over the Past 3-5 Centuries* Contact: Pat Walsh**

In 2006 Togiak Refuge and the University of Washington Fisheries Research Institute began a project to investigate changes in salmon abundance within Togiak Refuge watersheds over a time frame that extends far enough back in time to capture the natural variation caused by non-human factors. This project will relate the abundance of salmon to the commercial harvest and other factors. It will also relate changes in salmon abundance to changes in aquatic productivity, and determine how these relationships change across the landscape of the Togiak Refuge. Sediment cores have been collected from 16 lakes. Final analysis and report are underway. A progress report is available by contacting Togiak Refuge.

***The Roles of Alder and Salmon in Driving Aquatic Productivity* Contact: Pat Walsh**

In 2010, Togiak Refuge, the University of Illinois, and the University of Washington began a project to determine the relative role of salmon and alder in controlling productivity in lakes. Both salmon and alder contribute nutrients to lakes: salmon do so via decomposition of carcasses after spawning, and alder does so through nitrifying the soil, and by mobilizing soil nutrients which would otherwise be biologically inaccessible. This project will measure the contribution of nutrients from both sources by analyzing water samples from thirteen Refuge lakes over a four year period. The information that will come from this project will help salmon managers better understand the ecological consequences of harvest. In summer 2010, we installed water sampling equipment in all lakes and collected the initial water samples from each.

***Cooperative Salmon Escapement Monitoring Projects* Contact: Mark Lisac**

Togiak Refuge will again provide support to the Native Village of Kwinhagak (NVK) and ADF&G to operate salmon escapement monitoring projects (weirs) on the Kanektok (KRW) and Middle Fork Goodnews Rivers (MFGRW).

On the Middle Fork Goodnews River, ADF&G has monitored Chinook, chum and sockeye salmon escapement since 1980. Escapement goals and management of the commercial fishery are based on salmon escapement at the weir. Togiak Refuge has worked with ADF&G since 1992 to include the coho salmon and Dolly Varden runs in the project operation. ADF&G, Togiak Refuge and the Office of Subsistence Management (OSM) fund the project operation. This weir project also uses an underwater video system which allows the weir to be opened to salmon passage more hours a day. Use of motion sensors and digital recording video can improve fish counting accuracy, especially during periods of high water and poor visibility. The MFGRW began operation on 25 June and is scheduled to continue until 18 September.

On the Kanektok River, ADFG, NVK and Togiak Refuge worked cooperatively to monitor salmon and

Dolly Varden runs since 2001. This project is currently funded by OSM and Coastal Villages Region Fund. Escapement goal ranges have not been established for the Kanektok River because the weir has not been operational for enough years. This weir was operated for 28 June to 5 August so it no longer provides an estimate of coho salmon escapement.

Preliminary escapement counts for 2010 for these two projects are:

	Chinook	Sockeye	Chum	Coho	Pink	Dolly V.
MFGRW	1,724	34,498	22,955	5,597	3,306	3,573
KRW	5,703	200,483	60,640	330	106,459	43,221

Dolly Varden Life History Studies Contact: Mark Lisac

In 2010 the Refuge continued to work with ADF&G at the Middle Fork Goodnews River (MFGRW) and Kanektok River (KRW) weirs to monitor the annual Dolly Varden run. The purposes of this project are to make long term comparisons between annual spawner abundance and monitor the status of the individual populations. Preliminary numbers indicate that over 3,500 and 43,000 Dolly Varden were counted at the MFGRW and KRW, respectively. These are phenomenally large runs when compared to the long term average size runs. Several hundred Dolly Varden are marked at the weir each year. Fishers throughout western Alaska are requested to report any capture of these marked fish. The information from these observations will help to piece together the life history and travels of these unique fish. Reports of the findings from these various studies are available by contacting the Togiak Refuge office or on the FWS web site <http://alaska.fws.gov/fisheries/fish/reports.htm>

Rainbow Trout Population Identification Contact: Pat Walsh

Togiak Refuge, ADF&G Sport Fish, and the Conservation Genetics Laboratory are working together to inventory populations and determine the genetic relationships between populations of rainbow trout throughout Togiak Refuge. Archived genetic material collected from previous investigations were inventoried and assessed for suitability in the current study. A collection plan for unsampled populations was completed and new tissue collections began in the Goodnews, Kanektok, Igushik, Snake, and Wood River watersheds in summer 2009. A collection trip occurred in the Indian River in summer 2010, but no rainbow trout were encountered. It is anticipated that this project will occur through 2014.

Kanektok River Rainbow Trout Population Identification Contact: Mark Lisac

In 2009 the Refuge, Kenai Fish and Wildlife Field Office and ADFG Sport Fish Division implanted radio transmitters in 200 rainbow trout in the Kanektok River. The purpose of this study is to identify the geographic extent of the population and specifically to document these fishes' overwintering locations, seasonal movements, and to locate potential spawning areas. Twenty aerial tracking flights have been conducted between August 2009 and August 2010. These fish will be tracked until August 2011. Fishers are asked to contact the Refuge office if they recover any radio tags.

Chinook Salmon Escapement In The Togiak River Watershed Using Radio Telemetry Contact: Theresa Tanner (Anchorage Fish & Wildlife Field Office)

In 2010 the Anchorage Fish and Wildlife Field Office is completing the third year of a six year study to determine Chinook salmon run timing, distribution and abundance in the Togiak River watershed. Over 200 Chinook salmon were captured and implanted with esophageal radio transmitters. Movements and final spawning destinations of radio-tagged Chinook salmon has been documented using a combination of five fixed data-logging receiver stations, and four aerial or numerous ground-based mobile tracking surveys. A weir was placed on the Gechiak River tributary and has counted 284 Chinook, 5 of which had radio tags by the end of July when high water shut down the weir for six days. The known number of Chinook salmon past the Gechiak River weir will be used to extrapolate an escapement estimate for the entire Togiak drainage. This project is currently funded by OSM until 2012. Fishers are asked to contact the Refuge office if they recover any radio tags.

Determining Aquatic Habitat Quantity and Quality Contact: Mark Lisac

The Refuge is currently working with the UAF School of Fisheries and Ocean Science, and the U.S. Geological Survey developing a project to estimate the quantity and quality of aquatic habitat in the Kulukak River watershed. Satellite and airborne multispectral digital imagery were captured during May 2010 and will be again in October 2010. This imagery will be used to assess habitat quality and quantity for juvenile salmon in the watershed. Habitat classification will be determined using field-collected data on in-stream physical habitat features, water chemistry, and juvenile salmon abundance and distribution. Over 2,000 juvenile coho and sockeye salmon were captured during July 2010. A juvenile salmon and habitat relationships model will be developed. This model will be used to estimate habitat carrying capacity for salmon and serve as a baseline for monitoring habitat changes within the context of ongoing climate change. This project will result in the completion of MS Fisheries degrees for two UAF graduate students.

Mulchatna Caribou Contact: Andy Aderman

Togiak Refuge assisted ADF&G with telemetry monitoring flights, radiocollar deployment, satellite data acquisition, data entry and database management. Primary calving areas in 2010 were near Lime Village (Unit 19A) and the mid-Nushagak River area (Unit 17C) similar to the past several years. Caribou were also observed calving in the Heart Lake area (Units 17B and 18). Caribou did not group up sufficiently after calving to conduct a photocensus. A composition survey is planned during October 2010.

Nushagak Peninsula Caribou Contact: Andy Aderman

Due to inadequate snow cover, a population count of the Nushagak Peninsula Caribou herd was not conducted during the 2009-10 winter. After meeting with the Nushagak Peninsula Caribou Planning Committee, 20 permits were issued for a hunt during the 2010 winter season and 18 caribou were harvested. In May/June, a minimum of 21 of 28 (75%) adult cows 3-years-old or older produced a calf. A photocensus in July 2010 found a minimum of 708 caribou, up slightly from the 679 counted from the June 2009 photocensus. A composition survey is planned during October 2010. The Nushagak Peninsula Caribou Planning Committee plans to meet in November to review the biology and management of this herd.

Wolf Predation on Nushagak Peninsula Caribou Contact: Pat Walsh

Using radio telemetry, Togiak Refuge and ADF&G are investigating the seasonality and duration of wolf use of the Nushagak Peninsula, in order to assess whether predation is a likely factor in driving population dynamics of Nushagak Peninsula caribou. From 2007 through 2010, we placed conventional and GPS radio transmitters on wolves from two packs located within 30 km of the Nushagak Peninsula. Tracking flights have been flown monthly to locate wolves and to download location data from the GPS collars. Preliminary data indicates that one of the two packs used the Nushagak Peninsula approximately 40% of the time during the period March--January, with the majority of time spent there in the fall. Summers were spent primarily off the Nushagak Peninsula, and diet appeared to focus on salmon. Winter and spring was also spent primarily off the Peninsula, and diet appeared to be focused on moose. Little wolf activity occurred on the Peninsula during or soon after caribou calving, which is a time when caribou are more susceptible to wolf predation. We will continue to assess the use of the Nushagak Peninsula by wolves.

Moose Contact: Andy Aderman

During March 2010, Refuge staff counted only one moose in the Kanektok and Arolik River drainages (southern Game Management Unit 18), however, six moose were observed in this area earlier in the winter. No other moose population surveys were conducted in other areas of Togiak Refuge due to inadequate snow cover. In May/June, 26 of 36 radiocollared adult cows produced a minimum of 45 calves (125 calves per 100 cows). Twinning rate in 2010 was 73.1 percent, up from the long term average of 63 percent. Since 1998, calf survival rates to fall have averaged 0.498 and annual adult survival rates have

averaged 0.890.

Walrus Contact: Michael Winfree

Refuge staff monitor numbers of walrus that haul out on land at various locations on Togiak Refuge. Peak haulout counts over the past two decades have varied greatly, from less than 100 to over 12,000. Surveys occurred at Cape Peirce, Cape Newenham and Hagemeister Island from October 2009 through August 2010. Observed walrus numbers at Cape Peirce ranged from 0- 2,697, Hagemeister Island ranged from 0- 1,500, and 0 walrus were observed at Cape Newenham.

On October 28, 2009, 118 dead walrus were observed at Cape Peirce. The cause of death was attributed to trauma from falling off the cliffs. The camp at Cape Peirce was opened on November 6 through November 29, 2009. During that time, a tarp fence designed to prevent walrus from climbing into the uplands at the Cape was erected. The camp will be in operation from September 20 through November 15, 2010 to prevent walrus from traveling into the uplands.

Seals Contact: Michael Winfree

Togiak Refuge seal haulouts at Nanvak Bay were surveyed 8 times from October 2009 -August 2010. The observed seal numbers ranged from 0-275. Seal haulouts on Hagemeister Island were surveyed seven times, with 0 seals observed.

Steller Sea Lions Contact: Michael Winfree

Three aerial surveys of the Steller sea lion haulout at Cape Newenham were conducted from October 2009- August 2010, resulting in counts ranging from 0-157 animals.

Seabirds Contact: Michael Swaim

Togiak National Wildlife Refuge has monitored seabird populations at Cape Peirce from 1980 through 2010, making this one of the longest continuously studied seabird colonies in Alaska. During this time, pelagic cormorant populations have remained relative constant, while black-legged kittiwake and common murre populations declined by 1.5% and 1.7% per year respectively. The data provided by this study are not only useful for tracking changes in populations at the local and regional level, but this information is also useful for monitoring climate-driven changes within the Bering Sea.

Eelgrass Monitoring Contact: Michael Swaim

In 2010, the USGS Alaska Science Center, in corporation with Togiak Refuge, completed a series of boat-based eelgrass surveys in Goodnews Bay, Chagvan Bay, and Nanvak Bay as part of a larger multi-year project. A series of water temperature sensors were also deployed in Nanvak Bay. The information which has been collected to date will be used to develop a biological baseline as part of a broad multi-refuge initiative to monitor eelgrass throughout the region, since eelgrass play an important role in the health and productivity of many fish, waterfowl, and invertebrate species.

Water Temperature Monitoring Contact: Michael Swaim

Staff at Togiak Refuge collected water temperature data at sixteen sites across the refuge for the ninth consecutive year in 2010. The data collected at these monitoring locations contain high levels of variability, reflecting the dynamic nature of these river systems. We found no statistically significant trend in water temperature at any site, although the maximum range of variability declined at many locations, with summer highs becoming cooler and winter lows warmer on average. The refuge plans to continue monitoring water temperatures indefinitely, since this study provides information that is useful to a variety of other studies, ranging from the evaluation of fish growth to tracking long-term environmental change.

Quantifying River Discharge Contact: Michael Winfree

Togiak Refuge and the USFWS Water Resources Branch have worked cooperatively since 1999 to acquire

baseline hydrologic data of the flow regime (magnitude, duration, timing, frequency, and rate of change) and water quality. A network of stream discharge gauges collected stream flow data from 1999-2005 at 20 locations. A subset of five of these stations continued to collect data through fall 2009, after which three of the five stations were removed. We will continue indefinitely to monitor discharge in the Togiak and Kulukak Rivers. Each gauge is instrumented with pressure sensors that measure and store water level every 15 minutes.

Salmon River Water-Quality Contact: Michael Winfree

The Salmon River drainage, just south of Platinum, has been the site of a placer mine since the 1930's. Major production by the Goodnews Bay Mining Company stopped in 1976. The mine was sold to Hanson Industries in 1980, who in turn sold it to XS Platinum in 2007. In the summer of 2009, re-mining of the old tailings began. In September 2009, Togiak Refuge installed a continuous water-quality gage on the Salmon River. The gage monitors pH, turbidity, specific conductivity, dissolved oxygen, temperature, and depth. The gage runs continuously, taking a reading every 15 minutes.

Education and Outreach Contact: Allen Miller

Togiak Refuge has an active education and outreach program including the Migratory Bird Calendar and Junior Duck Stamp contests; National Wildlife Refuge Week and National Fishing Week activities; career fairs; production of Bristol Bay Field Notes, aired three times weekly on KDLG; and numerous classroom presentations in 12 villages in the Southwest Region, Lower Kuskokwim, and Dillingham City school districts. Field trips with area students in 2009-2010 included bird walks, pond life investigations, bear safety, and plants. The refuge website is also a valuable education tool and is available at <http://togiak.fws.gov>. The refuge partners with others to conduct three environmental education camps described below.

Southwest Alaska Science Academy Contact: Terry Fuller

The Refuge helped with the 9th year of a summer camp aimed at teaching middle and high school students about fisheries science and the importance of salmon to our ecosystem. Students were selected from the Bristol Bay region. During the camp students worked in the field alongside fisheries professionals. Cooperators with the refuge on this project included the Bristol Bay Economic Development Corporation, Bristol Bay Science and Research Institute, University of Alaska, University of Washington School of Fisheries, the Dillingham City and Southwest Region school districts, and the Alaska Department of Fish and Game.

Togiak Lake Environmental Education Contact: Terry Fuller

This camp has been conducted over the past three summers as an alternate camp to the Cape Peirce Marine Science and Yup'ik Culture Camp, the status of which has been put on hold by high bear numbers at Cape Peirce. Students who participated at the 3th annual Togiak Lake camp learned about salmon migrations and population monitoring from Alaska Fish and Game staff members at the Togiak River counting tower. Students also participated in a number of outdoor based activities (such as archery, identifying and plaster casting animal tracks, outdoor survival skills and birding). Students were also exposed to practices such as Catch and Release angling and Leave No Trace camping principals. An overriding theme for the camp was to strengthen an individual sense of stewardship for local natural resources. Traditional councils and school districts from throughout western Bristol Bay are cooperators with this camp.

Summer Outdoor Skills and River Ecology Float Camp Contact: Terry Fuller

Students learned about river ecosystems and how to enjoy them safely and responsibly while taking part in a float trip conducted on a refuge river. Students observed and learned about the many fish, wildlife and plant species found on refuge rivers and streams. Rafting skills, water safety, different angling practices (Catch and Release), Leave No Trace camping practices and bear safety were topics during the trip.

Students also participated in other outdoor activities such as animal tracking (plaster casting tracks) and archery. This program helps students understand the biological diversity of riparian ecosystems and the importance of salmon as a nutrient source, while developing a deeper sense of stewardship for local natural resources. Traditional councils and school districts from throughout western Bristol Bay are cooperators with this camp.

River Ranger Program Contact: Allen Miller

The Refuge River Ranger Program was conceived during the public use management planning process and was first implemented in 1991. The program serves many purposes. River Rangers are the main contact source for sport fishermen and local residents. Information distributed to the public includes Service policies, regulations, resource management practices, State sport fish regulations, bear safety, wilderness ethics, Leave-No-Trace camping, and information about private lands to prevent trespass. Rangers document public use occurring on the river along with the location and timing of activities, conflicts between users, and sport fish catch/harvest per unit effort. Rangers also assist Refuge and ADF&G staff at the Kanektok River and Middle Fork Goodnews River weirs, and assist Refuge staff with biological studies. In addition, Rangers patrol campsites for litter, monitor compliance of sport fishing guides, and offer assistance as needed.

Two River Rangers were stationed in the village of Togiak during summer 2010 and patrolled the Togiak River several times each week. Two River Rangers were also stationed in Quinhagak and patrolled the Kanektok River several times each week. All four rangers were residents of the villages where they were assigned. Two River Rangers stationed out of Dillingham patrolled the north and middle forks of the Goodnews River. Rangers on the Kanektok and Goodnews rivers used inflatable kayaks in addition to motorboats (which have been used since the program started). Use of kayaks allowed rangers to access the entire length of the Kanektok and Goodnews rivers, which are inaccessible to power boats during most water levels.

Winter 2011 Regional Advisory Council Meeting Calendar

February 15–March 24, 2011 current as of 08/02/10

Meeting dates and locations are subject to change.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<i>Feb. 13</i>	<i>Feb. 14</i>	<i>Feb. 15</i> <i>Window Opens</i>	<i>Feb. 16</i>	<i>Feb. 17</i>	<i>Feb. 18</i> NWA—Kotzebue	<i>Feb. 19</i>
<i>Feb. 20</i>	<i>Feb. 21</i> HOLIDAY	<i>Feb. 22</i>	<i>Feb. 23</i> YKD—Bethel	<i>Feb. 24</i>	<i>Feb. 25</i>	<i>Feb. 26</i>
<i>Feb. 27</i>	<i>Feb. 28</i>	<i>Mar. 1</i> EI—Tanana WI—Galena	<i>Mar. 2</i>	<i>Mar. 3</i>	<i>Mar. 4</i>	<i>Mar. 5</i>
<i>Mar. 6</i>	<i>Mar. 7</i> NS—Barrow	<i>Mar. 8</i>	<i>Mar. 9</i> BB—Naknek	<i>Mar. 10</i>	<i>Mar. 11</i>	<i>Mar. 12</i>
<i>Mar. 13</i>	<i>Mar. 14</i>	<i>Mar. 15</i>	<i>Mar. 16</i> SC—Anchorage	<i>Mar. 17</i>	<i>Mar. 18</i>	<i>Mar. 19</i>
<i>Mar. 20</i>	<i>Mar. 21</i>	<i>Mar. 22</i> SP—Nome SE—Sitka K/A—Kodiak	<i>Mar. 23</i>	<i>Mar. 24</i> <i>Window Closes</i>	<i>Mar. 25</i>	<i>Mar. 26</i>

Fall 2011 Regional Advisory Council Meeting Window

August 30–October 15, 2011 current as of 08/04/10

Meeting dates and locations are subject to change.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<i>Aug. 21</i>	<i>Aug. 22</i> WINDOW OPENS	<i>Aug. 23</i>	<i>Aug. 24</i>	<i>Aug. 25</i>	<i>Aug. 26</i>	<i>Aug. 27</i>
		NS—TBA				
<i>Aug. 28</i>	<i>Aug. 29</i>	<i>Aug. 30</i>	<i>Aug. 31</i>	<i>Sept. 1</i>	<i>Sept. 2</i>	<i>Sept. 3</i>
<i>Sept. 4</i>	<i>Sept. 5</i> HOLIDAY	<i>Sept. 6</i>	<i>Sept. 7</i>	<i>Sept. 8</i>	<i>Sept. 9</i>	<i>Sept. 10</i>
<i>Sept. 11</i>	<i>Sept. 12</i>	<i>Sept. 13</i>	<i>Sept. 14</i>	<i>Sept. 15</i>	<i>Sept. 16</i>	<i>Sept. 17</i>
<i>Sept. 18</i>	<i>Sept. 19</i>	<i>Sept. 20</i>	<i>Sept. 21</i>	<i>Sept. 22</i>	<i>Sept. 23</i>	<i>Sept. 24</i>
<i>Sept. 25</i>	<i>Sept. 26</i>	<i>Sept. 27</i>	<i>Sept. 28</i>	<i>Sept. 29</i>	<i>Sept. 30</i> <i>END OF FY2010</i>	<i>Oct. 1</i>
<i>Oct. 2</i>	<i>Oct. 3</i>	<i>Oct. 4</i>	<i>Oct. 5</i>	<i>Oct. 6</i>	<i>Oct. 7</i>	<i>Oct. 8</i>
<i>Oct. 9</i>	<i>Oct. 10</i> HOLIDAY	<i>Oct. 11</i>	<i>Oct. 12</i>	<i>Oct. 13</i>	<i>Oct. 14</i> WINDOW CLOSSES	<i>Oct. 15</i>