



Department of Energy

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

ENVIRONMENT, FISH AND WILDLIFE

June 22, 2020

In reply refer to: E-4

Mr. Richard Devlin, Chair
Northwest Power and Conservation Council
851 SW Sixth Avenue, Suite 1100
Portland, Oregon 97204

Dear Chair Devlin:

Bonneville appreciates this opportunity to comment on the Council's revised part one of its addendum to the Columbia River Basin Fish and Wildlife Program. It is encouraging to see that aspects of the Council's revision have been responsive to Bonneville's earlier comments, such as by adhering to the established wildlife loss assessments from past versions of the Program.

However, our review of the revisions to part one of the addendum also indicates that several points raised in Bonneville's earlier comments have gone unaddressed. As such, our October 2019 comments on the Council's first draft of the addendum, and the issues that we raised in those comments, remain relevant now. Therefore, Bonneville encloses and resubmits our earlier comments for the Council's renewed consideration and response, along with the related and supplementary comments also enclosed with this letter. As has been the case throughout this Program amendment process, the essence of Bonneville's comments focuses on a concern that the Program is increasingly moving away from its statutory sideboards and prior Council guidance, which is a matter of particular importance for Bonneville, given the Program's relationship to our fish and wildlife mitigation expenditures.

Thank you for your consideration of our enclosed comments and perspective.

Sincerely,

SCOTT G. ARMENTROUT
Executive Vice President Environment, Fish and Wildlife

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Final Bonneville comments on Draft Council Addendum 2019.10.18

Bonneville Power Administration
Comments on Revised Part One of the 2020 Addendum to the
Columbia River Basin Fish and Wildlife Program

Throughout this Program amendment process, including in our initial recommendations and our October 2019 comments on the Council’s initial draft addendum, Bonneville has emphasized the need for a comprehensive assessment of the Program’s accomplishments to date. This effort, we have explained, should entail more than recitals of implementation statistics covering a few years. It should place such statistics in the context of four decades of past Program guidance and the legal context of what the Northwest Power Act requires, then articulate what the Program has achieved with respect to what it originally set out to do under the Act. A comprehensive understanding of Program accomplishments, in the context of past Program guidance, is foundational to determining what more remains to be done under a statutory mandate that has not changed since its inception.

Despite the absence of this essential context, the revised part one of the addendum incorporates new goals and objectives into the 40-year old Program, drawing heavily on outside sources not suited to the unique statutory scope of the Program. Specifically, the Program “shall consist of measures to protect, mitigate, and enhance fish and wildlife affected by the development, operation, and management” of hydroelectric projects on the Columbia River and its tributaries.¹ Many of these outside goals and objectives were developed to inform resource management generally, not mitigation for Columbia River basin hydroelectric development. By including these broad, resource management objectives in the Program addendum, the Council assumes that they are relevant, transferrable, and appropriate in a Northwest Power Act context. They are not.

Bonneville’s earlier comments expressed concern that some of these outside goals and objectives, including those the Council proposes to adopt for anadromous fish, extend to every aspect of human influence on salmon and steelhead and lack a specified nexus to the impacts of the hydroelectric system.² Further, many of those goals and objectives relate to matters such as species abundance, distribution, and rates of return. The types of “objectives” that the Act directs the Council to solicit relate instead to development and operation of hydroelectric projects, not species status metrics. Thus, in several ways, the goals and objectives of the draft

¹ 16 U.S.C. § 839b(h)(5).

² See Bonneville Oct. 2019 Comments at 5. The draft addendum appears to incorporate the Columbia River Basin Partnership Task Force (“partnership”) adult return goals that include distribution targets for lower Columbia River tributaries, such as the Lewis, Cowlitz, and Kalama, despite the absence of federal hydropower impacts in those rivers and the fact that the Program does not include mitigation measures to implement in those tributary basins. And in a lengthy, contradictory caveat to its use of partnership goals, the Council at once seems to disavow any Program responsibility for the distribution aspect of the partnership targets, while also stating an expectation that the Program will contribute to achieving them, including, apparently, those in the lower Columbia River tributaries not addressed in the Program. See Draft Addendum at 11. The Council should explain why it is reasonable to expect the Program to contribute to abundance goals for areas where the Program does not include measures to implement, and further, why it is reasonable to include abundance targets for those areas in calculations for overall Program objectives.

addendum push beyond the statutory mandate for Program objectives related to hydroelectric dams.

The Council attempts to address this problem by explaining that the Program’s role is to “contribute to” many broader goals and objectives. Bonneville agrees that the Program is not wholly responsible for achieving such outcomes for fish and wildlife. However, the “contribute to” caveat is problematic for a couple of reasons, and it creates a lack of clarity about how certain objectives “clearly relate to program goals” or are “easy to understand and track.”³ First, the draft addendum asserts that achievement of broad regional objectives will indicate successful achievement of the Program’s goals,⁴ and that implementation of the Program’s measures “will clearly be necessary” to meeting outside regional objectives included in the addendum.⁵ The draft addendum presumes that implementing the Program is a necessary condition for achieving separate regional fisheries management goals developed through other processes. And second, even if the Program is a necessary condition for achieving those separate objectives, the inverse assertion is not necessarily true. That is, if broader regional goals are not met, such failure cannot logically be imputed to a failure on the part of the Program. The addendum fails to contemplate this scenario as a possibility. To Bonneville, this point is particularly important for the Council to clarify, especially given that the timeframe for some of the Columbia Basin Partnership Task Force (“partnership”) goals stretches out for decades, or even a century, while the Program’s overall anadromous fish goal is set for 2025. Failure to achieve partnership objectives, especially in the short-term, would not meaningfully inform questions of Northwest Power Act compliance or Program effectiveness. Bonneville asks that the Council make that point clear in its findings.

It remains unclear how the Council’s inclusion of regional objectives addressing fish impacts from sources other than the hydrosystem provides any useful implementation guidance or performance tracking value for the Program in its own right. If broad goals, are achieved, how will the Council determine that the Program, in fact, “contributed to” such achievement? If those broad goals aren’t met, how can they inform Program implementation or success?

As with the addendum’s expansive goals and objectives, Bonneville finds it difficult to discern how the addendum’s strategy performance indicators are of use for either guiding Program implementation or tracking Program progress. In fact, the addendum sends conflicting signals as

³ See Draft Addendum, Pt. 1, at 8. Bonneville understands that numerous entities encouraged the Council, in this amendment process, to take additional time and work with interested parties in the region to clarify the Program goals and objectives. While we are supportive of the Council’s willingness to allow additional time for such an effort and agree with the need for better clarity, we also observe that the Council’s adoption of part two of the addendum, with its guidance for implementation of measures, appears to have been premature; better to establish goals and objectives first, and then determine what actions may be necessary or appropriate to achieve them.

⁴ See *id.* at 8. (“Achieving these objectives is not the same as achieving the program’s goals, but the program’s contribution toward meeting these objectives also demonstrates progress toward achieving the program’s goals.”) The Council identified four criteria for determining whether to include in the addendum objectives addressing fish impacts from sources other than the hydrosystem. The addendum itself does not demonstrate application of those criteria; Bonneville requests that the Council explain its analysis of those criteria in its findings document.

⁵ *Id.*

to the underlying purpose or function of the indicators. Page four of the draft addendum states that the indicators are intended for tracking and reporting program performance, presumably as data points to be measured against objective standards. But page 25 then states that indicators “contribute to” achieving objectives, suggesting that they are actions to be implemented, rather than data points to consider. That incongruity, together with the qualifier that the indicators are “not adopted into the program,” leaves Bonneville concerned about what purpose they serve or how they will be used, and perhaps of greater concern, how they might change.⁶ As an entity responsible for mitigating consistent with the Council’s Program, Bonneville would certainly appreciate the Council providing more specific guidance about how to apply and use the addendum’s goals, objectives, and indicators.

Many of the specific indicators also seem to lack adequate context to determine what they actually indicate. This is most often characterized by the absence of a reference point, baseline, or standard to which the indicator data could be compared. Several examples are noted below, but the problem is pervasive throughout the strategy performance indicator section and the Council should review and revise it carefully before deciding to publish it with the Program.

- At page 25: “ratio of positive detections of quagga/zebra mussels to number of inspected water craft.” What does this ratio indicate about success or progress of the Council’s Fish and Wildlife Program? Not only is the introduction of invasive species by water craft unrelated to hydropower operation impacts, and therefore not appropriate for mitigation through the Program, but this indicator relies on pure chance. That is, the ratio depends entirely on how many water craft that are inspected happen to be carrying invasive mussels from outside the Columbia River basin – a factor that is both irrelevant to the Program and entirely beyond its influence.
- At page 26, with respect to sea lion counts. Do more sea lions indicate a Program success since they’re following abundant salmon? Or do more sea lions mean a failure in marine mammal management to not reduce the population?
- At page 26: “annual average catch rate of lake trout” in certain lakes. What does a catch rate of *X* versus *Y* indicate and what does that say about a specific hydropower mitigation responsibility in the Program?
- At page 27: “seasonal flows at specified Columbia and Snake river dams.” What do high flows indicate versus low flows, and doesn’t that depend on the time of year, and the dam

⁶ The draft addendum states that the strategy performance indicators, not adopted into the Program, are subject to change through undefined future processes or from unidentified sources. Therefore, Bonneville reiterates one of its prior comments on this topic: “Bonneville’s primary concern here is ensuring that any standard to which the Council intends to hold the Program is firmly grounded in the Northwest Power Act rather than goals developed in other contexts and that are not appropriately focused on the Act. To be clear, Bonneville does not object to the idea of metrics or indicators for tracking Program progress; in fact we support such an effort—provided it is focused on matters that are appropriate for the Program to track. But again, the value of any such tracking effort is unclear unless it is placed in context of what the Act requires, what’s been done, and what then remains.” *See* Bonneville Oct. 2019 Comments at 5.

that where it's measured? Does this indicate something about the water year, the snow pack, the run-off timing, fish migration, or other?

- At page 27: “percent of salmon and steelhead transported in Snake River.” Is a higher or lower percentage preferred? What would a low, medium, or high percentage indicate, respectively?
- At page 31: “number of core and conservation populations of cutthroat trout.” Does this refer to the raw number of core and conservation cutthroat populations, or to that number as a percentage of all cutthroat populations in the basin? Should the number increase, decrease, or remain stable over time? What does that indicate with respect to the Program, and how will the Council determine whether the desired change or stability can be attributed to success or failure of Program measures as opposed to other factors?

Even if the indicators are revised for general clarity, Bonneville again emphasizes that the Council should articulate how the specific strategy performance indicators flow down from specific statutory mitigation mandates before determining that they are appropriate as tracking tools for gauging success of the Program.⁷ For example, how is the Council's tracking of metrics related to regulatory water quality standards developed through other state and federal processes relevant to the Program's “general” water quality provisions?⁸ And crucially, regardless of whether the indicators signal progress or deficits, success or failure, how will the Council determine if the change is attributable to implementation of the Program unless the indicator is specifically tied to an actionable program measure derived from an appropriate statutory mitigation mandate?

The crux of Bonneville's comments on this revised part one of the Council's addendum return again to the concern we have raised throughout this amendment process: that the scope of the addendum and Program exceeds its appropriate statutory boundaries and thereby creates unreasonable expectations for both mitigation outcomes and mitigation funding.⁹ The problem presents itself at all levels of the program, from goals to objectives to indicators. Bonneville's ultimate concern is that when the Council creates greater expectations in the Program than those called for by the Northwest Power Act, any failure to meet those expectations needlessly perpetuates a general narrative of the Program's lack of long-term success and diminishes its true accomplishments. Such result is in neither the Council's nor Bonneville's interests.

⁷ Bonneville would also like to reiterate the point, raised in our earlier comments, that any changes to existing project databases to incorporate goals, objectives, or indicators would be appropriate, if at all, only after the Council can demonstrate that those goals, objectives, and indicators derive from Bonneville's statutory mitigation responsibilities and can be easily understood and tracked. *See* Bonneville Oct. 2019 Comments at 9.

⁸ *See* Draft Addendum, Pt. 1, n. 39.

⁹ *See* 16 U.S.C. § 839b(h)(2)(A) (calling for measures “which can be expected to be implemented by [Bonneville, the Corps, Reclamation, and FERC]” to mitigate the effects of hydroelectric operation and development on fish and wildlife); *see also id.* § 839b(h)(10)(A); *id.* 839b(h)(8)(A).



Department of Energy

Bonneville Power Administration
P.O. Box 3621
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ENVIRONMENT, FISH AND WILDLIFE

October 18, 2019

In reply refer to: EW-4

Ms. Jennifer Anders
Northwest Power and Conservation Council
851 SW Sixth Avenue, Suite 1100
Portland, Oregon 97204

Dear Chair Anders:

Enclosed are the Bonneville Power Administration (BPA) comments on the Northwest Power and Conservation Council's draft addendum to its 2014 Columbia River Basin Fish & Wildlife Program (Program). The draft addendum represents a substantial effort by the Council and its staff, and it raises important issues such as evaluating the Program's performance and improving Program implementation. BPA supports these efforts, with the consideration of the important issues identified in our comments.

Overall, we believe there is a need for a more comprehensive assessment of past accomplishments, as well as further evaluation and prioritization within the Program, before the Council makes substantive changes. It is critical to stress the importance of evaluating the Program's performance through the appropriate legal and historical context. We believe the Council needs to engage the region in a more collaborative effort regarding the Program goals and objectives and identify appropriate strategy performance indicators to make evaluations impactful and manageable.

BPA's initial recommendations asked the Council to largely retain the 2014 Program. Similarly, our comments on recommendations had emphasized that any changes or additions should be carefully crafted to account for historic accomplishments and to accommodate other regional planning processes currently underway. We appreciate the Council's intent to retain the 2014 Program. However, as we discuss in our enclosed comments, BPA is concerned that, in substance, the draft addendum goes beyond its intended purposes of reorganization or supplementation, and instead would amend the Program by significantly expanding the mitigation that the Council recommends.

Please contact Crystal Ball, Executive Manager, Fish and Wildlife Program, at 503-230-3991 or caball@bpa.gov if you have questions or would like to discuss in greater detail. We appreciate your consideration of these comments as the Council evaluates how it will conclude this Program amendment process.

Sincerely,

A handwritten signature in blue ink, appearing to read "S. Armentrout", is written over a light blue horizontal line.

SCOTT G. ARMENTROUT
Executive Vice President, Environment Fish and Wildlife

Enclosure:

Bonneville Comments on Draft 2020 Addendum to the Columbia River Basin Fish and Wildlife Program

Bonneville Power Administration
Comments on Draft 2020 Addendum to the
Columbia River Basin Fish and Wildlife Program

I. Context of Bonneville’s Strategic Plan

Bonneville’s Strategic Plan provides important context that has informed our review of the draft addendum and will continue to drive our implementation of mitigation consistent with the Council’s Fish and Wildlife Program and the purposes of the Northwest Power Act. Specifically, the Strategic Plan calls for taking a more disciplined approach to managing the total costs of our fish and wildlife program. Like other programs throughout the agency, Bonneville intends to manage its fish and wildlife program costs at or below the rate of inflation, inclusive of any new obligations. Other objectives established in our Strategic Plan include prioritizing fish and wildlife investments based on biological effectiveness and ensuring a nexus between mitigation and impacts of the federal hydrosystem.

This context underscores our continued need for careful review of the Program and addendum’s mitigation guidance and our concern that certain aspects of the draft addendum suggest mitigation that Bonneville lacks a clear responsibility to address. Certain categories of issues raised in Part II of the draft addendum have an uncertain relationship to federal hydropower impacts or otherwise are broader regional issues that should not fall exclusively to the Council’s Program as hydrosystem mitigation responsibilities. We appreciate the Council’s sensitivity in acknowledging that “the program’s goals should be understood in terms of protecting fish and wildlife and mitigating for the adverse effects of development and operation of the Columbia River hydroelectric facilities.” However, we ask that the Council help facilitate Bonneville’s consideration of mitigation recommendations by demonstrating and articulating a specific, case-by-case connection to hydrosystem impacts and accounting for the share of responsibility that can be apportioned fairly to other factors. We also caution that justifications such as regional “interest and participation” are not a statutory basis for action and are insufficient to support a Bonneville decision to fund a project.¹

II. Program Accomplishments

Bonneville appreciates the Council’s recognition of certain fish and wildlife mitigation accomplishments that occurred over the last five years, as noted in the draft addendum. While Bonneville supports, and was integral to, the achievements that are listed in the draft addendum, we believe that understanding *long-term* achievements and providing a more comprehensive retrospective of the region’s progress over nearly four decades is an essential threshold issue that should be addressed prior to making substantive changes to the Program. As an example, the

¹ See, e.g., Draft 2020 Addendum to Columbia River Basin Fish and Wildlife Program at 37 [hereinafter “Draft Addendum”].

federal agencies' have made significant changes and have had much success in overhauling the Columbia River System.

With respect to anadromous fish, the Northwest Power Act calls for “improved survival” at the dams and “flows of sufficient quality and quantity . . . to improve [their] production, migration, and survival.”² We provide the information below to summarize the results of the federal agencies' overhaul of the system, and reflect the success in achieving the Act's envisioned results for anadromous fish. The following accomplishments and achievements should be included in a more comprehensive review to recognize full and ongoing compliance with the Northwest Power Act's mandates applicable to Columbia River System operations and management.

- Recent measurements of juvenile fish passage survival at the Columbia River System dams for spring and summer migrants were 96% and 93%, respectively,³ as compared to when the Northwest Power Act was passed and the estimated average juvenile mortality at each main-stem dam and reservoir complex was 15-20% with losses recorded as high as 30%.⁴
- Travel time has improved for yearling Chinook and juvenile steelhead through the system thanks to the combination of spill and spillway weirs and other surface passage routes, even in low flow years such as 2015.⁵
- Total In-River survival has improved for migrating juvenile salmon and steelhead. Comparing two time periods reported in National Oceanic and Atmospheric Administration's (“NOAA”) reach study,⁶ (1997-2007 and 2008 – 2017), there has been a nearly 10% survival increase for hatchery and wild sockeye salmon, a 2% increase in hatchery and wild Chinook (3% for wild), and a 20% survival increase for hatchery and wild steelhead (13% for wild).
- For Pacific lamprey, the Corps has implemented fish ladder improvements at all eight lower Columbia River and Snake River dams, including two ladder entrance modifications and two prototype bypass flumes that are still being evaluated, and

² See 16 U.S.C. § 839b(h)(6)(E).

³ See Federal Columbia River Power System 2016 Comprehensive Evaluation, Section 1 at 13 (Jan. 2017), available at <https://www.salmonrecovery.gov/doc/default-source/default-document-library/fcrps2016comprehensiveevaluationsection1.pdf?sfvrsn=0> [hereinafter “2016 Comprehensive Evaluation”].

⁴ See *Nw. Res. Info. Ctr. v. Nw. Power Planning Council*, 35 F.3d 1371, 1376 (9th Cir. 1994). In its own loss estimates, the Council's Mainstem Passage Advisory Committee thought “an optimistic per dam survival rate would be about 82%.” See 1987 Columbia River Basin Fish and Wildlife Program, App. E, at 3, available at https://www.nwcouncil.org/sites/default/files/AppendixENumericalEstimates_3.pdf. Appendix E of the 1987 Program was incorporated into the 2014 Program's Appendix B, “Estimates of hydropower-related losses.”

⁵ See 2016 Comprehensive Evaluation, at 20.

⁶ See Daniel L. Widener, James R. Faulkner, Steven G. Smith, Tiffani M. Marsh, and Richard W. Zabel, *Survival Estimates for the Passage of Spring-Migrating Juvenile Salmonids through Snake and Columbia River Dams and Reservoirs*, 2017, at tbls. 27-31 (Feb. 2018), available at https://www.nwfsc.noaa.gov/assets/26/9359_02262018_135356_Widener.et.al.2018-Spring-Survival-2017.pdf.

modified juvenile bypass screen operations at McNary Dam and redesigned bypass collection raceway screens at transportation projects.

- Significant federal investment in structural improvements and operational changes to the system are helping to achieve these results.⁷
- As explained in greater detail under section II, below, wildlife mitigation achievements have been extensive, far exceeding those acknowledged in the draft addendum.

We also note that the region’s mitigation efforts over the last nearly 40 years were, in large part, undertaken at the urging of and consistent with past Council programs that guided those efforts. As such, Bonneville again encourages the Council not only to assess the cumulative progress made, but also to place it in the appropriate historical and legal context by considering the improvements of the last 40 years as they relate to the purposes of the Northwest Power Act.⁸ For example, Bonneville supports the Council’s efforts to quantify on-the-ground accomplishments, such as habitat improvement actions implemented over the last five years; in addition to citing mitigation statistics, though, Bonneville would be particularly interested in the Council’s assessment of how such accomplishments demonstrate progress towards the overarching fish and wildlife purposes of the Northwest Power Act.⁹

These overarching accomplishments demonstrate fidelity to the Northwest Power Act’s fish and wildlife provisions. As stated in our initial recommendations to the Council, this is not to say that other laws may not ask for something more, or something else, of the system; nor do we suggest that all fish and wildlife mitigation is complete under the Northwest Power Act. We hope, though, that the Council will undertake a broad review and evaluation of Program accomplishments soon, and that such process will yield clear documentation of where the Program started, where it is now, and where it still may need to go. By any measure, the region

⁷ See, e.g., U.S. ARMY CORPS OF ENGINEERS & BONNEVILLE POWER ADMIN., STRUCTURAL AND OPERATIONAL CHANGES AT FCRPS DAMS TO IMPROVE FISH SURVIVAL (2007), available at https://www.salmonrecovery.gov/Files/BiologicalOpinions/2004/Overhaul_of_the_System_final_draft%20.pdf.

⁸ As a related matter, Bonneville notes that the draft addendum expressly reaffirms the Program’s five million fish goal for anadromous fish. Bonneville’s initial recommendations asked the Council to consider new and relevant information if it revisited this goal. In the same way that a comprehensive review of Program accomplishments is needed before the Council undertakes an expansion of the Program, Bonneville maintains that the Council should evaluate current evidence and science related to the Program’s goal for anadromous fish before reaffirming that goal as appropriate based on nothing more than citation to earlier versions of the Program. For example, the Council should review its dated, low-end estimate of a historic run size of 9.6 million salmon and steelhead because it is higher than the highest estimates of current sources, including those by the Independent Scientific Advisory Board, the Pacific States Marine Fisheries Council, and the Columbia Basin Partnership Task Force. Compare 2014 Columbia River Basin Fish and Wildlife Program at 7 [hereinafter “2014 Program”] with A Vision for Salmon and Steelhead: Goals to Restore Thriving Salmon and Steelhead to the Columbia River Basin at 76, available at <https://www.fisheries.noaa.gov/webdam/download/93603722> [hereinafter “Partnership Phase 1 Report”].

⁹ See 16 U.S.C. § 839b(h)(6)(E) (calling for “improved survival” at the Columbia River System dams and “flows of sufficient quality and quantity . . . to improve production, migration, and survival of such fish as necessary to meet sound biological objectives”).

has made tremendous progress working together over the last several decades. Bonneville looks forward to working with the Council to develop a full accounting of that progress.

III. Addendum’s Expansion of the Program

On its face the addendum states that “[n]othing in the 2020 Addendum replaces or supersedes the provisions of the 2014 program, although in some situations the addendum supplements or reorganizes material in the 2014 program.” In Bonneville’s review of the addendum, however, we find that certain provisions suggest significant expansion of longstanding aspects of the Program (such as wildlife losses discussed in section IV.D, below) and more than mere supplementation or reorganization. A comprehensive review and evaluation of all mitigation completed under the Northwest Power Act is needed to support substantive changes in the Program’s scope, scale, or recommended mitigation.

In particular, with respect to the draft addendum’s assertion that mitigation in certain blocked areas of the basin should “increase significantly,” the Council needs to present an analysis supporting its reasoning on this point, particularly when the effect of the Council’s conclusion is an expectation of a significant ramp-up in work and investment by Bonneville. Bonneville has consistently followed the guidance of past programs, none of which identified what is now being cast by the Council as an “obvious gap” in mitigation.¹⁰ The mitigation Bonneville has funded in the Upper Columbia over the years, consistent with past and current Council programs, demonstrates the adequacy of the existing mitigation for purposes of compliance with the requirements of the Northwest Power Act. Recent examples include hatchery construction and improvement actions for Chinook, sturgeon, burbot, and trout; habitat restoration actions mitigating operational impacts; and new resident fish mitigation protecting thousands of acres in Montana, including extensive trout habitat that also provides significant wildlife benefits.

A thorough evaluation of Program accomplishments would provide critical information that needs to be considered before calling on Bonneville to “begin a comprehensive effort” to “intensify, expand, and then sustain” significant new mitigation. If such evaluation indicates a need for the significant increase in mitigation that the Council suggests exists, Bonneville stands ready to work with the Council and the appropriate mitigation sponsors on a strategy to address it.

IV. Program Goals, Objectives, and Performance Indicators

A. Goals

The draft addendum incorporates anadromous fish goals developed outside of the Council’s process, such as the salmon and steelhead goals established in the Columbia Basin Partnership Task Force (the partnership). Bonneville does not, in these comments, question the partnership’s

¹⁰ See Draft Addendum at 36, 41.

goals, but instead notes that such goals are not tailored to the statutory scope of the Program. The partnership goals implicate factors outside of Bonneville’s control or authority to address, extending to factors such as loss of habitats, migratory impediments, such as dams managed by others, ocean conditions, harvest rates, and increased predation.

We understand that the Council sees the Program’s role as needing to “contribute to” these goals, rather than achieve them. Even so, we ask that the Council articulate a clear strategy for how it will separate out responsibility relating to both Federal and non-Federal hydrosystem mitigation from responsibility for other impacts that are beyond the Program’s purview.

B. Strategy performance indicators

The draft addendum acknowledges that these objectives “may be broader than, or derived from a source other than hydrosystem impacts,” which is true as well for the related strategy performance indicators. Most of Part I focuses on strategy performance indicators despite the caveat that they are explicitly not part of the Program. Bonneville supports a more strategic approach to measuring program performance. However, the Council needs to articulate how the strategy performance indicators flow down from specific statutory mitigation mandates before determining that they are appropriate “tracking tools” for the Program.

The partnership sets a qualitative goal to “[r]estore salmon and steelhead in the Columbia Basin to healthy and harvestable/fishable levels.”¹¹ To achieve this, the partnership establishes provisional quantitative goals with a range of abundance indicators; the efforts needed to achieve these extend to every aspect of human influence on salmon and steelhead, and are beyond the Northwest Power Act obligations of Bonneville and the three other federal entities to protect, mitigate, and enhance fish and wildlife to the extent they are affected by the hydropower system. Again, Bonneville does not question the partnership’s goals, but struggles to understand how indicators focused on achieving those goals can be effective tracking tools in the context of the Northwest Power Act and the Council’s Program.

Therefore, Bonneville asks the Council to omit these external objectives and indicators from the addendum. Bonneville’s primary concern here is ensuring that any standard to which the Council intends to hold the Program is firmly grounded in the Northwest Power Act rather than goals developed in other contexts and that are not appropriately focused on the Act. To be clear, Bonneville does not object to the idea of metrics or indicators for tracking Program progress; in fact we support such an effort—provided it is focused on matters that are appropriate for the Program to track. But again, the value of any such tracking effort is unclear unless it is placed in context of what the Act requires, what’s been done, and what then remains.

C. Performance Indicators for Hydrosystem Flow and Passage

¹¹ See Partnership Phase 1 Report at 10.

Bonneville suggests that any indicators or measures relating to juvenile passage and survival in the addendum should focus on maintaining current levels of reach survival, based on reach survival estimates collected as part of the fish and wildlife program and reported to Bonneville annually by NOAA Fisheries, as well as estimates from the Comparative Survival Study (CSS). As noted in our comments on accomplishments above, current rates of in-river survival are higher than they were under previous Council Programs and meet the Northwest Power Act’s statutory direction for anadromous fish—to improve survival at and between dams. Current operations are tailored to maintain or improve those levels and facilitate information-gathering related to the latent mortality hypothesis. The 2019 NOAA Fisheries Columbia River System Biological Opinion, however, does not call for dam-specific survival monitoring. Consequently, it is our understanding that the Corps does not currently plan to continue to test performance against the 96% and 93% survival standards for spring and summer migrants, respectively, as called for in past biological opinions and in the current draft of the Council’s addendum.

However, if the Council sees a need to link the addendum to specific performance indicators for purposes of Program tracking, Bonneville recommends indicators that track the performance and impacts of system-wide dam operations, including the specific portion of which apply to the Columbia River System, relying on information in currently applicable biological opinions rather than standards derived from past biological opinions.¹²

In addition, Bonneville once again observes that while the 2-6 percent SAR objective may be appropriate to help set goals in a broader regional context considering all sources of salmon mortality, at this time SARs is not a useful performance measure for evaluating a Program objective of “contributing” to such broad regional goals. Hydrosystem operations like those planned for 2020 provide the opportunity to observe whether such operations have the potential to impact SAR rates, but since the SAR metric is affected by all survival factors (including many outside the direct influence of the hydrosystem) and require multiple generations of adult returns, the effects have, to date, not been easy to isolate to the hydrosystem specifically. If the Council continues to consider SARs in the context of the Program, though, Bonneville supports components of the 2014 Program that called for species-specific SAR targets reflecting the various unique factors affecting each particular species.

D. Wildlife Objectives

Despite the assertion that the draft addendum does not replace or supersede the 2014 Program, the effect of the addendum’s wildlife objectives is a doubling of portions of the wildlife loss assessments for construction and inundation in Table C-4 of the 2014 Program.¹³ In Bonneville’s view, this amounts to a substantive expansion of the wildlife provisions that have been unchanged in the Program for decades. The justification for this doubling seems to be based on a

¹² See Draft Addendum at n.9 (indicating that strategy performance indicators for mainstem flow and passage originate from the 2008 NOAA Fisheries biological opinion).

¹³ See Draft Addendum at n.88.

policy position that Bonneville rejected nearly 20 years ago and that we do not intend to revisit today.¹⁴ What's more, the wildlife objectives in the draft addendum ignore, or even contradict, the Council and region's earlier, comprehensive efforts to assess the status of wildlife construction and inundation mitigation to date: the Council's own Wildlife Crediting Forum Final Report in 2011—which was “accepted by the Council” according to Appendix J in the 2014 Program—and the Regional Habitat Evaluation Team's final work products, the regional mitigation assessments completed in 2015.¹⁵

For example, the “Wildlife Strategy, Program Mitigation and Remaining Loss Ledger,” linked in the draft addendum,¹⁶ suggests that the construction and inundation impacts of Bonneville Dam are under mitigated, yet the Regional Habitat Evaluation Team's comprehensive review of the lower Columbia River dams found the lower four Columbia River Dams, including Bonneville Dam, were “over-mitigated.”¹⁷ The Council's Wildlife Strategy document also suggests more construction and inundation mitigation is needed for Dworshak Dam to offset the dam's total impact of 16,970 acres despite nearly 70,000 acres being protected through a long-term trust agreement and other mitigation.¹⁸ In addition, the wildlife objectives enumerate the purported “under-mitigation” in terms of political entities, not fish and wildlife needs, contrary to both Bonneville's and the Council's interpretation of Northwest Power Act mitigation responsibility.¹⁹ Finally, the draft addendum's wildlife objectives continue to assert certain remaining wildlife mitigation as measured in habitat units. As Bonneville has noted repeatedly, there is no longer a regional entity with capacity to independently track wildlife mitigation using the habitat unit metric, so the presence of habitat units in the 2014 Program already presented an

¹⁴ Once again, Bonneville refers the Council to our March 2002 letter and the accompanying analysis on this topic, which we included as an attachment to our comments on recommendations in this amendment cycle.

¹⁵ See Wildlife Crediting Forum, Report on Forum Deliberations (Jan. 2010 – May 2011), *available at* https://www.nwcouncil.org/sites/default/files/2011_09Report_0.pdf. (The Regional Habitat Evaluation Team's reports are available at <https://www.streamnet.org/hep/historical-perspective-papers/>.) To the extent that Council intends for these new wildlife objectives or indicators to serve as measures guiding further mitigation by Bonneville, we note that it is unclear how the draft addendum's assessment of wildlife mitigation satisfies section 4(6)(B) of the Act when that assessment is contrary to the more authoritative reviews mentioned above. See 16 U.S.C. § 839b(h)(6)(B) (measures included in the Program will be “based on the best available scientific knowledge”).

¹⁶ See Draft Addendum at n.89. Bonneville staff met in person with Council staff when this presentation was first developed and expressed significant concerns regarding the accuracy of the underlying analysis and disputed the credibility of the ultimate conclusions.

¹⁷ See Regional HEP Team, Final Assessment and Analysis of the NW Power Act Funded by BPA, Lower Columbia River Sub-Region, at 14 (Sep. 25, 2015), *available at* <https://www.streamnet.org/hep/historical-perspective-papers/>.

¹⁸ Under the 1992 Dworshak Dam Wildlife Mitigation Agreement, Bonneville purchased approximately 60,000 acres of wildlife habitat that the Idaho Department of Fish and Game added to the Craig Mountain Wildlife Management Area and dedicated as the Peter T. Johnson Unit. Subsequent wildlife habitat acquisitions with the Nez Perce Tribe added almost another 10,000 acres of construction and inundation mitigation for Dworshak.

¹⁹ Bonneville maintains that attributing fish and wildlife mitigation to particular entities has no basis in the Northwest Power Act. See also Council Memorandum, Questions about Council and about Power Act mitigation re draft Southern Idaho Wildlife Mitigation MOA, Aug. 29, 2014 (indicating that mitigation obligations under the Northwest Power Act are “neither state nor regional” (nor tribal, presumably) in response to the question “Are the Power Act obligations tied to specific states and tribes or is it a general obligation to the region?”) (on file with Bonneville).

obstacle to practical implementation. Doubling of any remaining habitat units through the addendum would only compound that problem.

Bonneville cannot accept these significant amendments to the Program's wildlife provisions. We urge the Council to omit all of the draft addendum's provisions regarding wildlife and, at most, refer back to its 2014 Program guidance. A more complete review of habitat mitigation and wildlife crediting is necessary to provide a defensible basis for any substantial changes to the Program's wildlife provisions, particularly if such changes would be contrary to the conclusions of earlier comprehensive analyses.

To that end, Bonneville is conducting its own assessment of regional wildlife mitigation efforts, relying on analysis in the earlier comprehensive wildlife assessments mentioned above and other relevant information. In the case of construction and inundation mitigation for wildlife Bonneville's initial review indicates that it has enabled approximately 750,000 acres of mitigation for wildlife. The Council's documentation supporting the addendum indicates a comparable 706,760 acres.²⁰ Add to this mitigation done prior to passage of the Northwest Power Act plus fish habitat mitigation projects that also benefit wildlife, and Bonneville believes the region will find nearly 1,000,000 acres have been protected, mitigated, or enhanced. Considering that the wildlife loss assessments the Council relied on in establishing the Program's original wildlife mitigation guidance show roughly 375,000 acres of construction and inundation impacts, the full magnitude of the federal response to wildlife impacts in the basin should obviate the need for any further debate within the Program regarding crediting ratios. Bonneville looks forward to an opportunity to discuss the results of our review with the Council and the region in greater detail, and hopes that it will serve as a useful example of the type of comprehensive assessment needed across the Program before the Council asserts the need for continued expansion.

V. Implementation Provisions

We understand the Council's keen interest in how Bonneville implements mitigation, with the final pages of the draft addendum devoted to that topic. Bonneville has long been committed to independent science, regional collaboration, and strong partnerships to ensure we get the highest value for our fish and wildlife investments. We continue to support ongoing communication and coordination with the Council with respect to implementation of mitigation.²¹

²⁰ See Draft Addendum at n.89.

²¹ The draft addendum's implementation provisions are sometimes challenging to understand though, because they appear throughout the entirety of the draft and at times create confusion about who is being asked to do what. Although the Program is meant to guide Bonneville and three other federal entities, there are numerous instances in which the Council provides direction to itself, or fails to specify who is being directed, or seems to direct one entity to undertake a task better suited for another. In one such case the draft addendum asks the Corps and Bonneville to "[c]ontinue to make progress in developing the program's comprehensive approach to white sturgeon." See Draft Addendum at 40. Bonneville appreciates its input being considered as the Program's mitigation measures are developed or revised, but does not find wholesale development of Program strategies to fall within its appropriate role under the Northwest Power Act; that task is better left with the Council.

However, Bonneville has concerns about a particular implementation issue that the Council raises in the final pages of the draft addendum—that is, the Council’s expectation that Bonneville will submit proposed project budget changes of 5% or more to the Council for review and report lesser changes after-the-fact.²² Bonneville does not support or agree to this proposal for two primary reasons.

First, it imputes a budget oversight role to the Council that is not based in the statute and that properly resides with Bonneville. As Bonneville has stated before, budgets and contract administration are matters between Bonneville and individual project sponsors.

Second, initiation of Council review for budget changes of 5% or more would divert a substantial amount of time and effort, for both Bonneville and project sponsors, to a process that does not provide any apparent value or address anything more than a hypothetical concern. In the Fish Accords and in other agreements, Bonneville and certain project sponsors have agreed to project budgets adequate for implementation of the projects, and, as part of those agreements have also established budget management tools to promote efficient use of mitigation funding, such as by allowing for funding to be transferred between projects. Bonneville and its partners have found this to be a flexible and effective structure for implementing mitigation work.

Bonneville would also like to briefly address and set appropriate expectations on another non-substantive provision in the draft addendum regarding public access to project implementation information. The Council states that “[n]eeded adjustments to the exiting Bonneville database to improve information delivery include: (a) adding a standardized list of the program goals, objectives, and *strategy performance indicators* [emphasis added]; (b) connecting these elements to projects/contracts as appropriate; and (c) providing Excel reports with data in the required format for Council staff.”²³

As discussed above, the strategy performance indicators are not appropriate to include in the addendum or the Program; they do not track with Bonneville’s statutory responsibilities and therefore cannot be “standardized” into existing project tracking databases or connected to contracts. Bonneville also notes that the CB Fish website was originally developed, with the Council’s input, as a means to provide the Council and the public with access to pertinent information in Bonneville’s fish and wildlife mitigation projects and contracts. We are willing to continue working with the Council to ensure ongoing access to needed information.

VI. Need for Prioritization in the Program

Bonneville continues to believe there is a need for a prioritization framework within the Program, particularly when the draft addendum calls for funding of emerging issues as well as “significant increases” without compromising existing mitigation efforts elsewhere in the

²² See Draft Addendum at 42.

²³ See *id.* at 34.

Program.²⁴ A prioritization framework would, ideally, provide further insight and detail from the Council as to how these emerging issues and other increases should be handled within Bonneville’s existing fish and wildlife program.²⁵

In addition to any guidance from the Council on this issue, Bonneville intends to continue exploring options for prioritization and effectiveness methods that can be incorporated into its fish and wildlife program, consistent with our Strategic Plan. Such options might include compliance, effectiveness, and cost-benefit metrics that may help Bonneville continue to document its ongoing compliance with the Northwest Power Act mitigation mandates while doing so in a more biologically sound and cost-effective manner. We look forward to coordinating on these efforts with the Council and mitigation partners across the region.

A prioritization strategy may also help inform the issues with spreading any cost management efforts “equitably” across the Program.²⁶ The Northwest Power Act does not include mandates or purposes relating to equity within the Program. Thus, any reallocation of mitigation funding should be based on the comparative needs of the fish and wildlife resources of the Columbia River basin—the exclusive subject of the Act’s mitigation mandates.

²⁴ *See id.* at 36, 41-42.

²⁵ *See id.* at 41 (“The Council is confident that most, if not all, of the additional needs identified in the 2014 program, and reflected in this addendum, may be met within an overall program-management and cost-management approach that prevents program costs from rising above the rate of inflation.”).

²⁶ *See id.* at 42-43.