



Oregon

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MEMORANDUM

TO: Water Resources Commission

FROM: Alyssa Mucken, IWRS Program Coordinator

SUBJECT: Agenda Item G, November 14, 2013
Water Resources Commission

Update on the Columbia River Treaty

I. Introduction

The purpose of the Columbia River Treaty (Treaty) 2014/2024 Review is to enable the United States and the regional sovereigns to make an informed recommendation to the U.S. Department of State to continue, terminate, or renegotiate the Treaty.

Over the last several years, the U.S. Entity (Bonneville Power Administration and the U.S. Army Corps of Engineers) has engaged northwestern states, tribal governments, federal agencies and the public in the Columbia River Treaty Review Process.

This update provides an overview of the September 20, 2013 Draft Regional Recommendation released by the U.S. Entity.

This is an informational item. No action is needed.

II. Background

Department staff briefed Commission members last November, providing background information on the history of the Treaty, its provisions and operations, and Oregon's participation in the process.

The two primary reasons for a review of the Columbia River Treaty are as follows:

1. The Treaty has no specified end date; however, the United States or Canada can terminate most of the provisions of the Treaty as early as September 16, 2024, with a minimum of 10 years' written notice. Therefore, September 16, 2014 is the first opportunity to provide notice of intent to terminate the Treaty.

2. Canada's obligation to provide assured flood control storage will expire in 2024. This obligation shifts from the current assured amount of annual flood storage in Canada to a process that allows the U.S. to "call upon" Canada for flood storage.

Implementation of the Columbia River Treaty has provided significant flood control and hydroelectric power benefits, while fostering economic growth in Canada and the United States. Since the Treaty was signed, however, circumstances and interests in both countries have changed. Climate change is likely to significantly alter the basin's hydrology. In addition, there is an interest in managing the river more holistically, with consideration for fish and wildlife, recreation, cultural resources, water supply, water quality, and navigation. The Columbia River Treaty 2014/2024 Review Process seeks to assess the current Treaty and identify recommendations that address today's circumstances and interests.

III. Developing a Regional Recommendation

In June 2013, the U.S. Entity, in collaboration with regional sovereigns and stakeholders, developed a Working Draft Regional Recommendation. Regional stakeholders were asked to provide comments on the working draft recommendation by late August. The U.S. Entity and the U.S. Department of State held focused meetings with regional stakeholders to solicit additional input on the Working Draft Regional Recommendation. Oregon's perspectives on key elements of a regional recommendation are summarized in Attachment 1.

On September 20, 2013, the U.S. Entity released the Draft Regional Recommendation, accepting comments on the draft through October 25, 2013. The Draft Regional Recommendation suggests that it is in the best interest of the region to modernize the Treaty post-2024 to provide a broader, more balanced portfolio of benefits.

The Draft Regional Recommendation identifies regional goals and potential modifications to the Columbia River Treaty post-2024. It includes eight key principles underlying the Draft Regional Recommendation, as well as, specific recommendations related to ecosystem-based function, hydropower, flood risk management, water supply, navigation, recreation, and climate change.

The State of Oregon played an instrumental role in ensuring that the Treaty Review process provided meaningful information on the potential for accessing additional water supplies from Canadian reservoirs to support instream and out-of-stream uses. The September 20th Draft Regional Recommendation describes the following for water supply:

Treaty Review studies indicate a potential for a modernized Treaty to allow for additional storage of water in Canada during the fall and winter, and release in the spring and summer. The Treaty should allow the storage and release of water from Canada in the spring and summer for additional in-stream and out-of-stream uses. Such allocations should be subject to the requirement that they not adversely affect the operation of upstream reservoirs, such as VarQ. Any such allocation decisions should be made through a future domestic process and be consistent with water rights, including tribal reserved water rights and ecosystem-based function. (see Domestic Matters to be Addressed Post-2013 section).

The modernized Treaty that is envisioned in the Draft Regional Recommendation will simultaneously:

- better address the region's need for a reliable and economically sustainable hydropower system;
- continue to provide a similar level of flood risk management to protect public safety and the region's economy;
- include ecosystem-based function as a third primary purpose of the Treaty, to ensure a more comprehensive approach throughout the Columbia Basin watershed; and
- create the flexibility within the Treaty that is necessary to respond to climate change, changing water supply needs, and other future potential changes in system operations, while continuing to meet authorized purposes such as navigation.

In early October, the U.S. entity held public roundtables in Spokane, Boise, Helena, Olympia and Portland. The U.S. Entity is seeking broad regional support from sovereigns, regional stakeholders, and the general public before delivering its final recommendation to the U.S. Department of State in December 2013.

The U.S. Entity, in the Draft Regional Recommendation, recommended that the United States government decide by mid-2014 to renegotiate the Treaty in accordance with the objectives outlined in the regional recommendation. Further, the United States government should seek to complete that effort no later than 2015.

IV. Conclusion

The State of Oregon, through the Office of the Governor and several state agencies, has been actively involved in the Columbia River Treaty 2014/2024 Review Process, at both the technical and policy levels. The value of the Columbia River to Oregon - in terms of hydropower, flood control, fish and wildlife, water supply, navigation, and recreation, as well as our history and vision for the future cannot be underestimated. The state remains fully committed to playing an active role in the Treaty Review Process.

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Attachment 1: Oregon's Perspectives on Key Elements of a Regional Recommendation

Attachment 2: September 20, 2013 Draft Regional Recommendation

Oregon's Perspective: *Key Elements of a Regional Recommendation* can be summarized as follows. Oregon's perspectives helped inform the September 20, 2013 Draft Regional Recommendation and earlier versions.

General Overview

Oregon believes the Regional Recommendation should reflect a holistic approach to managing the water resources of the Columbia River and proposes amending the Treaty to add consideration of ecosystem-based function, as well as other important public values including water supply and the need for adaptive management to address the likely effects of climate change.

Hydropower

Oregon will not only rely on state policies and programs but on regional coordination to achieve its future energy goals. The existing federal hydropower system operated by the BPA has created substantial value for Oregon through low-cost, reliable, emission-free, and firm energy—energy that currently accounts for 43 percent of Oregon's electricity mix. Oregon envisions a post-2024 Columbia River Treaty that builds upon the coordination and management of Canadian reservoirs established under the current Treaty provisions with the goals of enhancing system flexibility to facilitate the integration of variable generating resources and improving ecosystem function.

Flood Risk Management

Oregon notes technical analysis showing that the built environment located within the stretch of the Columbia River from the Portland/Vancouver area to the Pacific Ocean is comparatively and particularly vulnerable to Columbia River mainstem flood events. Oregon desires a post-2024 Columbia River Treaty that assures that the federal government maintains a level of risk protection comparable to the current level provided for these vulnerable areas.

Ecosystem-based Function/Water Quality

Oregon envisions a post-2024 Columbia River Treaty that has been expanded to include provisions to manage flows to preserve and enhance ecosystem functions and ensures that the natural resources of the Columbia River Basin stand on equal footing with existing Treaty purposes, hydropower and flood risk management.

Water Supply

The Columbia River Treaty review process presents a unique opportunity to evaluate the potential for supporting and enhancing continued salmon and native fish recovery efforts in the mainstem Columbia River and to create additional economic activity through irrigated

agriculture in the Umatilla River Basin of Oregon. A post-2024 Columbia River Treaty should provide a mechanism for agreements between Canadian and U.S. interests for releases of water from Canadian reservoirs, consistent with the goal of improving ecosystem function, which also support out-of-stream uses of Columbia River water in the U.S.

Navigation

Oregon envisions a post-2024 Columbia River Treaty that supports navigation system operations on the Columbia River and its tributaries designed to facilitate the continued economic viability and value of port facilities, in particular, and commercial import and export of agricultural, bulk and manufactured goods, in general.

Recreation

Oregon envisions a post-2024 Columbia River Treaty that acknowledges the economic value to river-front communities of various businesses, facilities and recreational opportunities that rely upon the waters of the Columbia River. Oregon envisions a post-2024 Columbia River Treaty that, when implemented, provides protection against or mitigation for any negative impacts to existing recreational facilities and opportunities.

Climate Change

Oregon envisions a post-2024 Columbia River Treaty that fully acknowledges that climate change is likely to significantly alter the basin's hydrology and that provides adaptive management and operational tools to meet this eventuality.

United States Entity

Columbia River Treaty

P.O. Box 3621, Portland, OR 97208-3621

Chairman:

Administrator and Chief Executive Officer
Bonneville Power Administration
Department of Energy

Member:

Division Commander
Northwestern Division
Corps of Engineers
Department of the Army

September 20, 2013

To Whom it May Concern:

The U.S. Entity, in consultation with the Sovereign Review Team (SRT), regional stakeholders and sovereigns, and the public, has been conducting a multi-year review of the Columbia River Treaty (Treaty) to inform a recommendation to the U.S. Department of State on the future of the Treaty post-2024. In June 2013, the U.S. Entity shared an initial working draft of a recommendation for regional interests to review and provide comments. We are now releasing a Draft Regional Recommendation for additional review and comment. This letter provides information about the draft recommendation and next steps for the Treaty review process.

The Draft Regional Recommendation builds on and refines the basic premise of the working draft recommendation that it is in the best interests of the region to modernize the Treaty post-2024 in such a way as to bring about better and more balanced benefits to the region. In developing the Draft Regional Recommendation, the U.S. Entity listened closely to all voices in the region about how to reflect their interests in the recommendation, while respecting that a certain amount of compromise was necessary in order to garner as much region-wide support as possible.

Through this careful and extensive deliberation and review, we have heard many ideas. While the region acknowledges substantial benefits have flowed from the Treaty, there is also a strong desire to incorporate ecosystem-based functions into the Treaty and to recognize evolving interests in other water management issues in the Columbia River basin. There is growing interest in a Treaty that is more adaptive, flexible, and resilient in order to successfully meet the challenges presented by increased demand for water and the uncertainty of climate change impacts on Columbia River flow volume, timing, and variability in the next several decades. There is widespread concern that the method included in the Treaty for calculating Canada's share of its power benefits is outdated and no longer equitable, resulting in excessive costs to regional ratepayers. Finally, there is broad interest in reaching agreement with Canada on how we will conduct coordinated flood risk management operations post-2024 under the terms of the Treaty.

The Draft Regional Recommendation attempts to recognize and balance all of these viewpoints and interests. The modernized Treaty that is envisioned in this Draft Regional Recommendation will simultaneously:

- better address the region's need for a reliable and economically sustainable hydropower system;
- continue to provide a similar level of flood risk management to protect public safety and the region's economy;
- include ecosystem-based function as a third primary purpose of the Treaty, to ensure a more comprehensive approach throughout the Columbia Basin watershed; and
- create the flexibility within the Treaty that is necessary to respond to climate change, changing water supply needs, and other future potential changes in system operations while continuing to meet authorized purposes such as navigation.

In essence, the Draft Regional Recommendation seeks to further improve on a Treaty that has already provided immense benefits, while also making it more adapted – and adaptable – to current and future needs of the region. Through this approach, it is hoped that we can achieve a collective net “win” for the region on all fronts.

The U.S. Entity and the SRT agree that the Draft Regional Recommendation is ready for regional review at this time. The U.S. Entity believes that we, as a region, now have a valuable opportunity to coalesce around this recommendation to modernize the Treaty. The U.S. Entity is seeking broad regional support – from sovereigns, regional stakeholders, and the general public – before the recommendation is finalized and presented to the U.S. Department of State in December 2013.

The U.S. Entity welcomes your comments and suggestions on the Draft Regional Recommendation by October 25. These comments and suggestions will be considered for incorporation into the final recommendation. Please send your comments to www.bpa.gov/comment or mail them to CRT Review (DKE) P.O. Box 14428, Portland, OR 97293. We will also be working with the SRT and stakeholder interests to consider any comments and suggestions received during the Draft Regional Recommendation review period that are provided through members of the SRT.

In addition, the U.S. Entity plans to have additional meetings across the region to discuss the Draft Regional Recommendation with regional sovereigns, interested stakeholders and the public. To that end, we encourage your participation in upcoming roundtable discussions, which will be held in Spokane, Boise, Kalispell, Olympia, and Portland. We will distribute a notice to our mailing list as soon as possible; please watch for details on www.crt2014-2024review.gov.

The U.S. Entity is very appreciative of the interest shown by the region and looks forward to your comments. Thank you again for your involvement in this process.

Sincerely,

[/s/Stephen R. Oliver](#)

Stephen R. Oliver
U.S. Entity Coordinator, Columbia River Treaty
Bonneville Power Administration

[/s/David Ponganis](#)

David Ponganis
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U.S. Army Corps of Engineers, Northwestern Division

Columbia River Treaty Review

Draft Regional Recommendation

September 20, 2013

Introduction

The Pacific Northwest depends on a healthy Columbia River system to provide environmental sustainability, national energy independence, protection of public safety and infrastructure, and economic well-being. The Columbia River Treaty has provisions that could be improved to address this region's long-term ability to meet these objectives. Consequently, the region's Sovereigns and stakeholders believe that modernization of the Treaty is in the best interest of the United States.

This draft recommendation identifies potential modifications to the Columbia River Treaty (Treaty) post-2024. It begins by identifying regional goals for the future of the Treaty post-2024. It includes a set of general principles underlying this recommendation, followed by more specific recommendations related to a number of Treaty elements. Finally, it identifies a number of matters related to possible post-2024 Treaty implementation for consideration by domestic interests.

This draft recommendation was developed by the United States Entity with input from sovereigns and stakeholders through an extensive, multi-year process known as the Columbia River Treaty Review. Key to that process has been collaboration with the Sovereign Review Team (SRT), comprised of designated representatives of the states of Washington, Oregon, Idaho and Montana, 10 federal agencies, and 15 Native American Tribes. This group, supported by the Sovereign Technical Team, has met at least monthly to provide recommendations on every aspect of Treaty Review. In addition, the Entity has had government-to-government meetings with the 15 Tribes represented on the SRT, as well as with the Grand Ronde Tribe.

Equally critical to the Treaty Review and development of the draft recommendation has been the extensive involvement and input of the region's stakeholders. Stakeholders have provided perspectives and comments in individual meetings, workshop sessions, panel discussions, and presentations, as well as through the public comment period held on the working draft recommendation in July and August 2013.

Regional Goals for the Columbia River Treaty

The Pacific Northwest recognizes the value of the Columbia River Treaty in facilitating shared water resource management in the Basin to maximize benefits to both countries. When the Treaty was originally drafted in the 1960s, it was designed to optimize hydropower production and coordinate flood risk management as its two primary benefits. In terms of those purposes, the Treaty has served the people of the region well. The assured streamflows under the Treaty support the region's hydropower system, which serves as a crucial backbone of the Pacific Northwest economy. The Treaty also has assisted in effectively managing flood risk to ensure public safety and facilitate regional development.

Since the original Treaty was negotiated in the 1960s, the region has come to increasingly recognize and value the importance of the Basin's ecosystem. Significant efforts to address ecosystem concerns began in the 1980s, and the region, principally through its electric utility ratepayers, has invested hundreds of millions of dollars annually to achieve ecosystem improvements throughout the Basin over the intervening decades. In addition, in 1993 the United States and Canadian entities began using the flexibilities in the Treaty to assist in meeting Endangered Species Act (ESA) requirements and to address

ecosystem considerations on an annual basis through actions such as flow augmentation agreements. While it is recognized that significant ecological improvements are being implemented and realized in a number of critical areas and are anticipated to continue over time,¹ there is an opportunity for inclusion of certain additional ecosystem operations to expand, enhance, and complement these existing ecosystem investments as part of the post-2024 Treaty.

There is also increasing awareness in the region that an imbalance has developed in the equitable sharing of the downstream power benefits resulting from the Treaty. When the Treaty was ratified, the United States and Canada structured Canada's share of these benefits as one-half of the downstream power benefits with the Canadian Treaty projects as compared to without those projects. An equitable sharing of these benefits should instead be based on the more realistic measure of the power value of coordinated operations as compared to non-coordinated operations. Based on the present formula developed in the 1960s, the estimated value of the Canadian share of the downstream benefits in 2024 is significantly greater than anticipated, and far exceeds the value of coordinated power operations under the Treaty.

Flood risk management continues to be a vitally important aspect of coordinated operations with Canada, with recent high water events in 1996/1997 in the Portland/Vancouver area and in the Kootenai River Basin in 2012. After the first 60 years of assured flood risk management operations in Canadian reservoirs, the Treaty shifts to "called upon" procedures for post-2024 flood risk management operations. As the nation and region develop a better understanding of the potential implications of climate change, future flood risk management procedures need to be resilient to provide for public safety.

Other important elements of a modernized Treaty are current and future water supply, recreation and navigation needs. In addition, the Treaty should include both short- and long-term mechanisms that allow for adapting the Treaty to build in flexibility of operations as conditions change, e.g., climate change, ESA listings or de-listings, or as new information and technology become available.

Accordingly, the region's goal is for the United States and Canada to develop a modernized framework for the Treaty that ensures a more resilient and healthy ecosystem-based function throughout the Columbia River Basin while maintaining an acceptable level of flood risk² and assuring reliable and economic hydropower benefits. Therefore, it is important to achieve a modernized framework for the Treaty that balances power production, flood risk management, and ecosystem-based function as the primary purposes.³

¹ There are a number of domestic actions that have contributed, and will contribute, to ecological improvements in the Basin. These include the Federal Columbia River Power System Biological Opinion requirements under the Endangered Species Act, the Nez Perce Water Rights Agreements of 2004, actions under the Northwest Power and Conservation Council's Columbia River Basin Fish and Wildlife Program, actions under the Clean Water Act to improve water quality, and implementation of the Columbia Basin Fish Accords. In addition, there are numerous habitat and conservation programs and FERC license requirements associated with non-federal dams on the Columbia.

² Throughout this document, "acceptable" flood risk is defined as "similar to the current level" of flood risk; however, as noted in item one listed in the *Domestic Matters to be Addressed Post-2013* Section, the "acceptable" level of flood risk may change pending the outcome of the recommended regional flood risk review process post-2013.

³ In this document, the "primary purposes" refers to the "benefits" to be achieved through the Treaty. Where noted, "authorized purposes" is used to connote those purposes that have been authorized in the Basin through the United States Congress.

It is essential to note in the reading of this recommendation that, while the inclusion of ecosystem-based function as a third primary purpose of this Treaty is being recommended, a very important combination of water management uses has been established in the Basin and its tributaries over the past 50 years. This recommendation respects the importance, complexity, and trade-offs of each of these many uses and the benefits that the region has strived to achieve.

In summary, this recommendation seeks to formalize, provide certainty, and build on the many ecosystem actions already undertaken through annual or seasonal mutual agreements between the countries, while also providing a net increase in United States power benefits based on the actual value of coordinated operations with Canada, and preserving an acceptable level of flood risk to the people of the Basin.

In this document the term “modernization” of the Treaty refers to the construct of a post-2024 arrangement. These constructs could include amendments or revisions to the existing Treaty, diplomatic notes or protocols, or other means resulting in a modernized Treaty.

General Principles

Eight key principles underlie this recommendation and a modern approach to the Columbia River Treaty:

1. Treaty provisions should enable the greatest possible shared benefits in the United States and Canada from the coordinated operation of Treaty reservoirs for ecosystem, hydropower, and flood risk management, as well as water supply, recreation, navigation and other pertinent benefits and uses, as compared to no longer coordinating Treaty storage operations.
2. The health of the Columbia River ecosystem should be a shared benefit of the United States and Canada.
3. The minimum duration of the Treaty post-2024 should be long enough to allow each country to rely on the Treaty’s planned operations and benefits for purposes of managing their long-range budgets, resource plans and investments, but adaptable enough to allow integration of best available science and social knowledge, with rebalancing of the purposes and benefits if necessary.
4. United States Federal reservoirs/projects will continue to meet authorized uses consistent with applicable legislation and other United States laws such as Treaty and Trust Responsibilities to the Columbia Basin Tribes, the Clean Water Act, and the Endangered Species Act. Non-federal United States projects will continue to meet their responsibilities pursuant to their Federal Energy Regulatory Commission license plans.
5. The United States and Canada should integrate both Treaty and Canadian non-Treaty storage into the Treaty to increase the flexibility to, and benefits of, meeting ecosystem-based function, power, flood risk management and other authorized water management purposes in both countries.
6. The region anticipates impacts from climate change to all of the elements described in this document. The strategy for adapting the Treaty to future changes in climate should be resilient, adaptable, flexible, and timely as conditions warrant.

7. It is recognized that modifications to the Treaty could result in new benefits, and/or costs, to both Canada and the United States. United States' interests should ensure that costs associated with any Treaty operation are aligned with the appropriate party. As an example, any payments for Columbia River flood risk management should be consistent with the national flood risk funding policy of federal funding with applicable local beneficiaries sharing those costs as appropriate.
8. Inclusion of ecosystem-based functions in the Treaty, and the implementation of these functions, should not prevent the region from achieving its objective of reducing U.S. power costs. In order to accomplish this, funding for additional ecosystem-based function operations should come from a rebalancing of the power benefits between the two countries or from other sources.

Recommendation Details

Consistent with the intent of the general goals and principles, the following sections provide more specific recommendations for a modernized Treaty.

Ecosystem-based Function

In order to achieve the goal of modernizing the Treaty to further ensure a more comprehensive ecosystem-based function approach throughout the Columbia Basin watershed, the region recommends the following:

1. A modernized Treaty should provide streamflows from Canada with appropriate timing, quantity and water quality to promote productive populations of anadromous and resident fish, and provide reservoir conditions to promote productive populations of native fish and wildlife.
2. A modernized Treaty should recognize and minimize adverse effects to Tribal, First Nations and other cultural resources in Canada and the United States. To the extent there are adverse effects to United States cultural resource interests, such changes should be addressed under the Federal Columbia River Power System (FCRPS) Cultural Resources Program. This Program has the ability to be amended and expanded as needed if there are effects on cultural resources resulting from changes due to future operations in a modernized Treaty.
3. A modernized Treaty should seek to expand on present Treaty agreements to: a) further augment flows for spring and summer, with the recognition that these increased flows come from less fall and winter drafts in Canadian reservoirs; b) incorporate a dry-year strategy; c) gain long-term assurance of ecosystem-based functions rather than negotiating for these functions on an annual basis.
4. A modernized Treaty should be designed to be adaptable to meeting ecosystem-based function requirements as new information becomes available or conditions change (e.g., climate change) based on the management priorities of both countries.
5. The United States should pursue a joint program with Canada, with shared costs, to investigate and, if warranted, implement restored fish passage and reintroduction of anadromous fish on the main stem Columbia to Canadian spawning grounds. This joint program would proceed on an incremental basis, beginning with a reconnaissance-level investigation. Modernized Treaty operations should not interfere with other opportunities to restore fish passage and reintroduction of anadromous fish in other blocked areas of the Columbia River Basin.

6. The United States should continue to coordinate United States' operation of Libby Dam with Canada, with the goal of achieving mutually desirable ecosystem benefits on both sides of the border. VarQ at Libby and Hungry Horse Dams, including any modifications to VARQ, balances the multiple uses of the dams and incorporates ecosystem-based function.

Hydropower

In order to maintain coordinated hydropower operations, and a reliable, economically sustainable hydropower system in a modernized Treaty, the region recommends the following:

1. The United States should pursue rebalancing the power benefits between the two countries to reflect the actual value of coordinated operations. This rebalancing is necessary because the present Treaty power benefits are not equitably shared and Canada is deriving substantially greater value from coordinated power operations than the United States. Accordingly, for the Treaty to be sustainable after 2024, the United States should only provide benefits to Canada equivalent to one-half of the actual United States downstream power benefits received from coordinated operations as compared to a non-coordinated operation.
2. The United States should renegotiate for the replacement of the present "Aspects of Delivery Agreement" to create the least-cost transmission strategy for both countries to return the Canadian Entitlement to Canada. This includes reconsidering the flexibility of the return.
3. A modernized Treaty should retain the ability for both the United States and Canada to maintain an economical and reliable power supply post-2024. This requires consideration of the implications of any reductions in generation capability for either country, including lost revenue, system reliability, substantial increases in loss-of-load probability, carbon emissions, renewable resource integration, energy efficiency and conservation, and shifts in streamflow quantity and timing due to climate change.
4. A modernized Treaty should avoid substantial changes in power generation during peak load periods that results in lower system reliability.

Flood Risk Management

In order to maintain coordinated flood risk management, and to protect public safety and the region's economy, the region recommends the following:

1. The United States should pursue post-2024 Treaty flood risk management through a coordinated operation plan that provides for an acceptable level of flood risk. Unless modified based upon future review of flood risk management policy for the Columbia River, the level of risk will be similar to the level of risk existing prior to 2024. (see *Domestic Matters to be Addressed Post-2013* section)
2. The United States should pursue an assessment with Canada of potential alternatives for post-2024 operations to meet flood risk management objectives, including the possibility of using planned or assured Canadian Storage.
3. The United States and Canada should establish a common understanding of the methods and procedures for post-2024 "called upon," which should reflect the following principles based on the United States Entity White Paper: *Columbia River Post-2024 Flood Risk Management Procedure*, September 2011:

- A. Called upon should be considered only if coordinated Canadian power, flood control and other operations do not provide sufficient storage in conjunction with the use of United States system flood storage or when needed during refill season to modify planned Canadian releases.
 - B. Draft United States projects according to their storage reservation diagrams (SRDs). Future flood risk management studies may evaluate alternative SRDs to include incorporation of ecosystem-based function.
 - C. Define “effective use” as applying to the eight United States reservoirs authorized for system flood control.
4. The United States and Canada should identify reasonable compensation to Canada for economic losses and operating costs associated with called upon.
 5. A modernized Treaty should enable the necessary flexibility to adapt to changing flood risk management objectives in the United States and Canada and to climate change (such as the potential for more frequent and intense winter flood events) to avoid additional risks to authorized purposes.

Water Supply

Treaty Review studies indicate a potential for a modernized Treaty to allow for additional storage of water in Canada during the fall and winter, and release in the spring and summer. The Treaty should allow the storage and release of water from Canada in the spring and summer for additional in-stream and out-of-stream uses. Such allocations should be subject to the requirement that they not adversely affect the operation of upstream reservoirs, such as VarQ. Any such allocation decisions should be made through a future domestic process and be consistent with water rights, including tribal reserved water rights and ecosystem-based function. (see *Domestic Matters to be Addressed Post-2013* section).

Navigation

A modernized Treaty should provide for minimum and maximum flows/water levels to support navigation system operations on the Columbia River and its tributaries, and where appropriate, United States reservoirs. This will facilitate the economic value of port and transportation facilities, including commercial import and export of agricultural, bulk and manufactured goods.

Recreation

The region recognizes and supports the recreational and cultural opportunities that are a significant outcome of the Columbia River watershed management processes. Modernized Treaty operations should strive toward the protection of these resources.

Climate Change

A modernized Treaty should consider impacts from climate change to all elements described above, and create new terms in the post-2024 Treaty to allow the adaptive management of coordinated Treaty operations to better mitigate any impacts associated with climate change. The United States and Canadian Entities’ Hydro-meteorological Team should continue to collaborate and share the best available climate change data and information.

Recommendation Timeframe

The region recommends that the United States government make a decision by mid-2014 to proceed with a renegotiation of the Treaty with Canada in order to modernize the Treaty by incorporating the objectives in this regional recommendation. Further, the region recommends the United States government seek to complete that effort by no later than 2015.

Domestic Matters to be Addressed Post-2013

The following identifies domestic matters related to possible post-2024 modernized Treaty implementation for consideration by domestic interests. Some of these are appropriate for consideration once the United States Entity makes its recommendation to the Department of State in 2013 and others are more appropriate for consideration once the United States government has a better understanding of post-2024 circumstances.

1. **United States Columbia River Basin Flood Risk Policy Review:** Pacific Northwest States and Tribes support the pursuit of Congressional authorization and appropriations for a region-wide public process to assess potential changes to the current level of flood risk protection in the Columbia River Basin to enhance spring and summer flows. Any such process should occur between 2014 and 2024. Post-2024 Treaty provisions, including called upon, will be designed to adapt to any such changes that may be authorized. If a process is initiated, it will be a comprehensive approach, subject to public input, that addresses all opportunities to manage high flow events, including floodplain management, Columbia Basin reservoir operations, and strategic improvements to existing levees and the need for additional levees.
2. **Water Supply Allocation:** Pacific Northwest States, Tribes, and appropriate Federal agencies will design and initiate a process to allocate and manage any additional spring or summer flows for in-stream and out-of-stream purposes derived through post-2024 Treaty operations. The United States Entity will incorporate decisions from this process into their post-2024 Treaty planning and operations.
3. **Assessment of Canadian Entitlement:** BPA will host a public process in which States, Tribes, Federal agencies and stakeholders can participate. This process will take place between 2014 and 2024 to assess the expected potential changes to its annual revenue requirements and rates due to any redesign of the Treaty post-2024, and discuss with the region how to manage those costs and benefits consistent with BPA's statutory authorities.
4. **Plan for Post-2024 Treaty Implementation:** Following the conclusion of the United States and Canadian negotiations of the terms of the post-2024 Treaty, and subject to funding, the United States Entity will lead an effort in consultation with regional Sovereigns and stakeholders to develop a plan identifying the steps necessary to implement the modern Treaty post-2024. This plan will define the appropriate work needed to incorporate and implement any new ecosystem-based function, flood risk management, hydropower and any other expected new operational objectives under the Treaty.

5. **United States Flood Plain Reconnection:** Tribal, Federal and State Sovereigns will work with the Northwest Power & Conservation Council Fish and Wildlife Program and National Oceanic and Atmospheric Administration/National Marine Fisheries Recovery Planning process (particularly estuary actions) or any other identified process throughout the Basin to advance selective flood plain reconnection for the purpose of achieving additional benefits from a modernized Treaty.
6. **United States domestic advisory mechanism:** The Department of State should establish and resource a structured domestic advisory mechanism to assist, inform, and advise the Department of State in the negotiations phase of this process. The Department of State should seek to involve a broad cross-section of regional parties in this mechanism. This mechanism may also be used to provide advice regarding additional work needed to address ecosystem-based function, hydropower, flood risk management, and other beneficial water uses.
7. **Composition of United States Entity:** At an appropriate time, membership of the United States Entity should be reviewed by the Administration, with consideration given to assuring a composition and membership that is best suited to effectively and efficiently implement the Treaty post-2024.