Welcome to the Local Knowledge, Traditional Knowledge, and Subsistence Taskforce meeting!

- Please remember to mute your phone or computer when you are not speaking.
- Taskforce members may choose to turn on their webcams. Members of the public are asked to leave their webcams off.
- Public testimony will be taken at the end of the day.
- For individual tech support, email **npfmc.admin@noaa.gov**

Local Knowledge, Traditional Knowledge, and Subsistence Taskforce

Meeting 4
March 16, 2021

Co-chairs:
Sarah Wise
sarah.wise@noaa.gov and
Kate Haapala
kate.haapala@noaa.gov

Welcome!

- Introductions

- Review agenda

- Questions, comments, reflections

Reminder of Taskforce Goals and Objectives

Leads: Kate and Sarah

Taskforce Goals

Goal 1: To create processes and protocols through which the Council can identify, analyze, and consistently incorporate TK and LK, and the social science of TK and LK, into Council decision-making processes to support the use of best available scientific information in Ecosystem-based Fishery Management (EBFM).

Goal 2: To create a protocol and develop recommendations through which the Council can define and incorporate subsistence information into analyses and decision-making.

Taskforce Objectives

- **Objective 1**: Identify and define sources of LK and TK, and the social science of LK and TK, to support the use of best scientific information available in Council decision-making.
- **Objective 2:** Provide guidance and analytical protocols to the Council on how to evaluate and analyze LK and TK, and the social science of LK and TK.
- **Objective 3:** Provide guidance on how LK and TK, and the social science of LK and TK, could be incorporated into Council decision-making processes.
- **Objective 4:** Identify the relevant and appropriate sources of subsistence data and information to use in Council decision-making processes.
- **Objective 5:** Provide guidance on how subsistence data and information can be incorporated into Council decision-making processes.

Update on Recent Council Activity and Actions

Leads: Kate

Update from Kate

- Presentation to SSC and Council in February 2021
  - *Feedback was positive, supportive of work going forward*

- Presentation to Social Science Planning Team (SSPT) March 2021
  - *Feedback was positive, some members interested in knowing how SSPT may interact with, and support, Taskforce moving forward*

- Community Engagement Committee - Final recommendations and Council action

Community Engagement Committee

Members:

Simon Kineen (Chair)
Mellisa Johnson
Jennifer Hooper
Robert Keith
Marissa Merculieff
Tom Panamaroff
Rob Sanderson
Becca Robbins-Gisclair
Theresa Peterson
Nicole Kimball
Steve Maclean, Council staff

- Authorized by NPFMC in 2018
- Formed after request from the public to improve engagement between rural and Alaska Native communities and Council
- Process to augment Council's outreach
- Not intended to carry out engagement

SUMMARY OF COUNCIL ACTION

1. Provide cultural awareness training for Council members and Council staff

2. Executive Director shall assign responsibilities of a Rural Fisheries Community/Tribal Liaison position to staff

3. Continue and reconstitute the Community Engagement Committee

4. Explore ways to improve opportunities for public testimony, including allowing remote testimony

5. Clarify the Council process to allow any member of the public to waive questions by the Council during public testimony

6. Review Council requirements in the SOPPs and additional IT requirements support holding in-person meetings in rural, Alaska Native villages that meet these requirements

7. Work with NMFS to receive and understand results of Tribal Consultation meetings as early in the process as possible, preferably prior to Council final action

8. Continue current outreach practices, including the new practices implemented after initial CEC recommendations, and continue to explore ways to improve information delivery and strategies to foster two-way engagement

9. Support LKTKS Taskforce

Search Engine and Narrative Sources of Data

Lead: Kate

Section Purpose

During this agenda item, Taskforce members will receive a brief update on recent work for the search engine and narrative sources of data

Taskforce members are encouraged to ask questions

Taskforce members are encouraged to provide feedback on search terms, citations in the masterfile bibliography, and narrative sources of information

Search Engine - Reminder of Purpose

How can the Taskforce develop processes for identifying and defining sources of LK, TK, the social science of LK and TK, and subsistence information (Goal 1 and 2, Objective 1 and 4)?

- Identified preliminary sources of published or publicly available papers and reports related to LK, TK, or subsistence
  - Bibliography was sent out in advance of meeting & is posted to e-Agenda
- This tool will:
  - Help the Taskforce to gauge the usefulness of certain protocol components, and
  - Provide a useful resource to staff, agency partners, the Council, and the public

When the fish come, we go fishing:
Local Ecological Knowledge
of Non-Salmon Fish Used for Subsistence
in the Bering Strait Region

Subsistence Use and Knowledge of
Salmon in Barrow and Nuiqsut, Alaska

Principal Investigator
Courtney Carothers
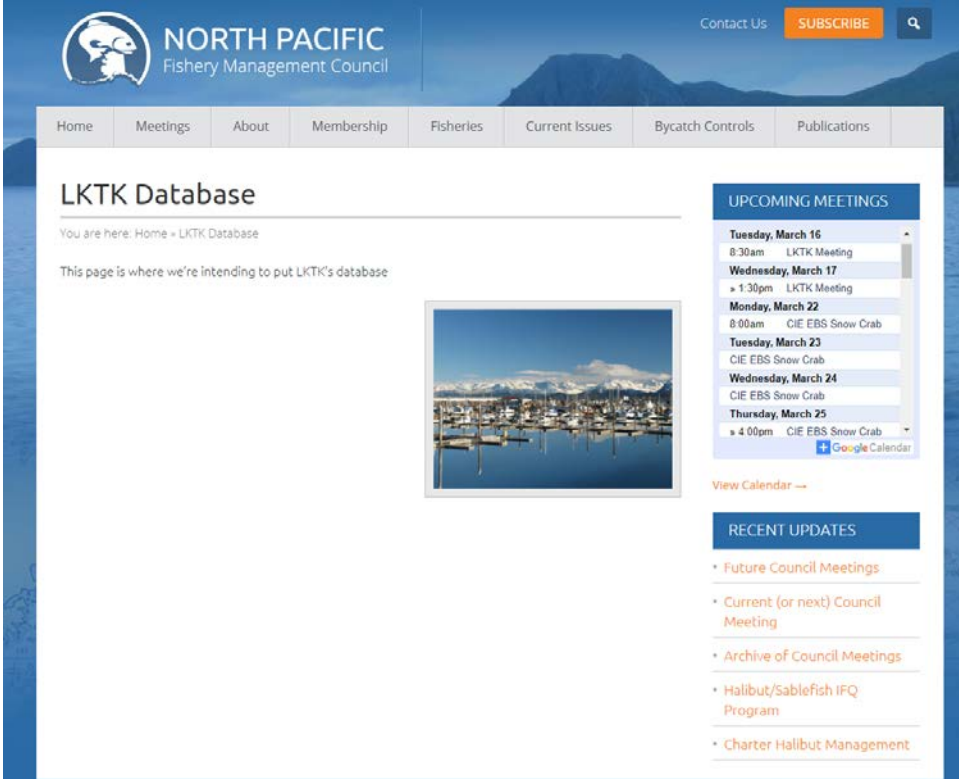School of Fisheries and Ocean Sciences
University of Alaska Fairbanks

Graduate Student Researchers
Shelley Cotton, Katie Moerlein

Search Terms

Key Words	User Group	Methods	Species	Region
Local Knowledge	Charter	Survey	Groundfish	Arctic
Subsistence	Commercial	Interviews	Salmon	Bering Sea
Traditional Knowledge	Community Development Quota Program	Focus Group	Crab	Aleutian Islands
Alaska Native	Tribe(s)	Ethnographic Research	Halibut	Gulf of Alaska
Wellbeing	Alaska Native	Literature Review	Sablefish	Canada
Perceptions/attitudes	Recreational		Marine Mammals	
Equity	Subsistence		Seabird	
Climate Change			Scallop	
Co-Production				

Other details and backend work

- Citations in bibliography move to excel file which feeds Directus
- Directus is the platform that will be used to build the dataset
  - Do not have a live demo to walk through
- Live on Council's website
- Other issues being considered by Taskforce: copyright, public submission portal, maintenance upon dissolution
- Target completion: May or June 2021

Search engine

Questions, comments, feedback?

Narrative Sources of Data

Narrative or non-published sources of data

Answering the question – How can the Taskforce help the Council and staff be aware of non-published sources of information, and in some cases, who they may need to contact to gain access?

- Sources may also be informational and provide broader background information
- These alternative sources are complementary and additive to the search engine

Organizing Themes   -   1

1. Legal and other guidance documents

Memorandum Regarding the Legal Status of Tribal Governments in Alaska
http://www.law.state.ak.us/pdf/opinions/opinions_2017/17-004_JU20172010.pdf
This is a legal opinion written by the former Attorney General of the State of Alaska on the existence of tribes in Alaska, the sovereign status of Alaskan Native tribes and their governments, and areas where the scope of that sovereignty is clear.

Working Effectively with Alaska Native Tribes and Organizations
https://www.fws.gov/r7/external/pdf/native_affairs_desk_guide_fws.pdf
A reference guide from the US Fish and Wildlife Service for federal employees to have a better understanding of Alaskan Native cultures, history, and legal information before coordinating and working with Alaska Native tribes and governments.

Chief Kerry's Moose
https://www.fws.gov/nativeamerican/pdf/tek-chief-kerry.pdf
A guidebook on land use from Terry Tobias about occupancy research and mapping for researchers, lawyers, and planners to prove Aboriginal, treaty, and natural resource rights of First Nations.

Communicating With Elders
http://anthc2.dreamhosters.com/wp-content/uploads/2015/12/Communicating%20with%20Elders%2004.09.15_print.pdf
A communication guide by the Alaska Native Tribal Health Consortium on Elder Outreach which includes best practices for communicating with Alaska Native Elders.

Organizing Themes - 2

1. Archives

Kawerak's Eskimo Heritage Project

Kawerak Subsistence Maps

Ecosystem Conservation Office (ECO), Aleut Community of St. Paul Island
The ECO is a first stop for individuals looking to do interviews with community members, or other information regarding climate change and wildlife that is archived with the department. To access this information, call 907-546-3200, 907-256-2636, or lmdivine@aleut.com

Oral History Program
http://library.uaf.edu/oral-history
The Oral History Program is part of the Alaska and Polar Regions Collections of the Elmer E. Rasmuson Library at the University of Alaska Fairbanks. The program was established in 1981 to collect and curate audio and video recordings that relate to various aspects of Alaska's history and the people who have contributed to its rich heritage. The collection contains over 13,000 individual recordings, including interviews with politicians, pioneers, and Native elders. To access the Oral History Program, the user must go to the UAF Library Catalogue and select the "UAF Oral History Catalogue" in the Collections dropdown. Contact Leslie McCartney, the Curator of Oral History, at lmccartney@alaska.edu or Robyn Russell, the Collection Manager, at rlrussell@alaska.edu for more details about the Oral History Collection.

Organizing Themes   - 3

1. Media

Make Prayers to the Raven: The Passage of Gifts
https://www.youtube.com/watch?v=xzYQX90Uvrg
The fourth part of the Make Prayers to the Raven video series presents a look at the relationships between humans and animals, and of humans with each other as they exist in the spiritual and natural world.

Make Prayers to the Raven: The Bible and Distant Time
https://www.youtube.com/watch?v=k0c5Oo7XOAc
The fifth part of the Make Prayers to the Raven video series gives a glimpse of some of the ways that traditional Athabascan beliefs and Christian beliefs coexist in villages on the Koyukuk River.

Respect the Land - Kamaksriłiq Nunam Irrusianik (Inupiaq)
https://www.youtube.com/watch?v=ofHJa3L2yCE
A short video on the values of the Inupiaq people and their subsistence management and ways of life. The Inupiaq people share the importance of their values, spirituality, and traditional knowledge.

At the Time of Whaling
https://www.youtube.com/watch?v=7DuGp-Ivrgg (Preview)
https://store.der.org/at-the-time-of-whalingp166.aspx (Can be purchased here)
A film in an Eskimo village in Gambell, Alaska about the life of the native people and how they hunt during whale season.

Organizing Themes   - 4

1. Networks

LEO Network

https://anthc.org/what-we-do/community-environment-and-health/leo-network/

The Local Environmental Observer Network works to increase knowledge about environmental change through documenting environmental events in communities throughout Alaska. The network displays observations and events through web-accessible maps.

Exchange for Local Observations and Knowledge of the Arctic

https://eloka-arctic.org/

ELOKA is a collaborative program designed to ethically collect, preserve, exchange, and use local observations and indigenous knowledge within the Arctic.

Alaska Native Knowledge Network

http://www.ankn.uaf.edu/

A network of resources for finding and sharing information about Alaska Native knowledge systems, education, culture, and ways of knowing.

Organizing Themes - 5

1. Other

Aleut/Alutiiq Cultural Atlases

http://ankn.uaf.edu/CulturalAtlases/

The Oral History Department of the University of Alaska-Fairbanks Rasmuson Library, working under the terms of the Memorandum of Agreement between the Alaska Federation of Natives and the University of Alaska Fairbanks, created these "cultural atlases" as a means of integrating Native ways of knowing about science and technology into Western educational curricula. These are the first such internet compatible multimedia "jukeboxes" produced under the Alaska Rural Systemic Challenge grant from the National Science Foundation. **Password required.** To obtain a password, you can Register.

Knowledge of the Supernatural Environment - A study of Bering Strait Residents' Knowledge, Beliefs and Experiences

https://kawerak.org/wp-content/uploads/2018/04/Supernatural-summary-sheet.pdf

A summary of the Kawerak Social Science Program research project that will document the knowledge, experiences, and beliefs of Bering Strait region tribes with supernatural phenomena.

Research Processes and Indigenous Communities in Western Alaska: Workshop Report

https://kawerak.org/wp-content/uploads/2018/04/Research-Processes-and-Indigenous-Communities-in-Western-Alaska-Workshop-Report.pdf

A report on a workshop in Nome, AK that brought together indigenous voices from western and northern Alaska to create a dialogue about the potential future of relationships between research processes and indigenous communities.

Next Steps and Discussion Questions

Next steps
1. Taskforce members provide ideas and input on key narrative sources of information
2. Determine formatting - written document or placed into search engine
3. Send document to members to review in early summer 2021
4. Finalize and review next meeting

Questions
1. What sources, archives, etc. are missing that you are aware of?
2. Depending on input or ideas…
    a. What are the best practices for analytical staff to reach out?
    b. What's the time frame for accessing some of these sources (e.g., Kawerak subsistence maps)?
    c. Confidentiality and ownership issues?

Guidelines for LK, TK, and Subsistence

Section Purpose

During this agenda item, Taskforce members will discuss and further flush out each guideline for the protocol

How do we make these guidelines useful and achievable to this context?

The co-chairs are looking to leave this meeting with enough content and consensus to start writing the protocol over summer 2021

Potential Structure

Protocol is the central element of Taskforce work

Envision one accessible guidance document with four main sections:

1. Overall purpose, contextual information, and definition of key terms

2. Overarching guidelines for including LKTKS

3. Protocol on how to:
   A. identify
   B. analyze
   C. incorporate

   LKTK, the social science of LKTK, and subsistence

4. References to relevant tools, other work, and other information.

Local Knowledge, Traditional Knowledge, & Subsistence Protocol

Guideline 1 — Understand key concepts and definitions related to LK, TK, and Subsistence

Guideline 2 — Recognize and respect the role of multiple knowledge systems

Guideline 3 — Recognize how to identify sources of LK, TK, the social science of LK and TK, and subsistence

Guideline 4 — Use appropriate methods to identify or collect LK and TK data

Guideline 5 — Analyzing sources of LKTKS information

Guideline 6 — Engage in early and frequent communication with relevant entities

Guideline 7 — Ensure the presence of appropriate community representatives for a given stage of the process

Guideline 8 — Understand and respect community and tribal protocols for sharing data and decision-making

Guideline 9 — Ensure a transparent and accountable process that provides clarity on the research, decision-making, or potential impacts of action

Guideline 10 — Ensure appropriate data management and maintain confidentiality, as agreed with participating entities

Guideline 11 — Ensure appropriate capacity

Guideline 12 — Interface with new or existing institutional onramps for LK, TK, the social science of LK and TK, and subsistence

Guideline 1

1. Understand key concepts and definitions related to LK, TK, and Subsistence

    a. The Taskforce has defined LK, TK, and has a description for subsistence. But what we still need to think about is: who are LK holders (examples)? Who are TK holders (examples)? What is the relationship between TK and subsistence?

    b. Discussion leads: Julie, Bobby, and Alida

Taskforce Reflections

Commercial LK
- Structure of fisheries and how it relates to LK (e.g., is it rationalized or not?)
- LK can come from fishermen but synthesized at co-op level.
- Discomfort with rigid definitions for qualifying LK expertise.
- Hard to draw boundaries around what 'counts' as LK or who is an LK expert than TK.
- LK and TK share place-based nature - geographic space/interaction with system; place-based is not just granular it can also be ecosystem perspective

TK
- Community as key - going to community and asking tribe to identify TK holders (Kawerak perspective).
- Boundaries around what 'counts' as TK is important in ways that it may not be for LK

Subsistence
- Thinking about regional advisory council as

Proactive identification of issues and data from Council
- You want real researchers doing real work, and that can be a slower process
- Current research gaps are not reflected in research priorities

Representation
- Expertise; no one person is all knowing of all things

Guideline 2

1. Recognize and respect the role of multiple knowledge systems

    a. Equity, Do no harm, FPIC. What do these things mean from your perspective? What do they look like in practice?

    b. Discussion leads: Darcy, Rachel, and Richard

Taskforce Reflections
*Connect to National Standards as able.
Free Prior Informed Consent (FPIC).

- Tribes/orgs/fishing associations have their own protocols and guidelines for communicating and sharing sensitive information or knowledge -- be aware and follow those guidelines
- Issues of consent; intellectual property rights
- Cautious about 'teaching non social scientists how to do social science.'
  - Analysts rely on primary research; recognize some constraints analysts face.
  - However, meaningful engagement for LK and TK requires a core understanding of these principles...equity, FPIC, etc.
- Who is the target audience? - Distinctions between regional office, Council staff, AFSC and their roles in the Council's process.

Knowledge systems
- Recognizing and respecting multiple knowledge systems - there is diversity but each should be seen as equal; each knowledge system has their own advantage/contribution
- There are limitations to our work - cannot be totally exhaustive of all knowledge/systems out there

Equity
LK/TK distinctions and legitimacy

Guideline 3

1. Recognize how to identify sources of LK, TK, the social science of LK and TK, and subsistence

    a. How do we identify sources of LK (i.e., fishermen, associations, community members), TK, subsistence in the North Pacific?

    b. Discussion leads: Bobby, Toby, and Julie

Taskforce Reflections

Related to LK
- Structural - understanding how fishing fleets work, leads, contacts, etc.

Relationships
- With individual tribes
- With organizations like Kawerak
- Leaning into the tribal/rural community liaison responsibilities
- Being aware that organizaitons, tribes, associations, co-ops may have many different types of sources and the relationships are key point for accessing.

Elders
- TK
- Shared knowledge; intergenerational components

Referencing taskforce resources (narrative sources/search engine)

Social media off limits as a data source

Representativeness - being mindful of who you are speaking to

Knowing your limitations and partnering with people to fill knowledge/expertise gaps; writing up and clarifying what you did

Directing on Do No Harm

Feelings of concern and conflict with the notion of setting out best practices

*can guidelines, 3,4,5 be combined because the key issue for them

Guideline 4 & 5

4. Use appropriate methods to identify or collect LK and TK data

   a. Discussion leads: Rachel and Sarah

5. Analyzing sources of LKTKS information

   a. Discussion leads: Kate and Alida

Guideline 6

1. Engaging in early and frequent communication with tribes, fishing associations, industry, local governments, co-management bodies, and CDQ groups

   a. What should staff be doing? Who to contact?

   b. Discussion leads: Simeon, Bridget, and Richard

Taskforce Reflections

When preparing the facilitator's agenda, Sarah and Kate thought this guideline may actually be an overarching principle/running theme the essence of which can be covered under many of the other guidelines. Thoughts on removing this high-level guideline knowing transparency is a relevant point to operationalizing Guideline 2, 3, 4, 6, 7,8?

Guideline 7

1. Ensure the presence of appropriate community representatives for a given stage of the process

   a. This includes for community/municipality, for tribe, for LK holders like fishers.

   B. Discussion leads: Kate, Bobby, Rachel, and Toby

Guideline 8

1. Have an understanding and respect for community and tribal protocols for sharing data or making decisions

> a. Respect for tribal governance and sovereignty, respect for community/municipality information, etc.

> b. Discussion leads: Kate, Richard, and Alida

Guideline 9

1. Ensure a transparent and accountable process that provides clarity on the research, decision-making, or potential impacts of action

a. When preparing the facilitator's agenda, Sarah and Kate thought this guideline may actually be an overarching principle/running theme the essence of which can be covered under many of the other guidelines. Thoughts on removing this high-level guideline knowing transparency is a relevant point to operationalizing Guideline 2, 3, 4, 6, 7,8?

Guideline 10

1. Ensure appropriate data management and maintain confidentiality, as agreed with participating entities

   a. Discussion leads: Sarah and Kate

Guideline 11

1. Ensure appropriate capacity

   a. Staff training, social science expertise

   b. Discussion leads: Sarah, Kate, and Alida

Guideline 12

1. Interface with new or existing institutional onramps for LK, TK, the social science of LK and TK, and subsistence

    a. Discussion leads: Kate

Taskforce Reflections

*Placeholder to reflect back to the onramps we are recommending

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Meeting 4
March 17, 2021

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Welcome!

- Introductions

- Review agenda

- Questions, comments, reflections

Revisiting protocol from Day 1

Leads: Kate and Sarah

Onramps for LK, TK, and Subsistence

Section Purpose

During this agenda item, Taskforce members will hone their recommendations on potential onramps

We will revisit prior onramp recommendations

We will 'workshop' different ideas for content

We will try to reach consensus on potential committees or Plan Teams

REMINDER - Tribal Engagement

At the November 2020 meeting, the Taskforce reviewed the tribal engagement onramp recommendation

- Reflects the Taskforce's understanding that including LKTKS information into the Council's process is a new undertaking and could bring in tribal members and TK holders in a more meaningful way
- The Taskforce is not recommending formal Tribal Consultations
- Local Knowledge and Traditional Knowledge are living sources of knowledge 'housed' in individuals and communities
- **Building relationships is key**

REMINDER - Tribal Engagement - 2

How does tribal engagement move the Council forward in terms of including LKTKS information into its process?

- Improve relationships and trust between the Council and tribes
- Facilitating two-way communication
- Potentially support NMFS as they engage formal Tribal Consultation
- Reduce the burden placed on the Council and its staff by ensuring Free Prior and Informed Consent (FPIC) principles are adhered to

REMINDER - Tribal Engagement - 3

What would tribal engagement look like in practice?

- Establish a process that allows for a workshop or meeting to be available upon request from the Council and/or tribes
- These meetings would occur when solicited by tribes or the Council – could be action specific or high-level
- Agenda should be flexible and would depend on why the meeting is being requested
- These meetings would be open to the public
- The expectations should be clear – a meeting or dialogue does not guarantee policy outcomes

Tribal Liaison Onramp Recommendation

The LKTKS Taskforce recommended the Council appoint/hire a Tribal Liaison to facilitate the inclusion of LK and TK at all levels of the Council process, and facilitate relationships between tribes and the Council across regions

Rationale:
- When making its original recommendation in April 2020, the Taskforce was aware that Executive Order (E.O.) 13175 requires federal agencies to engage Tribal Consultation with federally recognized tribes.

- The Council is not a Federal agency under E.O. 13175, and not responsible for formal Tribal Consultations, but the Council does develop management policies that directly affect tribes and their use of marine resources.

Recall Council Action

Taskforce recommendation preceded the Council's action on the Community Engagement Committee's final report in February 2021 which Rural Fisheries Community/Tribal Liaison responsibilities to Council staff. The Council's [motion](#) specifies:

> *"The Executive Director should assign responsibilities of a Rural Fisheries Community/Tribal Liaison position to staff. The primary duties would be to 1) serve as a first point of contact in the Council office for rural communities and Tribes to navigate the Council process; 2) provide outreach on Council actions; 3) facilitate presentations from rural and/or Alaska Native communities or Tribal organizations to the Council on Council issues of particular concern or with a direct or significant effect on such entities; and 4) account for and measure the impact of its engagement strategies over time."*

Tribal Liaison   - Discussion Questions

An important difference to note is that, at this point in time, Rural Fisheries Community/Tribal Liaison responsibilities are related to community engagement and not necessarily identifying, analyzing, and including LKTKS expertise or information.

Discussion questions
- *Does the Taskforce consider this recommendation complete?*
  - *Why or why not?*

Taskforce Reflections

The LKTKS Taskforce recommended LK, TK, the social science of LK and TK, and subsistence data be incorporated more systematically into analyses required by the National Environmental Policy Act (NEPA).

- LK, TK, the social science of LK and TK, or subsistence information are relevant to multiple types of actions and analyses
  - Inform ecosystem interactions, species abundance or distribution may inform an Environmental Assessment (EA)
  - Provide context and information about the cultural importance of a particular resource for inclusion in a Regulatory Impact Review (RIR) or a Social Impact Assessment (SIA)
  - This recommendation is in line with National Standards 2 and 8

Primary NEPA Documents

- A Categorical Exclusion (CE) may be used for an action that has *no potential* for a significant effect on the quality of the human environment.

- An EA developed for an action is concluded when an action is found to have <u>no significant impact</u> on the quality of the human environment and a Finding of No Significant Impact (FONSI) is issued.

- An EIS is developed when the action is expected to "significantly affect the quality of the human environment."

NOAA FISHERIES

Significance under NEPA

- "Quality of human environment" refers to the natural and physical environment and the relationship of people with that environment.

- 1978 CEQ regs established broad criteria of "context" (setting of the action) & "intensity" (severity of impact on resources) to be analyzed.

- 2020 CEQ regs replaced "context" and "intensity" with "potentially affected environment" and "degree of effect," but preserves the same fundamental concepts.

- Significance thresholds have been developed by NMFS for fishery actions.

Environmental Assessment

- An **EA** considers the potential effects of the alternatives considered for a proposed action.

- An **EA** concludes when a ___Finding of No Significant Impact___ (FONSI) determination is made.

- A FONSI declares that the action is not expected to result in significant impacts and relies on the analysis contained in the **EA** prepared for the action.

- The NOAA FONSI template identifies specific points to consider in determining whether impacts of the proposed action may be significant.

- If the action is determined to be not significant, the **EA** and resulting FONSI will be the final NEPA documents required.

- If the **EA** concludes that significant environmental impacts may be reasonably expected to occur, then an EIS must be prepared.

Environmental Impact Statement

- Information disclosure
- Problem-solving tool
- Consensus-building opportunity
- Programmatic or project-specific
- Prescribed processes:
  - Notice of Intent to prepare an EIS
  - Scoping
  - Publication of a Draft EIS
  - Receive & Summarize Public Comments
  - Publication of a Final EIS
  - Record of Decision (ROD)

Area of the Affected Environment

The analysis of potential impacts of the alternatives must be based on the **area of the affected environment.**

The affected environment area encompasses all biological and physical environmental conditions, including:

- all natural resources
- cultural heritage or built resources
- the relationship of people with that environment, including economic and social conditions

Integrated Analyses: EA/RIR

The NMFS Sustainable Fisheries and Council staff prepare analyses using a template for an integrated document

- o NEPA Environmental Assessment
- o Regulatory Impact Review (Reg Flex Act)
- o MSA and FMP Considerations
- o Social Impact Assessment

EA/RIR Integrated Document

Introduction
- ✓ Purpose and Need
- ✓ History of the Action
- ✓ Description of Management Area

Description of Alternatives

Environmental Assessment
- ✓ Analytical Methods
- ✓ Target Species
- ✓ Non-Target Species
- ✓ Marine Mammals
- ✓ Seabirds
- ✓ Habitat
- ✓ Ecosystem
- ✓ NEPA Summary

EA/RIR Integrated Document (cont'd)

Regulatory Impact Review

- ✓ Statutory Authority

- ✓ Purpose and Need, Alternatives, Analytical Methods

- ✓ Description of the Fisheries

- ✓ Analysis of Impacts: Status Quo and Alternatives

- ✓ Management and Enforcement Considerations

- ✓ Affected Small Entities

- ✓ Summation of the Alts w Respect to the Nation

EA/RIR Integrated Document (cont'd)

Magnuson-Stevens Act (MSA) and FMP Considerations

- ✓ *MSA National Standards*
- ✓ *Fisheries Impact Statement*
- ✓ *Council's Ecosystem Statement*

Appended - Social Impact Assessment

- ✓ Environmental Justice in minority & low-income populations

NOAA FISHERIES

LKTKS Benefits to NEPA Documents

LKTKS sources can enhance NEPA analyses by providing information on:

- biological & physical dynamics that may inform analyses of impacts of the action on biological & physical environments (EA)

- potential social & economic impacts of the action to communities (RIR & SIA)

EA and EIS Development & LKTKS Sources

The EAs and EISs for Council Actions in Alaska are prepared by teams of NMFS Sustainable Fisheries and Council staff and contractors:

- EA – generally prepared by biologists
- RIR - generally prepared by economists
- SIA –prepared by social scientists

- Authors use a myriad of sources when preparing analyses, including direct communication with stakeholders and researchers.

- Availability of LKTKS sources to EA/RIR authors is critical to incorporation of LKTKS information in Council and NMFS decision-making processes.

Analytical Realities and Guidance

- Analysts have the discretion to craft analyses in a way they feel provides the Council the best scientific information available relevant to the management action

- It may be useful for the Taskforce to consider developing a framework of template for writing analytical sections based on LK, TK, the social science of LK and TK, and subsistence information

- Not a rigid set of analytical requirements, but rather a starting point for analytical writing that will be accompanied by the LKTKS search engine and eventual protocols

Subsistence Considerations

*The following are based on ADF&G Customary and Traditional Use Worksheets

Length and Consistency of Use: *A long term consistent pattern of use and reliance on the fish stock or game population that has been established over a reasonable period of time, excluding interruption by circumstances beyond the user's control, such as unavailability of the fish or game caused by migratory patterns or climatic events:* The analyst should consider whether the community has a long-term, consistent pattern of noncommercial taking, use, and reliance on a particular fish stock or marine mammal species. Long-term use can be conceptualized as a reasonable period of time not less than one generation, excluding interruption by circumstances beyond the user's control (e.g., Exxon Valdez spill).

Seasonality: *A use pattern recurring in specific seasons of each year:* Describe the patterns of resource use, and when the occur. Description may be brief, but it should help decision-makers consider the timing and availability of food sources - link to food security if possible.

Means and Methods of Harvest: *A use pattern consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost:* Description of how users harvest particular resources, including a characterization of labor and cost if data is available.

Location: *The area in which the non commercial long-term and consistent pattern of taking, use, and reliance upon the fish stock population has been established:* Simply describe where the harvest of this resource occurs. If maps are available, please include.

Processing and Preservation: *The means of handling, preparing, preserving, and storing fish which has been traditionally used by past generations, but not excluding recent technological advances where appropriate:* include any details about how a resource is processed, stored, or put away for later consumption.

Generational Transmission of Knowledge: *A use pattern which includes the handing down of knowledge of fishing skills, values, and lore from generation to generation:* The intergenerational transmission of knowledge can include skills, values, and stories connected to the resource.

Sharing and Exchange: *A pattern of taking, use, and reliance where the harvest effort or products of that harvest are distributed or shared, including customary trade (the exchange of a resource for small amounts of cash), barter (the exchange of a resource for something other than cash ie another wild food, gas, groceries, etc.), and gift-giving:* Sharing and the exchange of wild resources is an integral part of subsistence. Describing how a resource is exchanged is fundamental to understanding how harvest supports the community or region at large.

Economic, cultural, social, and nutritional elements of subsistence: *A pattern that includes taking, use, and reliance for subsistence purposes upon a wide variety of the fish and game resources and that provides substantial economic, cultural, social, and nutritional elements of the subsistence way of life.*
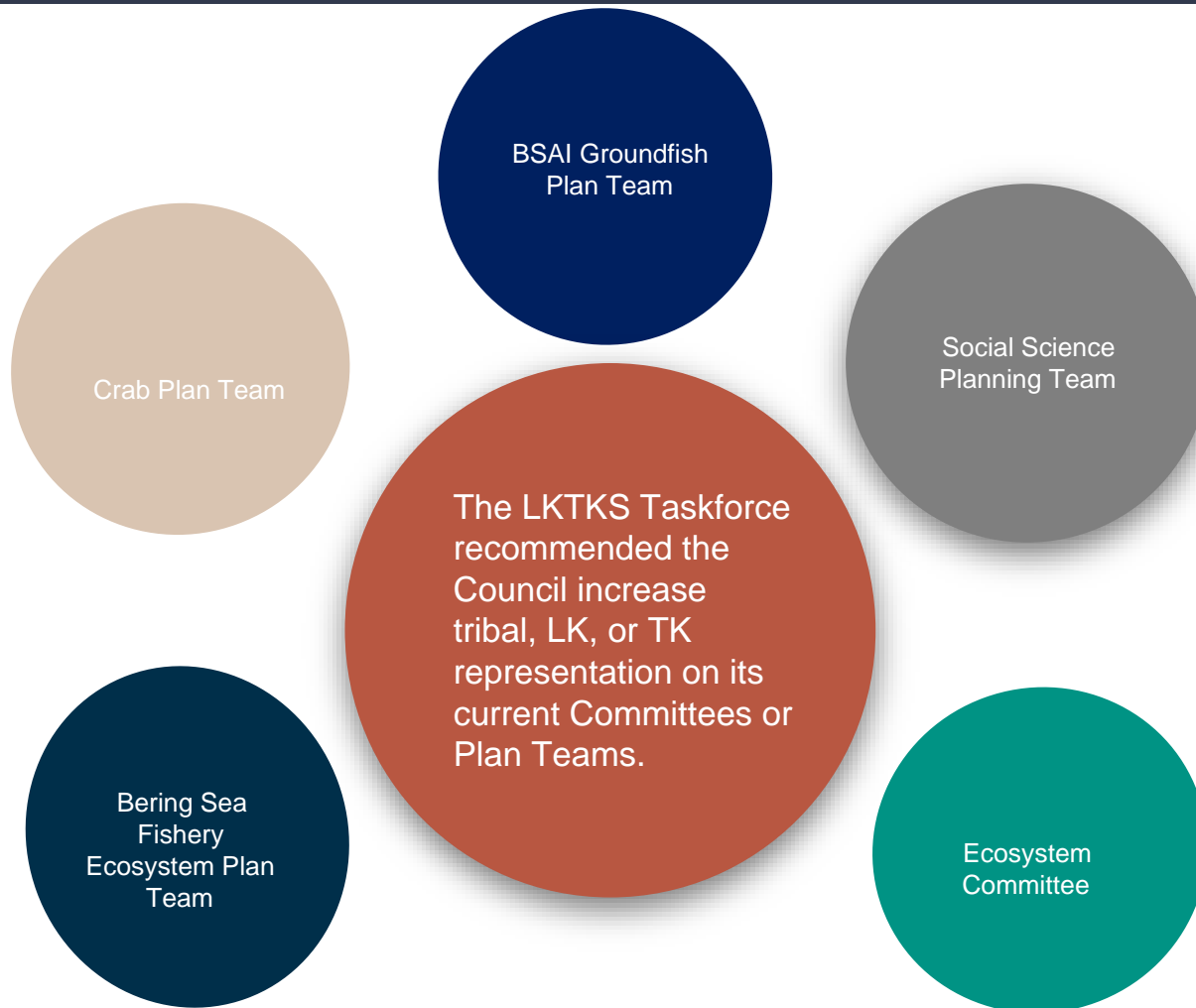
Discussion Questions

LK, TK, and the social science of LK and TK considerations

[See questions below]

- *Discussion questions related to LKTKS and social and economic analyses:*
    - *What are the major points of consideration that should be included for LK, TK, and the social science of LK and TK in an analytical document?*
    - *What guidance would you give to staff looking to include secondary sources of LK, TK, and the social science of LK and TK in an analysis?*
    - *Are there other considerations for subsistence that should be considered?*

Taskforce Reflections

Increasing LK, TK, or Subsistence Representation on Council Committees and Plan Teams - Onramp Recommendation

BSAI Groundfish Plan Team

Social Science Planning Team

Crab Plan Team

The LKTKS Taskforce recommended the Council increase tribal, LK, or TK representation on its current Committees or Plan Teams.

Bering Sea Fishery Ecosystem Plan Team

Ecosystem Committee

Differences Between Plan Teams and Committees

- A <u>Plan Team</u> is a standing advisory body whose membership consists of scientists and managers who review the status of the Council's Fishery Management Plans, Fishery Ecosystem Plans, and best available social science

- A <u>Committee</u> is formed to advise on a specific issue
  - These can be standing committees or ad-hoc committees that are established for a particular duration and which then disband. Most of the Council's current committees are standing committees

- The Council also creates issue-specific committees to review staff work and management actions under development, and the degree of active participation needed from stakeholders on the Committee is a direct outcome of the Council's statement of purpose

Rationale

- Provides an opportunity to complement existing expertise which is largely composed of western, non-social scientists or agency representatives
  - Important exceptions are the SSPT and Community Engagement Committee.

- Rather than forming a new LKTKS committee, taskforce members agreed it would be more appropriate to add expertise to existing bodies
  - Less burdensome to the Council and the public as it does not require creating or tasking a new body and eliminates the need to learn a new process

- One additional person with tribal representation, LK, TK, or subsistence expertise could be added to any recommended body, leaving open the possibility for additional representation over time
  - Caveat - one person cannot be expected to hold LK, TK, or subsistence knowledge related to every issue going before the Council

Discussion Questions

Discussion Questions

- Which body would you recommend, and what is your supporting rationale?
- Are there any committees, Plan Teams, etc. that you feel are the least well-suited?
- Should other avenues for increasing representation be explored?
    - If yes, what are they?

Taskforce Reflections

Ecosystem Status Report - NEW

- Ecosystem Status Reports (ESR) are produced annually to compile and summarize information about the status of the Alaska marine ecosystems for the North Pacific Fishery Management Council, the scientific community, and the public

- There are four regional reports, each updated once every two years: the Eastern Bering Sea (last updated 2019), Aleutian Islands (updated 2018), the Gulf of Alaska (updated 2019), and Arctic (forthcoming) ecosystems

- The ESRs annually summarize and synthesize climate and fishing effects (historical and future) on each region from an ecosystem perspective

- Use an **indicator approach** to provide a historical perspective of status and trends of ecosystem components and ecosystem -level attributes

Ecosystem Status Report – Rationale

- Recently the ESR authors have taken steps to include local and traditional knowledge within the assessments
- ESRs have been in development for over 10 years, and have high visibility in the Council process
- Doing the work will require additional resources

Recent example including TK:

Unusual observations of adult pollock behavior were reported from community members as well as subsistence and commercial fishers in Bristol Bay from May–July 2018. Sightings of pollock swimming 'with their heads out of the water' and 'behaving odd' were reported. Adult pollock were reported to have washed up on shore in high numbers, and pollock were reported to have been caught in subsistence set nets during the salmon fishery(both near Pilot Point, Ugashik River, and from the Nushagak District). "Traditionally, it is unusual to see pollock in the salmon season in Bristol Bay" (Catie Bursch, fisher, pers. comm.).

Northern fur seal pup production at St. Paul Island s ~6% less than 2016. Pup production has been declining at St. Paul Island at an approximate annual rate of 4.0% since 1998. Anecdotal reports suggest smaller or skinnier pups at some rookeries on St. Paul Island. The estimated St. George pup production is approximately 5% greater than 2016 with no unusual pup mortality, but shows no significant trend since 1998. The decline of northern fur seals is also apparent to Elders, adults, and youth. Subsistence harvests represent the importance of securing seal meat to provide food security for winter (L. Divine, Aleut Community of St. Paul Island).

Ecosystem Status Report – 3

Discussion questions
- Comments and questions about the ESR
- How could the ESR improve on reporting and attributing LK and TK?
- What would be needed in terms of capacity to support this effort?
- How could we develop, facilitate, and support a knowledge network to inform this effort?
- How can reciprocity be addressed?
- Have ESR authors met protocol guidelines or best practices? How can we support this?

Taskforce Reflections