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Washington

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Washington

November 30, 2011

MEMORANDUM

TO: Chairman Booth and members of the Fish and Wildlife Committee

FROM: Tony Grover

SUBJECT: Science & Policy Exchanges – Draft Final list

Over the last few months staff have been working with the Fish and Wildlife Committee and other Council members to narrow a long list of potential topics for ‘Science and Policy’ discussions prior to the next Fish and Wildlife Program Amendment process begins in early 2013. Most Council members generally agree a few topic areas should receive the greatest focus:

Draft final list of focused Science Policy work by the Council and its’ regional partners.

1. Habitat restoration. Consider ties to:
 - a. CHaMP, ISEMP, IMWs and Tetra Tech’s work for WA, OR and BPA
 - b. Geographic review and Expert Panels
2. Supplementation
 - a. Wild and hatchery fish interactions
 - b. Idaho Supplementation Study and Hatchery Scientific Review Group results
 - c. Council criteria resulting from the recent RM&E / AP category review
 - d. Assist NOAA and BPA in developing the scope of CRHEET
3. Predation
 - a. Current conditions across all predators (sea lions, birds, fish)
 - b. Native fish versus non-native fish including lake trout
 - c. Predation functions within a broader ecological context
4. Integration of the ISAB reports into the Council’s evaluation and decision-making processes
5. Updating the Council’s Fish and Wildlife Research Plan

These exchanges should involve interested Council members, and may differ from past Science Policy exchanges by being more frequent, focused, shorter, with targeted outcomes for possible Program implementation or possible issue incorporation into the next Program as appropriate for the topic. These exchanges might take place at, or around, a council meeting, in a classroom-

style setting, or even as a longer workshop. More than one discussion may be required to fully explore a topic.

Discussions at these Science & Policy exchanges are intended to inform and frame issues for the next Program amendment process, and may help shape implementation strategies. After the completion of each exchange a summary report with implementation recommendations will be produced and posted to the Council's website. These exchanges are not intended to predetermine Program language

Fish and Wildlife managers, researchers and other experts on each topic will be invited to share their experience and latest findings. They will also be encouraged to discuss among themselves, and with Council members and staff, how best to integrate their technical and scientific findings with management policies and decision-making processes. As appropriate the ISRP and ISAB members will participate.

**Fish Tagging Forum
Portland, OR
Meeting Notes
November 16, 2011**

Background

The Northwest Power and Conservation Council convened the Fish Tagging Forum (FTF) to address regional fish tagging issues (see July 13, 2011 Charter at <http://www.nwcouncil.org/fw/tag/charter.pdf>). The forum held its first meeting on November 16, 2011. Briefing materials modified during the meeting are included as Attachment A, the Agenda is included as Attachment B, and the List of Attendees is included as Attachment C.

Discussion Summary

Introductions and opening remarks were made by most forum participants. It was an opportunity to express their interests and concerns with respect to the forum. The group discussed the focus and process for the forum. Presentation materials associated with the discussion are provided as Attachment A and key discussion points are summarized below.

- 1) Scope – The Charter defined the range of tagging technologies to be evaluated by the forum. As a result of discussion, there was a general consensus to specify information related to species, geography and timeframe to allow for broader coordination. While it was recognized that the revised scope definition is very comprehensive, prioritization of discussions will be necessary to effectively work through the process in a timely manner. Engaging the ISAB or IEAB to review forum products (e.g., cost-effectiveness evaluation) will be considered when those products are developed.
- 2) Objectives - A significant discussion point for the objectives of the FTF revolved around the breadth of tagging efforts outside of the BPA funded activities. It was agreed that to fully answer the questions in front of the FTF, that the scope of the review needed to include all tagging efforts in the region. In addition, the Objectives were further modified to include recommending a “fair share” funding allocation, and responding, as appropriate, to the 2009 ISRP Fish Tagging Report recommendations (ISAB/ISRP 2009-1). There were other items originally included in the objectives section that have now been defined as “related efforts to support the primary objectives”. The purpose for this is to differentiate between evaluation outcomes and considerations as part of the evaluation. The revised objectives are included in Attachment A.
 - a. Program Effectiveness – The participants discussed the importance of defining the attributes associated with “program effectiveness”. Some initial ideas include adverse biological impacts, cultural concerns, legal obligations (e.g., take limits), statistical confidence, and cost.

- b. Fair Share - There was a general agreement that the concept of “fair share” allocation of cost was important to reaching the objectives of the FTF. Questions were raised as to what level of funding provided by BPA is considered to be BPA’s fair share of tagging activities.
 - c. Responding to the 2009 ISAB/ISRP Tagging Report Recommendations – The 2009 report is considered the starting point for the FTF review. While the two initial objectives of the FTF were determining cost and program effectiveness, it was agreed that there were other items from the 2009 Fish Tagging Report that may require further attention as part of the FTF effort.
- 3) Evaluation Framework - At the meeting a “top down” vs. “bottom up” approach was discussed for evaluating the relationship between Management Questions and Tagging Technologies (see Attachment C). The path forward for December will be for the forum to initiate a discussion of the primary legal drivers (e.g., FCRPS Biop, NW Power Act, US v OR, Pacific Salmon Treaty, etc) and associated Management Questions informed by data collected using tags. The first evaluation will be for Acoustic Tagging (e.g., JSATS) at the December meeting. The evaluation will follow the framework from the bottom up.
 - 4) Management Questions - It was generally agreed that adequate logistical coordination to execute annual studies occurs at the local level and therefore should not be the focus of this forum. However, there was general consensus that opportunity does exist to improve basin-wide coordination and future planning efforts that recognize changes in programs, technologies, and various management questions derived from the FTF participants legal and regulatory drivers. To this end the first collective effort of the FTF will be to establish a cross-walk between management questions with the associated regulatory or legal driver.
 - 5) Short and Long Term Tagging Objectives - There was general consensus that the FTF should proceed with an emphasis of looking to leverage information from both short-term and long-term studies as it relates to long-term objectives. It is a preliminary observation that there may be opportunity to better improve coordination by understanding how short-term and long-term objectives can be mutually supported.
 - 6) Other Regional Efforts and Existing Information – The FTF will use existing information wherever feasible. Much information exists with respect to the use of tags for addressing existing needs. The FTF will strive to not duplicate prior or ongoing work. In addition, there will be several parallel regional processes over the next two years where coordination will occur as instances arise (e.g., development of a regional PIT Tagging Plan).

Path Forward

The next meeting will be Wednesday, December 14th, 2011 at the Council offices in Portland Oregon. Going forward, all meetings will include a teleconference line and computer connection.

Topics and Associated Actions for next meeting:

- 1) Management Question/Legal Driver Cross-walk: Prior to the next meeting, participants will review the relationship between management questions with the driving regulation sources (BiOp, Power Act, HCPs, etc) in support of completing a crosswalk at the next meeting. Participants suggested reviewing previous work related to management questions including:

- a. PNAMP -

http://www.pnamp.org/sites/default/files/2007_0502PNAMPMQReportFinal.pdf

- b. CSEMP -

http://www.cbfwa.org/csmep/web/documents/general/Documents/CSMEP_FY08AnnualReport.pdf

- 2) List of BPA Funded Tagging Projects: Rick Golden (BPA) will review contract documentation to develop a list of BPA funded tagging projects and provide the information at the December 14th meeting.
- 3) Acoustic Tagging Technology Mapping: USACE will prepare to discuss Juvenile Salmon Acoustic Telemetry System (JSATS) at the next meeting. David Clugston will coordinate with the appropriate USACE staff. The FTF will work the evaluation framework from the bottom up.
- 4) January Briefing for Council: Forum Manager (Tony Grover) will discuss the FTF topics to be discussed at the January Council meeting.

Attachment A: Briefing Slides from Meeting

Fish Tagging Forum

November 16, 2011

Note: Items added through group discussion at the meeting are in *Blue Italics*

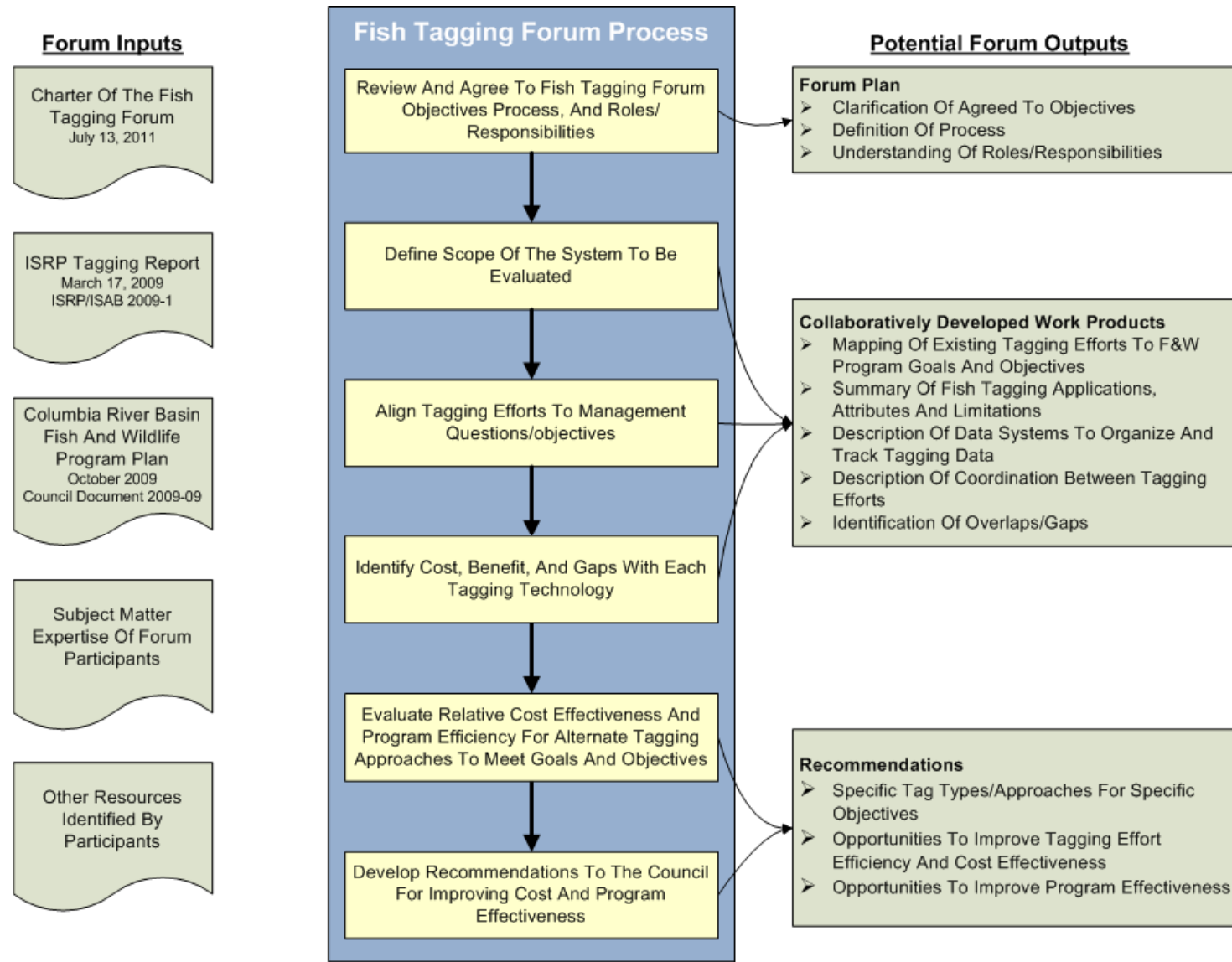
Ground Rules

- Follow the Rule of Reciprocity (i.e., Golden Rule)
- Treat all people and perspectives with respect
- Avoid “side-bar” conversations - limit disruptions by leaving the room for private conversations
- Let folks finish their statements
- Be patient with those who are asking clarifying questions
- Silence cellular phones

Participation

- Open to interested parties – varied input and perspectives are welcomed
- Meetings are intended to be working meetings where we collaboratively work to develop our outputs
- There may be “homework” between meetings
- We will be working towards developing recommendations to the Council so we will seek alignment/consensus

General Process



Forum Objectives

(as revised in meeting)

Objectives and Scope of Activity: The Fish Tagging Forum will advise the Council regarding the following issues. Activities of the Forum will include:

- A. Developing and recommending to the Council a commonly accepted description of fish tagging funded by Bonneville Power Administration, including what fish are tagged and released and recovered, in what numbers, where, and by what entity, and for what purposes. *Additionally, the forum participants will describe similar efforts in the Columbia Basin that are outside of the BPA funded programs including their connection to answering multiple management questions. The descriptions will include identification of the obligation or authority that drives the tagging effort.*
- B. Recommendations to the Council on ways to improve the cost effectiveness of fish tagging under the Fish and Wildlife Program.
- C. Recommendations to the Council on ways to improve the program effectiveness* of fish tagging to address key management questions under the Fish and Wildlife Program.
- D. *Recommend “fair share” allocation of responsibilities for funding fish tagging relative to each management question.*
- E. *Respond, as appropriate, to 2009 ISRP recommended actions.*

Related efforts to support the primary objectives above:

- 1. *Originally Objective (D):* Describe the various data systems used to organize and track tagging data including recovery information.
- 2. *Originally Objective (E):* Describe the degree of coordination within and among tagging efforts and recommend improvements in coordination within and among tagging efforts where efficiencies and cost effectiveness may be improved.
- 3. *Originally Objective (F):* What is the objective of each tagging effort and are the right tags being used, or proposed to be used, to accomplish that objective.
- 4. *Originally Objective (G):* Review issues related to fish tagging, such as the adequacy of geographic coverage, span of species diversity, *adverse biological impacts* or completeness of life cycle tracking. The forum could provide recommendations on cost efficient, technologically practical and acceptable changes to current tagging programs.
- 5. *NEW: Description of future considerations related to management questions and related fish tagging efforts.*

NOTE: “Tagging” includes: Tagging, Release, Recover, and Assessment – full life-cycle.

** considerations/attributes of “effectiveness” will need to be defined as part of the forum.*

Outcomes

- Common understanding and documentation of relationship between current tagging efforts and management questions
- Identification of opportunities to improve coordination, efficiency and cost-effectiveness
- Recommendations to the Council for improving cost and program effectiveness

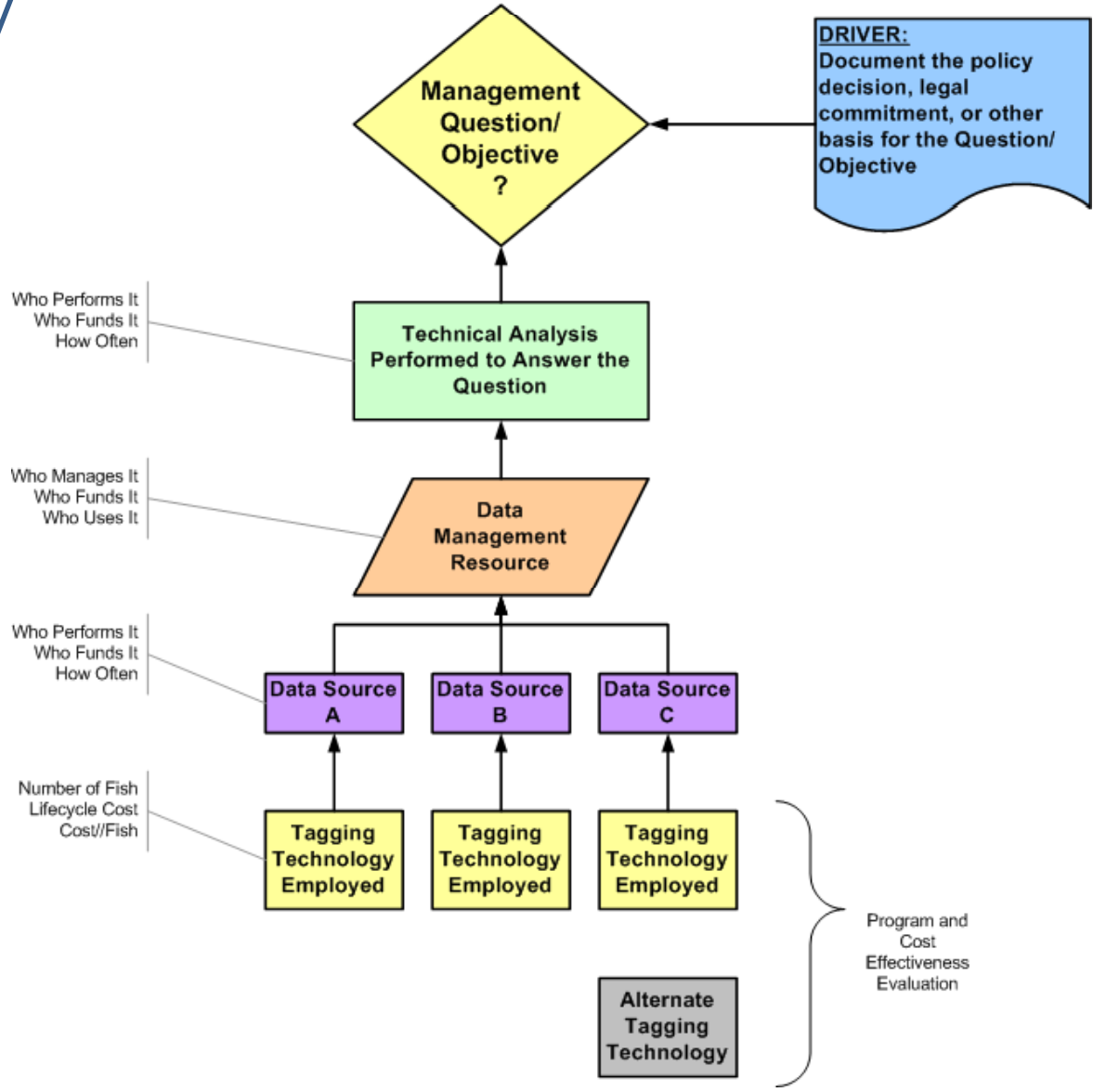
Scope of the Evaluation

- Species
 - *spring/summer chinook, sockeye, fall chinook, steelhead, sturgeon, lamprey, coho, chum salmon, bull trout, cutthroat, red band, burbot, smelt,*
- Geography
 - *Columbia River Basin, Willamette River Basin, Pacific Ocean (includes Puget Sound) – not just BPA funded programs (PUDs, private utilities, Feds, States, Tribes, Counties?)*
 - *Varies by species and program*
- Technology (includes life-cycle activities and infrastructure)
 - Coded Wire Tags, PIT Tags, Radio Tags, Acoustic Telemetry, Data Storage (*Archival*) Tags, Genetic Markers, Otolith Marks, Natural Marks and Tags (Otoliths, Scales, and Parasites), *Visual Implant Elastomer Tags, Fin Clipping, chemical marks (oxytetracycline), balloon tags,*
 - *tags are recovered in the Columbia Basin from other programs (high seas, Deschutes (Floy tags)).*
- Timeframe
 - *Short (research) and long-term (status and trend)*
 - *Periodic and continuous*

Note: Participants indicated that this scope definition is very comprehensive and prioritization of discussions will be necessary to effectively work through the process.

Evaluation Framework

At the meeting a “top down” vs. “bottom up” approach was discussed. The path forward for December will be for the forum to discuss primary Drivers (e.g., FCRPS Biop, NW Power Act, etc) and associated Management Questions, followed by a “bottom up” discussion of Acoustic Tagging technologies.



Attachment B: Meeting Agenda

AGENDA	Meeting Date: Wednesday November 16, 2011
<i>Fish Tagging Forum</i>	Location: Council Central offices 851 S.W. Sixth Avenue, Suite 1100 Portland, OR 97204 For Directions Call: 503-222-5161
Northwest Power and Conservation Council	Schedule: 9am to 4:30pm
	Contact: Kevin Kytola kkytola@sapereconsulting.com 509.200.9804

- 9:00 to 9:15 Introductions
- 9:15 to 10:30 Opening Remarks
- *Forum Manager, Forum Chair, and Participants will share their perspectives and expectations related to the Fish Tagging Forum.*
- BREAK*
- 10:45 to 11:15 Forum Ground Rules, Participation & General Process
- *Facilitator will provide an overview of the collaborative process and expectations for participation.*
- 11:15 to 11:45 Discuss and Finalize Forum Objectives and Outcomes
- *Forum participants will discuss objectives and outcomes defined by the Council to clarify and/or modify what the Forum strives to accomplish so that there is alignment amongst participants.*
- LUNCH*
- 1:15 to 2:15 Discuss and Agree to Framework for Technical Discussions
- *Facilitator will describe the specific framework that will be employed to ensure that Forum discussions remain focused on aligning F&W Program Goals to Fish Tagging Activities. Forum participants will discuss the framework to clarify and/or modify how the process will be conducted so that there is alignment amongst participants.*
- BREAK*
- 2:30 to 4:00 Begin Mapping F&W Program Goals to Fish Tagging Activities
- 4:00 to 4:30 Recap and Plan Next Meeting

Attachment C: List of Attendees

Name	Organization	Email	Office Phone	Mobile Phone
Kevin Kytola	Sapere Consulting	kkytola@sapereconsulting.com	509.524.2343	509.200.9804
Tracy Yount	Sapere Consulting	tyount@sapereconsulting.com	509.737.0083	509.741-9990
Doug Marsh	NOAA - NWFSC	doug.marsh@noaa.gov	206.860.3235	
Rick Golden	BPA	rlgolden@bpa.gov	503.230.5119	
George Nandor	PSMFC	gnandor@psmfc.org	503.595.3100	
Karl Weist	NPCC	kweist@nwcouncil.org	503.229.5171	
Bo Downen	PPC	bdownen@ppcpdx.org	503.595.9772	
Lawrence Schwabe	CTGR	lawrence.schwabe@grandronde.org	503.879.2395	
Marianne McClure	CRITFC	mccm@critfc.org	503.731.1254	
Geraldine Vander Huegen	NW Marine Tech	geraldine.vanderhaegen@nmt.us		360.791.2955
Steve Yundt	LSRCP-FWS	steve_yundt@fws.gov	208.378.5227	
Dan Rawding	WDFW	rawdird@dfw.wa.gov	509.493.2976	
Ron Costello	BPA	rjcostello@bpa.gov	503.230.4367	
Pete Hassemer	IDFG	pete.hassemer@idfg.idaho.gov	208.334.3791	
David Clugston	USACE - NWD	david.a.clugston@usace.army.mil	503.808.3724	
Keith Wolf	Colville Tribes	kwolf@colvilletribes.com	509.422.5657	509.631.1407
Sandy Downing	NOAA	sandy.downing@noaa.gov	206.860.5604	
Guy Norman	WDFW	normagn@dfw.wa.gov		
Tony Grover	NPCC	tgrover@nwcouncil.org		
Randy Fisher	PSMFC	randy_fisher@psmfc.org		
Jay Hesse	Nez Perce Tribe	jayh@nezperce.org		
Jim Geiselman	BPA	jrgeiselman@bpa.gov		
Therese Hampton	NW River Partners	hh_solutions@comcast.net	360.210.7325	
Bill Booth	NPCC - Idaho Member			
Bill Bradbury	NPCC - Oregon Member			
Terry Flores	NW River Partners			
Shaun Narum	CRITFC	nars@critfc.org	208.837.9096	

Name	Organization	Email	Office Phone	Mobile Phone
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Jim Ruff	NPCC	jruff@nwcouncil.org		
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Raquel Crozier	NPCC - WA Council Staff			
Lynn Palensky	NPCC	lpalensky@nwcouncil.org		
Mark Fritsch	NPCC	mfritsch@nwcouncil.org		
Pat Frazier	WDFW	patrick.frazier@dfw.wa.gov	360.906.6711	360.608.2906