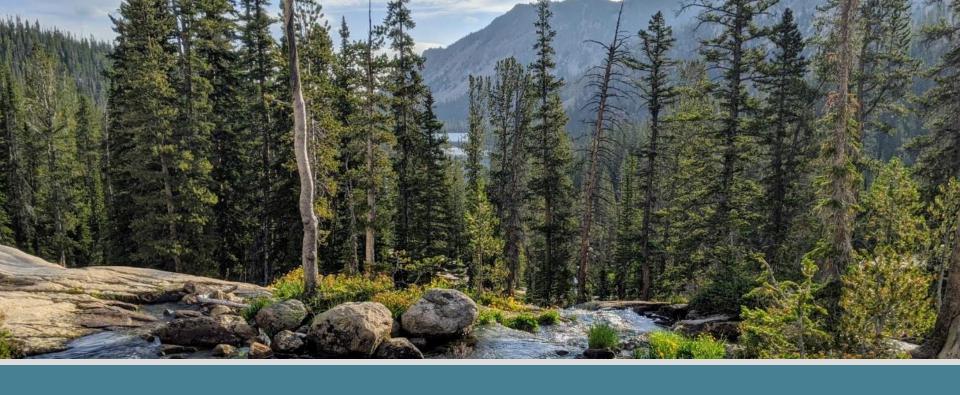


Provider of Choice Phase 1 Workshop: Conservation

September 8, 2022







Today's Workshop

Michelle Lichtenfels, Program Manager, Provider of Choice

Agenda

Time Start	Time End	Topic	Presenter(s)
9 a.m.	9:05 a.m.	Intro and Expectations	Michelle Lichtenfels
9:05 a.m.	9:30 a.m.	Summary of Comments	Sarah Burczak
9:30 a.m.	9:50 a.m.	Update on CHWM Scenarios	Sarah Burczak
9:50 a.m.	10:00 a.m.	Break	
10:00 a.m.	11:55 a.m.	Conservation Overview and Discussion	Dave Moody
11:55 a.m.	Noon	Wrap-up and Future Workshop Dates	Michelle Lichtenfels

Format

- Presenters will take pauses for questions.
- There is scheduled Q & A time.
- If a question arises during a presentation, please:
 - Hold your question until a pause, or
 - Write your question in the Webex chat with the corresponding slide number.
- Chat questions will be addressed in the order received.
- We will call on raised hands. You can unmute/mute yourself.
 - Please state your name and organization.

Workshop Roles & Expectations: BPA

- Distribute workshop materials a minimum of 48 hours in advance via email and/or post on BPA website.
 - Materials will not be printed.
- Start and end workshops on time.
- Facilitate and moderate conversations with an eye on workshop objectives and scope.
- Provide open and inclusive opportunities for feedback, both within and following workshops.
- Respect others and assume good intentions.
- Bring a constructive mentality.

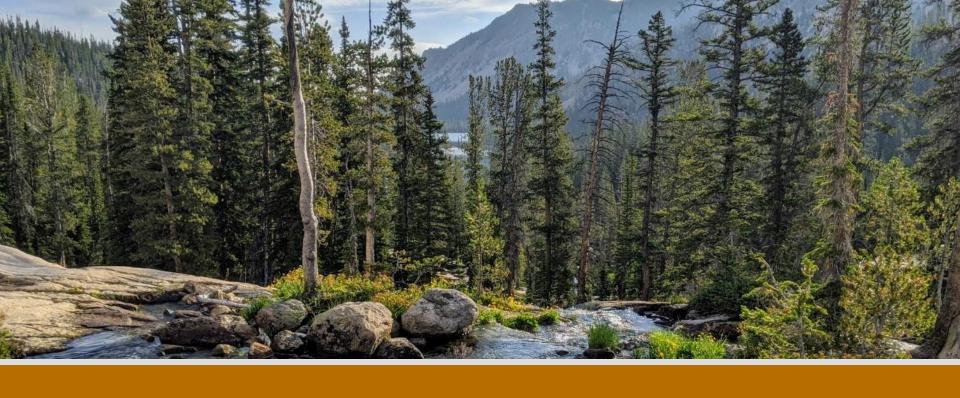


Workshop Roles & Expectations: Participants



- Come prepared by reviewing materials in advance of workshops.
- Participants are empowered to represent utility or organization, as applicable.
- Share your perspective and provide feedback.
- Limit discussion to the scope of each workshop.
 Don't start side conversations.
- Respect others and assume good intentions.
- Bring a constructive mentality.





Comments

Sarah Burczak, Policy Lead, Provider of Choice

Comments and Responses

- Written comments received are posted to the Provider of Choice subpage on bpa.gov. BPA does not intend to respond to each comment.
- Feedback received during and after workshops are used to help shape analyses, workshop topics, and schedule.
- Comments associated with other Post-2028 processes are passed on to those respective leads.
- Goal today is to illustrate when and how content will be addressed.



Tier 1 System Size

Summary of comments:

- Explore a larger Tier 1 system size that is equal to all CHWM load with potential to have headroom.
- Support for a fixed system size but would like to see a larger size than 7,000 aMW.
- Concern about fixing the system due to variability around hydro generation.
- Re-evaluate how billing credits could be used to support a larger Tier 1 system size.

- Phase 1 covered on Aug. 31
- Phase 2 workshops, est'd Sept.- Nov. 2022







Contract High Water Marks

Summary of comments:

- Establish CHWMs to meet all net requirements load and consider inclusion of headroom.
- Explore how conservation should be treated in the CHWM calculation.
 - Support for inclusion of all Regional Dialogue conservation in adjustment.
 - Concern conservation adjustment building headroom if those with load growth do not have similar access.
- Request to re-explore how to provide CHWM headroom to customers with Above-RHWM load.

- Phase 1 covered on Aug. 16
- Phase 2 workshops, est'd Sept.- Nov. 2022



Non-federal Resources

Summary of comments:

- Support for allowing non-federal resources to offset load that would otherwise be eligible to be served under Tier 1 rates. Explore removing all caps to support decarbonization.
- Increase minimum threshold to at least 1 MW.
- Re-examine and look to simplify approach to Resource Support Services.

- Workshops to start this fall, targeting late October 2022.
- RSS will be covered as a Post-2028 Rate Methodology issue.





Peak Net Requirements

Summary of comments:

- Recognize uncertainty around capacity in the future and need to look at solutions that work for all products.
- Request to reconsider the implementation of peak net requirements.
- Explore options to also ensure all customer capacity needs are met whether through current products or a new capacity product.

- Peak Net Requirement Task Force launched in August.
- Recommendations from task force will be brought to workshops by late 2022.



Above-RHWM Service

Summary of comments:

- Provide more Above-RHWM federal service offerings, with more election opportunities than a one-time election at the start of the contract.
- Above-RHWM federal service offerings should be cost-based, not market-based.

When will it be addressed?

 Phase 2 workshops, est'd Sept. - Dec. 2022, following system size workshops



Rate Discounts

Summary of comments:

- Support continuing Irrigation Rate Discount for next contract.
 - Request to explore expanding eligibility for IRD to all irrigators in the region.
- Support continuing Low Density Discount for next contract.

- Workshops expected to start in early 2023.
- Any rate changes would be discussed as part of Post-2028 Rate Methodology process.





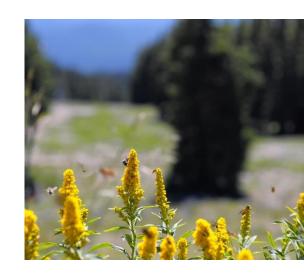
Contract Framework

Summary of comments:

- Discuss contract term with considerations for shorterterm contracts or ending prior to January 1, 2045.
- Look for win-win opportunities, such as allowing a customer an off-ramp if another customer agrees to take on that obligation.
- Reconsider contractual off-ramps around costs, especially if implementing a take-or-pay construct.

When will it be addressed?

Est'd Spring 2023



Carbon and Other Environmental Attributes

Summary of comments:

- Support for a 100% carbon-free product option needed to help customers meet state goals and needed for Provider of Choice contract period.
- Assign costs associated with a carbon-free product to those customers who would like that product.
- Understand how BPA would incorporate cost of greenhouse gas emissions associated with market purchases under future contract.

When will it be addressed?

 Workshops early this fall and part of other discussions e.g. system size.





Transfer Services and Transmission

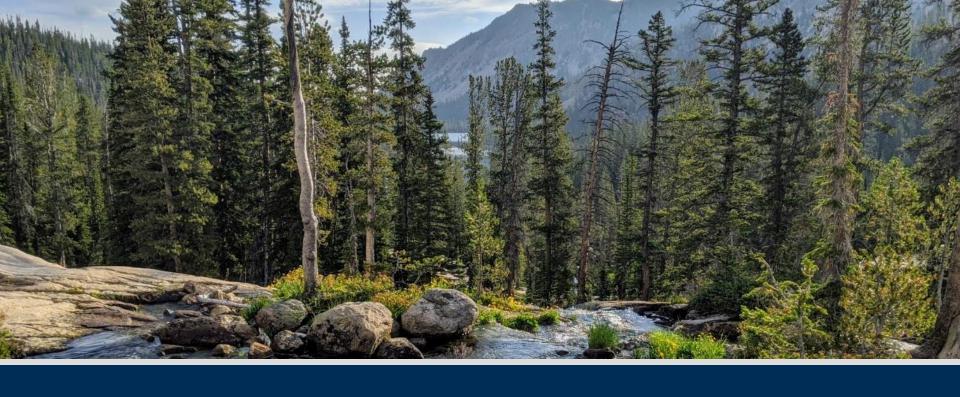
Summary of comments:

- Direct-assigning non-federal transfer costs is a barrier to developing non-federal resources.
- Concern about discontinuing the comparability principle.
- Request BPA consider changes to how it plans for transfer service.

When will it be addressed?

Workshops anticipated to start in late 2022.





CHWM Scenario Update

Sarah Burczak, Policy Lead, Provider of Choice

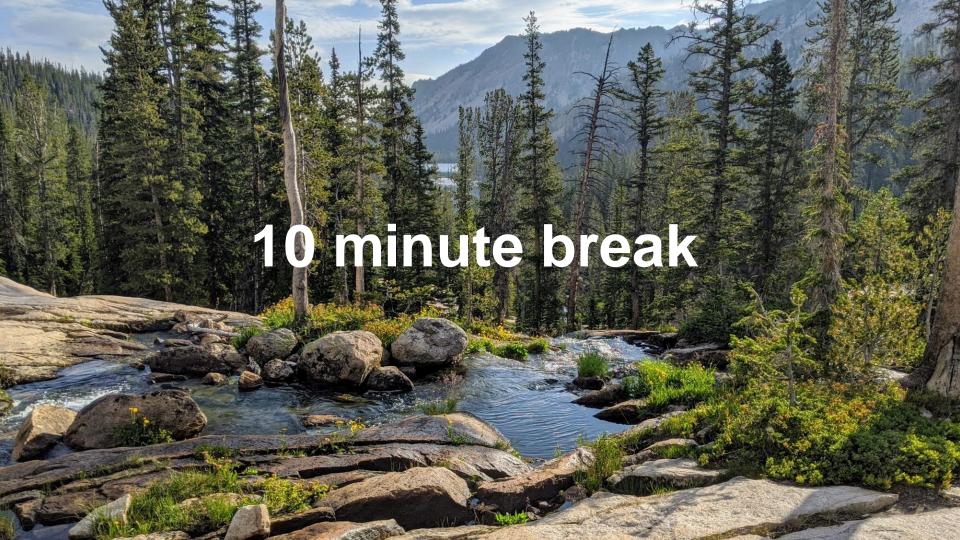
CHWM Scenario Update

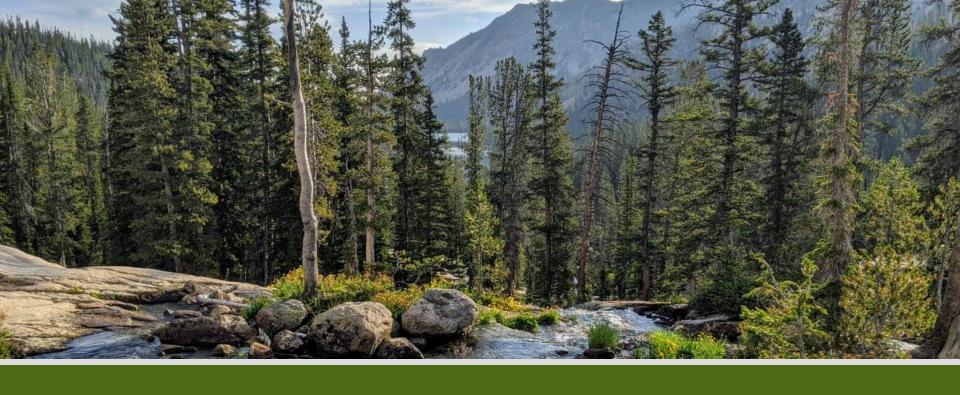
Published three CHWM scenarios in conjunction with the Aug. 16 workshop.

- Discovered error in how the "High Net Requirements" resource scenario was applied to two customers.
- Based on August 16 workshop feedback, rebuilt tool to provide more flexibility.

New scenarios were published. Changes include:

- More flexibility to look at different calculation years and resource scenarios.
- Improved ability to pull in conservation scenarios.





Conservation Overview

Dave Moody, Manager, EE Planning and Evaluation

BPA's Conservation Acquisition Model

- Establish a conservation acquisition goal.
- Estimate the cost to meet this goal using past performance and market intelligence.
- Collect sufficient funds in Tier One rates to meet 70% of this goal.
- Allocate EEI Budgets to customers based on TOCA (portion of BPA's Tier One load).
- Pay utilities for reported conservation achievements using their allocated EEI Budget.



Model (Cont'd)

Power Plan:

- Northwest Power and Conservation Council's regional Power Plan establishes a regional need for resources and the most economical way to achieve it.
- Treats conservation as the priority resource assuming that it costs no more than 10% more than an alternate resource.
- Provides a regional and BPA-specific conservation target.
- BPA is obligated by the Power Act to act consistently with the Power Plan, as determined by the BPA Administrator.

Resource Program:

- BPA internal study to understand our own system needs and identifying resourcing strategies to meet them.
- Uses conservation, along with other resources like market purchases and new generation as options to consider.
- Provides guidance on how much and what type of efficiency is most valuable to BPA but does not result in resourcing decisions.





Model (Cont'd)

- Utilities are not assigned individual conservation targets.
- BPA's aggregate conservation goal is met through:
 - a) EEI-funded conservation (70% of savings)
 - b) Self-funded conservation (30% of savings)
- Utilities are encouraged to spend all available EEI or transfer it to another utility through an Implementation Budget Transfer, but they are not required to do so.
- Customers do not have a financial penalty for specific or general under performance.

Flexibility Mechanisms

Rollover

 Utilities are allowed to carry over up to 10% of their EEI budget, or up to \$50,000 of their available implementation budget - whichever is greater from one rate period to the next.

Implementation Budget Transfers

Utilities can freely transfer budget to other BPA preference customers.

Unassigned Account

- Should BPA have funds allocated to infrastructure programs that will go unspent, it reallocates those funds to customers via the unassigned account.
- These funds are added to the EEI budgets of customers who opt in to distributions.



Flexibility Mechanisms (Cont'd)

Performance Payment

- Customers can, but are not required to, use a portion of their EEI budgets to support infrastructure and implementation costs.
- Small Rural Residential (SRR) Customers can use up to 30% of their total budget and qualify for \$0.08 per kWh achieved.
- Non-SRR customers can use up to 20% of their total budget and qualify for \$0.04 per kWh achieved.



Option 1 vs Option 2

Most customers are "Option 1" Customers:

- Receive BPA engineering support for custom projects and lighting projects.
- Subject to project level M&V requirements (supported by BPA).
- Report custom projects and lighting calculators individually with supporting documentation.

Some of BPA's largest customers are "Option 2" Customers:

- Do not typically receive engineering support for custom projects and lighting projects.
- Required to author and maintain their own M&V protocols, approved by BPA, each rate period.
 - Not subject to BPA's M&V requirements.

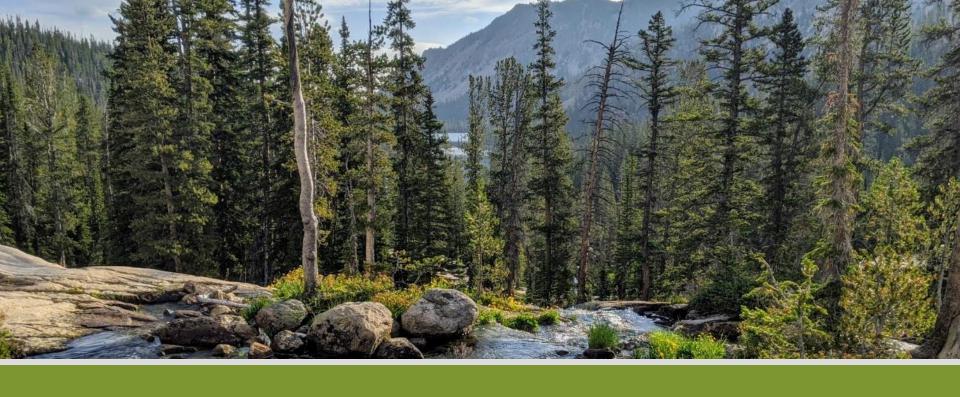


Treatment of Measure Life

- Each conservation measure has an associated measure life based on how long it is expected to be in use.
 - Technologies that are replaced more frequently have shorter measure lives (Smart Thermostats, Agricultural sprinkler hardware)
 - Technologies that are likely to stay in place for long periods have long measure lives (Insulation, Windows)
- BPA uses a 12 year measure life as a planning assumption.
 - Actual average measure life has varied by rate period from 11.5-12.2 over the Regional Dialogue period
- The Council and BPA assume conservation is "sticky" and an efficient technology is typically replaced with a technology that is as or more efficient.
 - BPA does not decrement or remove conservation from our forward planning once measure life is over.

Avoiding Double Counting

- Since BPA does not remove conservation from its planning forecasts, it must avoid "double counting" measures installed in the same location. We do so in two ways:
 - Understanding installation precondition
 - Using a market average baseline
- Installation precondition allows BPA to measure the energy savings that occur based on specific technology being replaced
- Market average baseline is used when installation conditions cannot be known and establishes a market average from which to measure savings



CHWM Recalculation Analysis

Dave Moody, Manager, EE Planning and Evaluation

Analysis

- BPA developed several conservation scenarios and recalculated different CHWM outcomes, using BPA's CHWM proposal as the basis for comparison. Assumptions:
 - Baseline CHWM recalculation scenario:
 - Fixed system size of 7000 aMW Tier 1 system
 - Recalculation year of FY 2026
 - Subtract both specified and unspecified resources
 - No new utility
 - All future conservation is forecasted based on best available information.
- All scenarios were compared to "baseline" option in Provider of Choice Concept Paper:
 - For each scenario, the potential change to each customer's high water mark (+/-) was compared to the baseline.
 - Impact shown in both absolute aMW and % change.



Scenarios

Scenario 1: Forward Looking Self-Funding

Baseline proposal in concept paper (self-funded FY 2022 – FY 2026)

Scenario 5: All Conservation

All conservation (FY 2012 – FY 2026)

Scenario 6: All Historical Self-Funding

All self-funded conservation (FY 2012 – FY 2026)

Scenario 7: Partial Historical Self-Funding

Compromise self-funding (FY 2018 – FY 2026)

Scenarios 8, 9, 10: Scenarios Adjusted for Impact on BPA Load

- To account for the impact of conservation on non federal resources, we took the portion of each customer's total retail load (excluding NLSL) served by BPA (RHWM) and adjusted conservation achievement proportionately. This was done for Scenarios 1-3:
 - » Forecast self-funding adjusted (FY 2022 FY 2026)
 - » All self-funding adjusted (FY 2012 FY 2026)
 - » Compromise self-funding adjusted (FY 2018 FY 2026)





Scenario 1: Forward Looking Self-Funding

Description	The proposal offered by BPA in the concept paper. This scenario increases each customer's CHWM by the amount of self-funded conservation forecast for FY 2022 through FY 2026.	
Rationale	This approach avoids a disincentive to program participation until HWM recalculation. Continued participation in BPA efficiency programs is critical to BPA's ability to meet its resource needs. BPA is not proposing to account for EEI funded conservation because it believes having money collected in rates provides significant incentive for participation in EEI funded efficiency programs.	
Caveats:	BPA has used actuals from BPA 18 and BP 20 as the basis for this self-funding forecast. Should actuals vary significantly, results will vary.	

Scenario 5: All Conservation

Description	Increases each customer's HWM by an amount equal to all conservation achieved since the start of the Regional Dialogue period.
Rationale	This scenario illustrates the maximum impacts of conservation on CHWMs and demonstrates the scale and diversity of impact on BPA's customers.
Caveats	BPA does not believe this is a reasonable scenario to consider; it includes both EEI and self-funded conservation and would lead to potentially significant negative impacts to many customers.

Scenario 6: All Historical Self-Funding

Description	This scenario increases each customer's CHWM by the amount of self- funded efficiency achieved since the start of the regional dialogue period, plus the amount of self-funding forecast for FY 2022 through FY 2026.
Rationale	This approach avoids a disincentive to program participation prior to HWM recalculation and accounts for the benefit created by self-funding throughout the RD contract period.
Caveats	BPA has not decremented those conservation measures that are beyond their measure life.



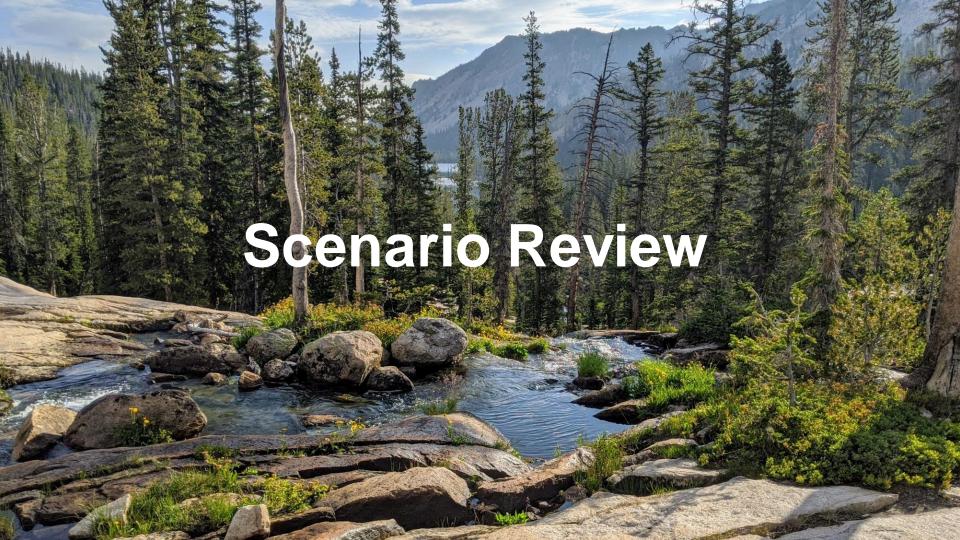
Scenario 7: Partial Historical Self-Funding

Description	This scenario increases each customer's CHWM by the amount of self-funded efficiency achieved since FY 2018, plus the amount of self-funding forecast for FY 2022 through FY 2026.
Rationale	This is a compromise approach that avoids a disincentive to program participation prior to HWM recalculation and accounts for part of the benefit created by self-funding throughout the RD contract period.
Caveats	Using FY 2018 as a basis to begin measurement has no quantitative basis and represents only one example of a potential compromise.



Scenarios 8, 9, 10: Adjusted for Impact on BPA Load

Description	BPA recalculated each of the previous scenarios with CHWM adjusted to reflect the impact of conservation on the BPA system. These adjustments were made by normalizing the amount of conservation add-in by the % of total retail load (excluding any NLSL) served by RHWM.
Rationale	Conservation achieved within a given service territory reduces load served by both federal and nonfederal resources. These scenarios attempt to account for the specific impact on the BPA system.
Caveats	Removing the impact of NLSL load over time requires accurate data over time. Initial data shown here relies on estimates of historical load and will need to be refined before it is finalized. Should a customer have RHWM in excess of TRL, no adjustment was made.



Scenario 5: All Conservation

Description	Themes
Increases each customer's HWM by an amount equal to all conservation achieved since the start of the Regional Dialogue period.	Using All Regional Dialogue conservation (inclusive of EEI funded aMW) creates significant shifts and tends to exacerbate rural urban divides, though there are some major outliers.

Scenario 6: All Historical Self-Funding

Description Themes This scenario increases each Only a small number of utilities seeing significant customer's CHWM by the change. amount of self-funded Provides a large benefit to a very small number of efficiency achieved since the utilities (less than 5 utilities see an increase greater start of the regional dialogue than ~1% regardless of scenario). Most customers, even those with non-trivial selfperiod, plus the amount of funding see minimal adjustments given the impact of a self-funding forecast for FY few outliers. 2022 through FY 2026.

Scenario 7: Partial Historical Self-Funding

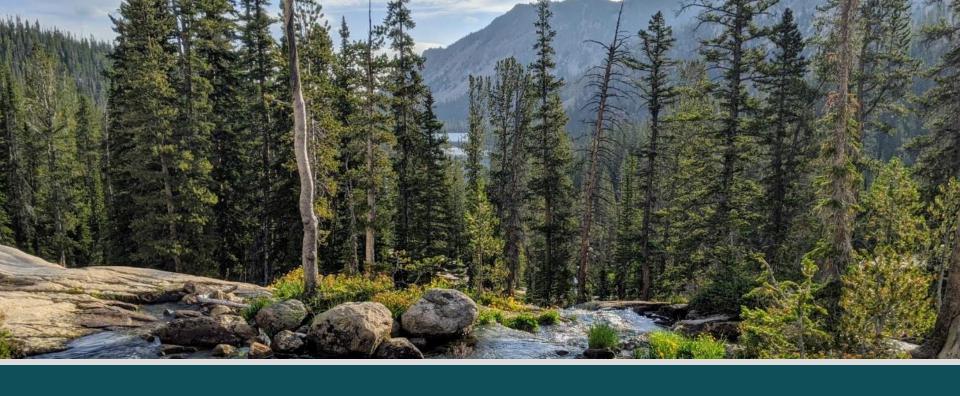
Description	Themes
This scenario increases each customer's CHWM by the amount of self-funded efficiency achieved since FY 2018, plus the amount of self-funding forecast for FY 2022 through FY 2026.	 Much less dramatic changes overall with no increase or decrease greater than ~3%. Impacts likely mitigated by a general trend toward reduced self funding in the recent past.

Scenarios 8, 9, 10: Adjusted for Impact to BPA Load

Description	Themes
These adjustments were made by normalizing the amount of conservation addin by the % of total retail load (excluding any NLSL) served by RHWM. • Forecast self-funding adjusted (FY 2022 – FY 2026) • All self-funding adjusted FY 2012 – FY 2026) • Compromise self-funding adjusted (FY 2018 – FY 2026)	 Impacts a very small number of customers in a meaningful way. Similar in scale and nature to the previous scenarios with HWM changing only for customers with significant generation.



QUESTION AND ANSWER



Schedule & Feedback

Michelle Lichtenfels, Program Manager, Provider of Choice

Mark Your Calendar

Date	Time	Workshop Topics
September 22	9 a.m. – 12 p.m.	Agenda in development
October 5	9 a.m. – 12 p.m.	Agenda in development
October 12	9 a.m. – 12 p.m.	TBD
October 19	9 a.m. – 12 p.m.	TBD

BPA Event Calendar: https://www.bpa.gov/learn-and-participate/public-involvement-decisions/event-calendar

Feedback Requested

Informal comments accepted and feedback requested:

- Conservation scenario alternatives and preferences
 - Can we take any scenarios off the table?
- Other scenarios of interest
- Interest in revisiting any concepts covered to-date
- Other feedback to help inform future workshops

Feedback



- Share feedback by September 22 to your Power AE and/or Post2028@bpa.gov with a copy to your Power AE.
- Please note that direct responses will not be provided.

Thank You.

Provider of Choice Lead Sponsor:

Kim Thompson, Vice President, Northwest Requirements Marketing

Provider of Choice Team Leads:

Sarah Burczak, Policy Lead Kelly Olive, Contract Lead Michelle Lichtenfels, Program Manager

Provider of Choice Website:

https://www.bpa.gov/energy-and-services/power/provider-of-choice