



WASHINGTON STATE
RECREATION AND CONSERVATION OFFICE

Forum on Monitoring Salmon Recovery and Watershed Health

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Dear Dr. Leonard,

I am pleased to forward these comments on the Northwest Power and Conservation Council's Draft "*Monitoring, Evaluation, Research, and Reporting*" (MERR) Plan on behalf of the Washington Forum on Monitoring Salmon Recovery and Watershed Health. As you know, the Forum currently comprises over 28 participating local, regional, state, tribal, and federal agencies and organizations involved in monitoring for salmon recovery and watershed health.

The Forum commends the Council for undertaking the challenging and timely task of developing strategic policy guidance and priorities for its Research, Monitoring and Evaluation (RME) program. An effective RME program coordinated across the Council's many partners in the Columbia Basin is much needed to answer critical management questions, to ensure the prudent and efficient use of resources, and to assess progress in achieving the goals of the Fish and Wildlife program.

In compiling our members' comments, a number of broader themes emerged that are highlighted below. We hope our suggestions and comments will strengthen the Plan and enhance its utility and value in guiding Council decisions.

We have also attached a number of more detailed comments on specific elements of the Plan. Again, we appreciate the tremendous work that went into preparing this draft, and we look forward to continuing to work in partnership with the Council as you complete the final Plan.

Please note that the Forum's comments were compiled from a number of members who have reviewed the Plan. Therefore, our comments reflect a broad collection of views and should not be interpreted to represent the position of any individual agency or member (some of whom may have elected not to comment on the Plan). In addition, our comments do not supersede those of any members who may also choose to independently provide their own detailed

comments on the guidance. Naturally, our NPCC representative abstained from commenting on the draft since the subject document is a Council product.

Forum comments on the Draft MERR Plan:

- 1) **Organization:** Overall, the MERR Plan is a well organized and well thought out document that should provide the necessary information to establish a framework for monitoring, evaluation, research, and reporting in the Basin. In general, the Plan contains all the elements needed to describe the goals, objectives, and actions to be monitored, evaluated, and reported.
- 2) **Decision Making:** We understand the Council intends to use the Plan to guide ongoing management of RME projects and provide the ISRP with a policy framework and technical criteria for use in the upcoming categorical review of RME projects. However, it is somewhat unclear how the current draft of the MERR Plan will guide the Council in making decisions, and we find it difficult to ascertain how the many new and existing policies and procedures identified in the Plan would be applied in the existing decision-making environment. We suggest a decision tree be developed that illustrates the Council's decision-making process, identifies what information it needs to make those decisions, and shows the policies and procedures that would apply to those decisions.
- 3) **Costs:** There is no mention of the cost to implement the Plan, and it is unclear how the number and complexity of new tasks identified in the Plan will be accomplished given limited resources. It would be valuable to identify the resources that will be required to complete each substantive step identified in the Plan in a timely manner.
- 4) **Priorities:** We strongly support the goal of developing a prioritization framework. However, the prioritization guidance described in the draft is very broad, rather diffuse, and unfocused. Use of step-down graphics (e.g. dichotomous keys) or a decision tree (as mentioned earlier) might help identify which criteria would be applied at each step. Since prioritizing RME actions also depends on the priority given other actions (e.g. the priority of evaluating effectiveness of a set of actions depends on the priority given to completing those actions), we suggest the Council consider developing a collaborative, inclusive, and transparent process to define strategic priorities for all Program activities during the full Fish and Wildlife Program Amendment process.
- 5) **Alignment:** We would like to see a convergence of the direction set through MERR with that provided by the Washington Forum on Monitoring (FORUM) as well as the Washington Salmon Recovery Funding Board (SRFB). Alignment among these bodies is critical to achieve our goal of both regional and statewide consistency (i.e. consistency in approach, methods, etc. with Puget Sound and other regions outside the Columbia Basin). There are a few

significant differences, including definitions of different types of monitoring and of Intensively Monitored Watersheds (IMWs), which are particularly troubling (see below). Also, there are several areas in the document where performance standards, high level indicators, high level questions, management actions, and other performance- or action-related measures are discussed (e.g., pp. 6, 11, 14). The document needs to do a better job of defining these measures and explaining their relationship to one another. A diagram might be helpful, and we think it will greatly benefit all involved if the definitions we jointly use are consistent.

- 6) Types of Monitoring: In contrast to the more experimental/rigorous approach used by the Forum, SRFB, and adopted in Washington's Comprehensive Monitoring Strategy, The MERR Plan appears to define "intensively monitored watersheds" differently, and appears to steer all action effectiveness monitoring (e.g., including reach-scale project effectiveness efforts like those funded by the SRFB) into those watersheds. Although all environmental monitoring could be treated as "effectiveness monitoring" at some scale and timeframe, IMW monitoring is usually viewed as cause-and-effect monitoring and effectiveness monitoring used to describe reach or basin evaluation of specific management actions. As described in the text, the goals and objectives of these two types of monitoring are confusing. The document includes language suggesting that effectiveness monitoring should be at the population scale yet also describes single actions or specific actions at specific locations. We recommend separating out IMWs into its own type of monitoring and better define the goals and objectives of effectiveness monitoring.
- 7) Protocols: Protocols are an important issue for all aspects of monitoring, evaluation, research and reporting, including data management. Data collected to support HLI, other indicators, and their associated metrics need to be measured using consistent protocols and reported the same. However, protocols are treated inconsistently throughout the draft, especially with respect to the Council's role and processes. The document identifies a role for the Council in adopting protocols, and references three that have been adopted to date (section 3.4.2). But in contrast to adoption, the draft also "urges" use of appropriate protocols.
 - Are there other protocols the Council may adopt under the MERR Plan?
 - If so, what process will the Council use to identify and adopt those protocols (i.e., implementation, status-trends and effectiveness monitoring, research, data management and sharing)?
 - How would the ISRP/ISAB's periodic reviews of status and trends methods and protocols relate to these issues?
- 8) Data Management: The plan is not clear about how data will be managed and reported across the many different groups involved in implementing the Plan. Also, there is no mention of the potential costs to develop the necessary data management infrastructure to carry out the reporting elements of the Plan, nor who would bear the burden of those costs.

- 9) Reports: A strength of the MERR Plan is the inclusion of “reporting” in addition to the usual content involving research, monitoring, and evaluation. However, as written the components appear to reflect a mere aggregation without being framed in a logical or strategic manner addressing priority needs. A graphic depicting the relationship among the various reports, strategic needs/functions, and other components might be helpful. We suggest further consideration be given to what the Council expects from each report outlined in the Plan. For example, what will the new synopsis reports do that reports characterizing high level indicators would not? Multiple reports with multiple data demands – whether from the Council or other sources – burden data contributors with many hours of work and have the potential, if not carefully developed, to be of limited use or to portray misleading or confusing information. We request the Council identify the particular target audience for each report, the questions to be answered, and the level of resources needed to complete each report in a rigorous and transparent manner.
- 10) Living document: There are several references to the MERR Plan as a living document and its elements as dynamic in nature, but there is little discussion about just how the Plan will be updated in a manner that is both dynamic and inclusive. For example, research and monitoring needs evolve continually. In addition, much of the detail relevant to the implementation strategies and data collection and management infrastructure is only now being crafted and updated. How will this information be kept current and by whom? This topic needs further clarification with emphasis on who will be responsible for which elements and the associated maintenance cost.

Thank you again for the opportunity to comment on the Council’s draft MERR Plan. We believe the Plan is an important step forward and we appreciate the Council’s efforts to develop this document. We hope our comments will help strengthen the draft, lead to increase opportunities for partnership between the Council, the Forum, and member organizations, and improve statewide and regional consistency in how we all jointly approach monitoring, evaluation, research, and reporting on salmon recovery and watershed health.

Sincerely,

Bill Wilkerson, Chair

Washington Forum on Monitoring

Attachment:
Detailed comments on the Draft MERR Plan:

Executive Summary

Page 2. You might consider adding a summary of Council’s monitoring priorities. The three implementation strategies should also be identified.

Section 1) Background

Page 4. This section appears to use the term “action” differently and, perhaps, in conflict with the definition presented in footnote 2. It also highlights the need for a definitions section at the beginning of the document. We found several places – most notably in types of monitoring – where suggested definitions vary from those used in Washington. We think consistency across organizations and states is crucial to a successful strategy and plan, so we hope the Council will consider adopting definitions recommended by PNAMP, or perhaps making clear why the usage in MERR is different.

Page 6: Figure 1. This is a complex and confusing figure, and text explaining the figure is quite long; if this much explanation is needed to understand the figure, perhaps a better approach would be to move the explanation into the body of the text?

Section 2) Strategic Plan

2.3) Policy Guidance

Page 8. It is good that key policy bullets are highlighted up front, but it is difficult to understand how they logically relate to one another or to follow them through subsequent sections. Moreover, we find it very difficult to follow how the many new and existing policies and procedures identified in MERR would be applied to the existing decision-making environment.

We suggest that a decision tree be developed that clearly and logically depicts the Council’s role and process in making decisions, identifies the applicable policies to be considered, and lays out the procedures and steps that will be followed. Specifically, for each step, we would like to see a box that identifies what information the Council needs to make a decision and what policies and criteria would be applied during that decision. It would also be valuable to identify the resources that will be required to complete each substantive step identified in MERR in a timely manner.

The use of a risk-effort analysis approach appears to be a new and significant initiative. It seems something as important as the effort-risk analysis would be more appropriately discussed in the body of the plan text, rather than in a footnote, and an example or two of how this might work added. Likewise, while we support the concepts of a preponderance of evidence standard, it seems this is also an initiative that deserves more prominence in the text as well as a discussion of when and how it might be applied.

We understand that common protocols are essential to data sharing and interpretation, but are also perplexed by the policy which would require “. . .all research and monitoring conducted must. . .use protocols approved by the Council” (emphasis added). Is it possible that there are circumstances where it would be desirable to encourage the use and/or development of new and

diverse protocols during the course of a project? We accept the idea that use of common protocols is appropriate for some wide-spread measures, but perhaps there could be a qualifier for the times when this does not work.

We agree that RME data need to be accessible in a timely manner. We question if the creation of a separate timeline for reporting (last policy) outside that which exists for BPA annual reporting is necessary.

Section 3) Implementation Framework

3.2) Structure

Page 11. This diagram is easy to follow and might benefit a reader if it were placed earlier in the report since it applies to all of MERR, not just the implementation framework. And, as with Figure 1, we recommend the cumbersome figure description be shortened; this much text deserves to be in the main body of the text. Perhaps you might also consider pulling each of the boxes out and repeating them in their appropriate location in the document.

3.3.1) Management Questions

Page 12. Although the footnote sends readers to Appendix 3 and the Council's website for the list of management questions, they are on the next page. It is interesting to note that an important priority is embedded in the statement: "All RME actions, therefore, must contribute data towards answering one or more of these questions." This is an example of where the decision tree we suggest be developed could help identify policy applications.

3.3.2) Biological Objectives

Page 12. The plan states that the Program's biological objectives should aid in prioritizing RME and reporting actions, but does not explain how they would be used for such a purpose. It also notes that biological objectives need to be "developed further," but does not explain what needs to be done or the schedule or process for doing so.

3.3.3 Performance Standards

Page 15. You might want to note that Appendix 2 provides a list of the Council's performance standards.

The plan notes that the Council will assess the need for additional standards in conjunction with its efforts to further develop biological objectives, but does not explain how this will be accomplished.

The sentence, "If progress towards achieving these performance standards falls significantly short then the Council may revisit all or part of the Program to determine what needs to be changed to make progress" appears to be a significant policy statement; we suggest you move it up front where it will be more visible.

3.3.4) Prioritization Criteria

Page 16. This section could benefit from some clarification. We struggle with a prioritization scheme that tiers criteria, but says they are all important; that doesn't eliminate or "lower-rank" projects through any sorting mechanism; and that places coordination in the third tier (seemingly

less important?) of a strategy that argues one of its main functions is to improve coordination. Another confusion is the sentence, “The Council has adopted broad criteria, subdivided into four tiers, to provide guidance for implementation of Program RME actions.” This implies the criteria are only germane to the Implementation Framework, but shouldn’t they also be applicable to Implementation Strategies, project-by-project decisions related to RME data collection, reviews by the ISRP, and decisions by the Council?

The second-tier criteria “Reasonable Timeframe to Produce Results” suggests that “reasonable” is five-to-ten years or a few salmonid generations. This timeframe may be sufficient for some project and site specific characteristics, but it may not be enough for meaningful status and trends data for fish and habitat given the expected timeframe for changes to occur at the ESU or population scale – likely a minimum of 10 years or more. Also, some effectiveness monitoring projects would be expected to take more than 10 years to produce their intended effects (e.g. re-vegetation of riparian corridors). The Plan should note that there needs to be a long-term commitment to status and trends monitoring (i.e. significantly longer than 10 years).

The entire “Focusing...” section (3.3) is about prioritization, and there are other pertinent places throughout the document that address prioritization in various ways. This is cumbersome, and will remain diffuse without a means to organize and perhaps prioritize the various prioritizations. Use of step-down graphics (e.g., dichotomous keys) might be helpful.

Section 3.3.4 Criteria do not sufficiently align throughout; recommendations:

- Move “priority species” into Tier 1
- Move “coordination” from Tier 3 to at least Tier 2 (consistent with its import as referenced throughout the document)
- Move “timeframe” from Tier 2 to Tier 3 (because various essential recovery actions will take time to achieve outcomes (e.g., increases in large wood via riparian restoration projects))

Page 17. The plan states that “Implementation strategies developed for resident fish, anadromous fish, and wildlife will at a minimum focus on listed priority species and habitat characteristics.” This is a significant policy statement and priority criterion, but it is not included in the four tiers of criteria nor is its relationship to the criteria tiers explained. The discussion around priority species warrants more exposure (perhaps elevating to a 3.3.5 heading in the document?) and digestion. Have you considered moving priority species to a First Tier criterion as well?

3.4.1) Research Approach

Page 17. This section discusses prioritization of research on critical uncertainties, but does not define or explain how critical uncertainties are identified. Perhaps this is a task of the upcoming research plan development, but it would be good to specifically state that here.

Page 18. Is effort-risk analysis the same as comparative risk analysis? If not, how do they differ or relate?

Page 19. Figure 4 would be much more helpful if a few examples were included in the text. How does placement on the grid result in different priorities? When does a high risk, high cost need trump a low risk, low cost need. The upper left quadrant is clearly a priority, and lower right would seem to be a lower priority; but, how the other half of the diagram would rank out is unclear. Many of our regional salmon recovery organizations use something similar (sometimes the axes are labeled benefit to fish and certainty of success), but within each quadrant there are clear up front criteria for ranking that help distinguish within each “bucket.”

3.4.2) Monitoring Approach

Page 20. It isn’t clear here, but we trust consideration will be given to integrating the MERR and Research Plans into a single, coordinated plan.

Page 20. The second paragraph identifies that the Program requires some level of monitoring for all projects, but also allows for separation of monitoring efforts from individual projects. This is an important distinction and deserves further clarification: how would those situations be identified? By way of an example, in the past the WA SRFB also provided for monitoring of all projects, but found that approach did not produce information that was broadly useful in answering their questions. Subsequently, they transitioned to a programmatic approach that better informs their questions about the effectiveness of categories of habitat projects. Ultimately, this is a clear example of the import of “coordination” among activities, now a Third Tier priority.

Page 21. Table 1 on page 21 and the associated text are generally understandable and clear. However, the discussion mixes Effectiveness Monitoring and Intensively Monitored Watersheds (IMW) descriptions. Action Effectiveness Monitoring as used in the document is synonymous with validation or intensive monitoring,

Page 22. Figure 5 seems to imply that both low and high risk elements end up with the same level of monitoring effort. Is this correct? How does placement on the grid result in different priorities? How does this prioritization approach relate to that which is set forth in Section 3.3.4? And, as we suggested in our earlier comments on policies, the need for the Council to have consistent protocols is understood. But it is a very technically-based task, one perhaps more appropriately given to an organization such as the ISRP. Many research projects must be highly flexible and may adapt or even create protocols to fit the specific situation. Perhaps the Council could collaborate in a process to devise a balanced method that will allow for creative approaches without risking outcomes?

Pages 23 - 26. Definitions chosen for the Compliance, Implementation, and Performance Monitoring subsection may not align with those used by Washington. Specifically, we note these differences:

The last sentence in the first paragraph under Compliance, Implementation, and Performance Monitoring is inconsistent and would more appropriately and robustly state “... evaluates impacts at the action and project level, *and depending on the scale of the action or project, could be* at the watershed, population, or species scale.” Moreover, the plan does not clearly differentiate among performance monitoring, status and trends monitoring, and action

effectiveness monitoring. All three seem to be defined in part as assessing biological and physical impacts.

The last paragraph in this section indicates that implementation data are already in PISCES. It further suggests performance measures will be needed at the action and project, and that they should be selected from the ISRP metrics report. It would help to clarify the similarities and differences between implementation data and performance measures, and their relationship to metrics used by the Pacific Coastal Salmon Recovery Fund.

The two sentences in the first paragraph under Status and Trend Monitoring are unnecessarily narrow in scope. We suggest deleting “undisturbed” from the first, and modifying the second to something like “... in order to assess *changes in status over time*.” Furthermore, in the second paragraph it is stated that the Council requires collaboration, suggesting coordination at least be a Tier 2 criterion in section 3.3.4. In addition, it appears habitat status and trend monitoring efforts like what is being implemented under the Washington Forum Framework across the state would not be possible in locations other than those identified as intensively monitored watersheds. Is that correct?

The first paragraph under Action Effectiveness Monitoring is inconsistently narrow compared to the content of Table 1. The first sentence should be revised to something like “...and its direct *physical or biological effect on the environment or on populations*.” It appears that MERR defines intensively monitored watersheds differently from Washington’s Salmon Recovery Funding Board (SRFB) and Comprehensive Monitoring Strategy, which may be confusing to project proponents, the Council, funding agencies and scientists. Further, as noted above for habitat status and trends, it appears a reach-scale effectiveness monitoring effort like what has been funded by the SRFB would not be possible in locations other than those identified as intensively monitored watersheds. Are these interpretations correct? If so, how will the Council’s action effectiveness monitoring efforts be coordinated with ongoing efforts funded by the State of Washington? How would a decision to use an independent party to gather effectiveness data be made? How would effectiveness monitoring data be rolled up?

Wouldn’t the “effort-risk analysis approach” also be appropriate where the “preponderance of evidence” (POE) assessment is mentioned for action effectiveness? And/or conversely, why wouldn’t the POE approach mentioned under action effectiveness be appropriate for research too?

3.4.3) Evaluation and Reporting Approach

Pages 27 - 31. This section would benefit from a thoughtful analysis of what kinds of reports, and for what purposes and users, the Council desires. There are multiple reports, some new, discussed in this section but it is not clear that each has a defined goal and audience. For example, is this Program Synopsis intended primarily as an evaluation tool, a reporting tool, or both? It is not clear how it relates to or complements high level indicator evaluating and reporting and fish and wildlife program indicator reporting? Will it draw from HLI/FWI indicators or synthesize other data in other ways? It is simply described as a “map” but it’s not clear how a map can depict shortcomings, and meet all the other stated ambitions and intentions (“...reflects information needed to inform Council decisions and to facilitate ISRP evaluation... guide implementation and adaptive management...”). Is there overlap between what would be

included in the Council's HLI report and the synopsis (e.g., the list of bullets to be included in the first iteration of the synopsis looks like what might be in an HLI report)? We believe it is vital that these reports be integrated to avoid repetition, and that data from one is captured seamlessly in the others.

3.4.4) Data Management and Sharing Requirements

Page 32. It is probably axiomatic to say data management is the essential foundation to communication of MERR information. Without accessible data we cannot understand how we are progressing toward our goals, and we certainly cannot ask for more money from legislatures, Congress, and ratepayers to continue our work. Consequently, the Council must set the stage for maximum data access and sharing among Basin partners. We understand the sensitivity associated with this, but feel insistent on requesting that Council policies be clear, concise, and coordinated with other partners.

Consequently, we believe the data management approach should be more fully developed, and clearly call for compatible protocols, clarify what the Council's role, process, and expectations are for data management protocol adoption and use. (Note: one of the three protocols cited in earlier in footnote 23 is actually a data management protocol.) Is the standard calling for "RME data using common terminology" where a data dictionary fits? If not, then where?

Although not specifically identified as protocols, the requirement in the first sentence stating "...data must be made available in an agreed-upon electronic format," and the bullets of "basin-wide accepted standards" in the second paragraph are really expressions associated with protocols for data management. To be able to roll-up data, protocols for data management are at least as important as protocols for other aspects of MERR and the need for them should be stressed in this section.

The last paragraph in this section is unique within the entire MERR Plan, in that it makes explicit policy requests (in this case of BPA; e.g., "The Council strongly encourages Bonneville... also requests that Bonneville... also asks that Bonneville...") rather than policy statements. Here again, we stress the importance of a decision tree which would clearly show when the Council is making a decision and when that decision lies in the purview of others.

3.4.5) Standardized Approach for Implementation Strategies

Unfortunately, these strategies were not available for all to review at the time we were looking at MERR. It would be helpful to look at them together, so we may have additional comments when these are released.