

## Draft Wildlife Advisory Committee April 9<sup>th</sup> 2015 Meeting Minutes

[Meeting Title]		
4 09.2015	Wildlife Advisory Committee	NPCC Offices
Attendees	Peter Paquet, Karl Weist, Kelly Singer, Sam Rushing, Chris Wheaton, Mark Fritsch, , Kerry Berg, Philip Key, Richard Whitney, Paul Dahmer, Norm Merz, Loren Kronemann, Alan Wood,, Dwight, Keith Kutchins, Kendra Coles, Kerry Berg, Nancy Leonard Robert. Stephens, Carl Scheeler, Bob Austin; Aren Eddingsaas, Fife, Sandra, Jeff Allen; Matthew Berger	
[Agenda Topic] Approval of minutes from February 12 <sup>th</sup> & March 12 <sup>th</sup> Meetings		
Discussion	The Committee unanimously approved the minutes from the February and March Meetings. The minutes are posted on the WAC website ( <a href="http://www.nwcouncil.org/fw/wac/">http://www.nwcouncil.org/fw/wac/</a> ).	
[Agenda Topic] Operational and Secondary Losses Definitions		
Discussion	<p>The Chair and other committee members reported to the WAC members on the message that was received from the presentation to the Council on the proposed definitions for Operational and Secondary Losses (See Attachment 1)</p> <p>The general feeling was that the Fish and Wildlife Committee members were still uncomfortable with the current draft definitions and were uncomfortable with the distinction between the two definitions. It was also clear that the Fish and Wildlife Committee members would like to see an option from the WAC that focuses on the use of agreements for resolving these issues and confirms the nexus to the hydro system. There was some discussion on how the Council would look at agreements if there was no method for quantifying the losses.</p> <p>There questions as to how these were addressed in other agreements. Philip Key provided this link (<a href="#">Response to Comments on the 'Willamette River Basin Memorandum of Agreement</a>) To help clarify the issue. There were also questions regarding transmission lines and how they would be handled in the Power Plan. Members requested a briefing on the issue at the May WAC meeting.</p>	
Circulate Revised Draft to Committee members	Peter Paquet	4/17/15
[Agenda Topic] Operational and Secondary Losses		
Define options for Operational & Secondary Losses		
Discussion	The chair presented a Power Point on options for making recommendations to the Council on how to address these losses in the future. See: ( <a href="http://www.nwcouncil.org/fw/wac/meetings/2015_0409/">http://www.nwcouncil.org/fw/wac/meetings/2015_0409/</a> )	
[Agenda Topic] Update on HEP Contracting		
Define options for Operational & Secondary Losses		
Discussion	Chris Wheaton (PSMFC) presented a Power Point on the HEP contract and status of data and future products. See: ( <a href="http://www.nwcouncil.org/fw/wac/meetings/2015_0409/">http://www.nwcouncil.org/fw/wac/meetings/2015_0409/</a> )	

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### Attachment 1

#### WAC Operational and Secondary Loss Definitions v1.2

**Operational Impacts to Wildlife** - Direct changes in river hydrology, hydraulics, sediment and nutrient availability and/or transport that cascade throughout the ecosystem, altering physical and ecological processes, which directly affect fish, wildlife, and vegetative communities. Operational impacts occur within reservoirs and downstream of the dam as a result of altered flows and/or fluctuating water levels. Operational and secondary impacts are generally expressed over time and will continue beyond the life of the hydropower system operation until riverine hydrology and ecological functions and processes are restored. These impacts have not been fully assessed and may not have been mitigated for as part of construction and inundation losses.

Examples of operational impacts include increased shoreline/riparian erosion; fragmentation of or reduction in wetlands and wetland function, changes in nutrient and temperature conditions below reservoirs that alters instream and riparian productivity, populations, and habitats; loss of spring flooding flows that maintained downstream riparian/floodplain cottonwood galleries and habitats; and changes in wildlife use resulting in loss of productivity, food resources, and normal reproductive, migration, movement, or other wildlife cycles. These impacts should be assessed and mitigated for in terms of extent, magnitude, duration, reversibility, timing, frequency, and cumulative effect. These impacts may exceed those of construction and inundation.

**Secondary Impacts to Wildlife** - Changes in human land uses within the historic floodplain enabled by dam operations as well as development and maintenance of the FCRPS grid affecting wildlife connectivity, direct mortality, habitat use and quality, wildlife frequency, noxious weed infestations and human disturbance. Secondary impacts include alterations in previously normal and predictable cycles and processes upon which wildlife and wildlife habitats are dependent on. All of these changes cause direct effects to wildlife communities and/or their habitats. Examples of secondary impacts include: 1) elimination or reduction of wild adult salmon and steelhead and lamprey to spawning streams, thus impacting the benefits of these marine-derived nutrients (MDN) to these watersheds, habitats, and their vertebrate and invertebrate populations. 2) Conversion of wild spawning stocks of anadromous fish into hatchery production, outmigration and returns; altering nutrient and prey availability, use, and timing in tributary and mainstem systems. 3) Development and maintenance of the FCRPS grid affecting wildlife connectivity, direct mortality, habitat use and quality, wildfire frequency, noxious weed infestation, and human disturbance. Secondary impacts are often manifested in trophic cascades and so their impacts are compounded throughout an ecosystem. Secondary impacts are pervasive and cumulative.