

Spring Bear Hunt Decision Support Plan

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Summary: Environmental decision making is complex and is informed by multiple inputs, including diverse forms of knowledge (e.g., sciences, local, tacit, and indigenous), worldviews, cultures, and decision contexts. This complexity is reflected by the current status of the Spring Bear Hunt (SBH) decision and the desire to have a longer term approach/policy. We propose the use of social science-informed approaches to support the SBH decision making process. Through a SBH survey and policy objective setting workshop, co-created among the Wildlife Committee, WDFW staff, and UW Coop Unit staff, this effort aims to produce outputs, including survey results, problem statement, and shared SBH objectives, to inform Commissioners' SBH decision making. This plan is intended to produce a suite of policy objective choices for a final Commission decision through a guided collaborative process. The subsequent policy decision would be codified in the creation of a Commission SBH policy to inform the Game Management Plan. **Project Timeframe:** 6 months (October 2022-March 2023)

Project Participants and Roles:

Participant	Role
Commissioners	Survey participants, External process guidance and input, Output discussants, and Post-process key decision makers
Wildlife Committee	Project co-creators, Survey participants, Workshop co-creators, Output co-creators and key disseminators, and Post-process key decision-makers
WDFW Staff (Dr. David Trimbach)	Project co-creators, Workshop co-creator, Co-facilitator, Internal process guidance and input, and Output co-creators
UW Coop Unit Staff (Dr. Alex McInturff)	Project co-creators, Workshop co-creator, Co-facilitator, Internal process guidance and input, and Output co-creators
WDFW Staff (Wildlife Program Staff)	Overall project guidance, input, and support

Project Tasks:

Task	Activities	Outcome	Timeframe
1	1a. SBH survey co-creation by WDFW Staff, UW Coop Staff, and Wildlife Committee 1b. Ensure survey instrument gauges perspectives and positions on SBH among Commissioners 1c. SBH survey implementation 1d. SBH survey results analysis and dissemination	1a. Survey instrument 1b. Survey results 1c. Survey results summary document (e.g., report and/or presentation) 1d. Direction and input for next task	October 2022

	1e. SBH survey results to determine subsequent tasks		
2	2a. SBH policy objective setting workshop (type and length of workshop to be determined by Wildlife Committee) co-creation by WDFW Staff, UW Coop Staff, and Wildlife Committee	2a. Outline of workshop goals, plan, and activities 2b. Agreed upon activities and workshop next steps	November 2022
3	3a. SBH policy objective setting workshop implementation by WDFW Staff and UW Coop Staff	3a. Workshop implementation 3b. Data and information collection 3c. Research problem identified and defined 3d. SBH objectives identified and prioritized	December 2022- February 2023
4	4a. SBH policy objective setting workshop output synthesis and dissemination by WDFW Staff, UW Coop Staff, and Wildlife Committee	4a. Workshop synthesis that includes data analysis, findings, and policy recommendations (note: recommendations solely created by Committee) 4b. Dissemination materials (e.g., report and presentation) (note: dissemination led by Committee)	February-March 2023

Plan Process Diagram (adapted from Djenontin and Meadow 2018, Figure 1):



Please note that this plan and process are Commissioner and/or Wildlife Committee-dependent, meaning all tasks are to be determined with and co-lead by the Commission and/or Wildlife Committee members. The tasks outlined are not intended to be prescribed, but rather offer potential options to be collaboratively pursued as part of this plan.

Project Task Details:

Task 1: The survey instrument will be used to gauge initial thoughts and perspectives on the SBH among all Commissioners. The survey findings will help determine whether or not a policy objective setting workshop (single or series) is perceived to be necessary for SBH decision

making next steps. The survey findings will be used to help structure a collaborative SBH policy objective setting workshop to be held within the Wildlife Committee (or all Commissioners). The survey instrument can be structured and implemented to ensure anonymity of Commissioners. While the survey instrument will be co-created with input from the Wildlife Committee, potential questions or topic areas may include (note that these are simple draft questions or topic areas):

- Do you think WA should allow spring bear hunts?
- Under what conditions do you think a SBH is warranted?
- Do you agree with the current bear management objectives outlined in the Game Management Plan?
- Do you think the bear management objectives should be changed?
- Do you think a policy objective setting workshop is a feasible next step for the SHB decision making process?
- What should we do next to move this process further?
- How would you describe your value(s) position on SBH?

Task 1 will help better understand the SBH context. Depending on the availability of the Commission and Wildlife Committee, this task will take 1 month. WDFW staff, UW Coop Unit staff, and Wildlife Committee will co-create and implement an initial survey instrument.

Task 2: The workshop series will focus on SBH policy objective setting and gauging underlying values associated with SBH policy objectives among Wildlife Committee and/or larger Commission. This task prepares for a workshop (single or series) that will integrate survey findings and identify a shared problem statement and SBH objectives in order to help determine SBH decision next steps. The workshop will also integrate previously approved bear management objectives outlined in the WDFW Game Management Plan. Task 2 will help prepare for the SBH workshop and ensure that there is an organized conversation at the workshop. Depending on the availability of the Wildlife Committee, this task will take 1 month and will likely take place over multiple planning meetings. WDFW staff, UW Coop Unit staff, and Wildlife Committee to co-create (plan and design) policy objective setting workshop series.

Task 3: Implement workshop with a focus on the following activities:

1. further understand the SBH decision context;
2. define the SBH issue or problem;
3. identify values underlying SBH issue and decision;
4. determine shared SBH objectives;
5. determine current bear management objectives alignment with shared SBH objectives;
and
6. determine SBH decision next steps with recommendations (as determined by Committee).

Task 3 will entail the most effort, time, and capacity among consenting participants. WDFW staff and UW Coop Unit staff will help creatively and interactively facilitate the workshops;

however, the Wildlife Committee members will also help guide the process through their input and engagement. Depending on the availability of the Wildlife Committee, this task will take 3 months and will include multiple workshop days (if determined and approved by Committee). WDFW staff and UW Coop Unit staff to implement a policy objective setting workshop series.

Task 4: WDFW staff, UW Coop Unit staff, and Wildlife Committee to synthesize workshop input and activities in order to co-create outputs for Commission including:

- report;
- presentation; and
- draft policy objectives for Commission consideration.

WDFW staff and UW Coop Unit can assist with leading the creation of these key outputs and their contents (e.g., process results, lessons learned, problem statement, and shared policy objectives); however, any key recommendations for SBH decision next steps will be led by the Committee and/or Commission. Committee will lead the dissemination process, including presenting and sharing process findings with the Commission in order to inform discussion or next steps. This task will take 1-2 months. WDFW staff and UW Coop Unit staff can lead this analysis and synthesis process with Wildlife Committee oversight and review.

Wildlife Committee Questions and Recommendations:

1. Question: Is this project or plan something the Commission and/or Wildlife Committee is interested in pursuing? Recommendation: Yes.
2. Question: Should the workshop series include with entire Commission or Wildlife Committee? Recommendation: Wildlife Committee
3. Question: Should this workshop be open to the public? Recommendation: Given the sensitive content of the discussions (e.g., values and objectives), no.

Appendix

Background: Environmental decision making is complex. Not only do the natural and social sciences play a major role, but so do multiple worldviews (e.g., beliefs, values, attitudes, senses of place, identities, and emotions), cultures (e.g., social norms, political forces, risk perceptions, environmental injustices, and economic mechanisms), understandings of the environmental system (e.g., location, landscape change, and species/habitats of concern), and other diverse forms of knowledge (e.g., local, indigenous, and tacit) (Knapp et al. 2013; Dawson et al. 2021; Clifford et al. 2022). Decision making also is informed by the overarching decision context, which includes decision makers, nature of the issue or problem, the greater institutional, social, political, and economic context, scientific uncertainty, social feasibility, and implementation capacity (Walsh et al. 2019; Clifford et al. 2022). Decisions are further complicated by decision makers' perceptions of risk, levels of trust, and values, among other factors (Stern 2018; Böhm and Tanner. 2019; Walsh et al. 2019). The complexity of decision making has fostered the creation of numerous social science-informed theories, decision support tools, and approaches in order to support decision making processes. We propose using such tools, specifically a knowledge co-production approach and components of structured decision

making, to co-create a survey and policy objective setting workshop in order to assist with the Spring Bear Hunt decision making process.

The workshop series will be informed by a knowledge co-production approach. Knowledge co-production is a collaborative social learning endeavor in which knowledge is co-produced through learning and interaction among a group of people with diverse perspectives (Shrestha et al. 2018). Knowledge co-production complements community-based natural resource management, community geography, and community-based participatory research (Djenontin and Meadow 2018; Trimbach et al. 2022), approaches that emphasize diverse perspectives, close collaboration, relationship and trust building, and shared co-created processes or outputs. The project will attempt to flexibly apply the knowledge co-production process outlined by Djenontin and Meadow (2018), which includes, understanding decision/problem context (e.g., Commission and/or Wildlife Committee input), acquiring diverse inputs (e.g., survey results and Wildlife Committee feedback), implementing activities (e.g., workshop activities), co-producing outputs (e.g., report/presentation), and co-producing outcomes-impacts (e.g., shared problem statement, shared objectives, SBH decision next steps, and Committee recommendations).

The knowledge co-production approach will integrate structured decision making (SDM) components. SDM is a commonly used decision support tool and framework within natural resource management (Gregory et al. 2012). SDM is a pragmatic approach to making environmental decisions, often impacted by uncertainty. SDM is not a unified theory or technique, but rather a perspective and set of approaches aimed at offering insight to decision makers tasked with making challenging decisions (Gregory et al. 2012). SDM is a values-focused approach that emphasizes objectives and problem decomposition (Runge et al. 2015). SDM follows a PrOACT process, consisting of the following components: defining the problem; determining the objectives; identifying alternatives; forecasting the consequences; and evaluating the trade-offs (Gregory et al. 2012; Runge et al. 2015). The workshop series will emphasize the PrO components of the process by collaboratively and creatively defining the problem and determining the objectives. SDM complements and is well suited to be paired with knowledge co-production. Both Dr. Alex McInturff and Dr. David Trimbach have experience with knowledge co-production and SDM, including applying both approaches while working in collaboration with environmental decision makers.

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