



# ALTERNATIVE DESCRIPTIONS

Based on conditions and suggested alternatives as of Wednesday, July 28<sup>th</sup> 2021, all dates are approximate and could slide 1-2 days in either direction based on observed conditions.



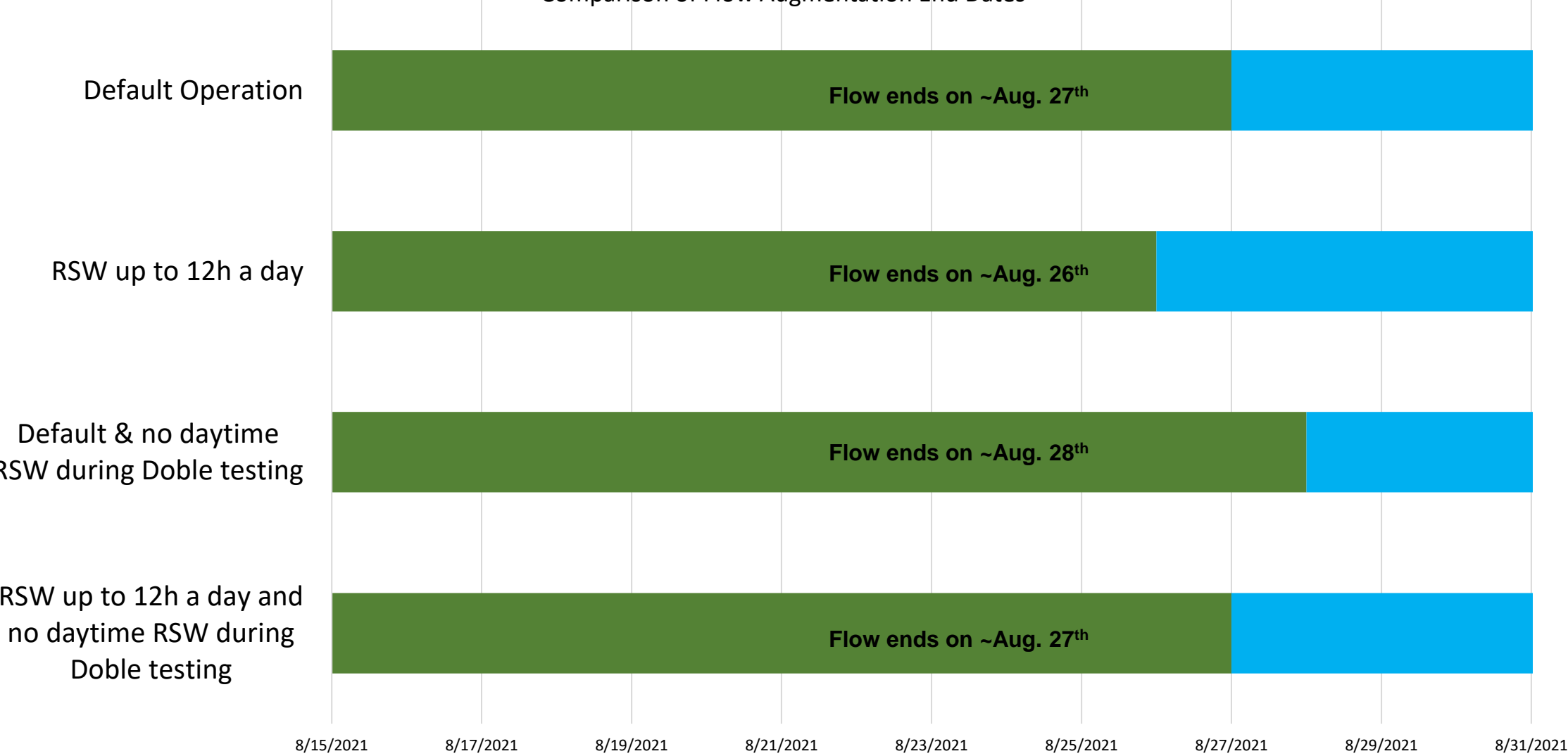
Based on low flow conditions, many previous alternatives are all converging on the same date, alternatives listed below are to show how adjustments could alter the extension of water from DWR. *All alternatives take into consideration current CPC forecast, double testing, a higher tailwater temperature during the approved time window and water needed to cool the river back down to 68°, and targeting the adult fish trap at 69° F.*

1. Default operation - Summer Spill operations as defined in the 2020 BA. Minimum generation, spill up to 18kcfs. Spill is through the RSW unless daily inflow is under 21kcfs, then all spill is put released through the conventional spill bays (deep spill).
  - *Flow Augmentation Ends: ~Aug. 27<sup>th</sup>*
2. Alternative operation - Have the RSW remain open for up to 12hours a day (daylight hours) and then conduct less spill during the other 12hours through the conventional spill bays (deep spill).
  - *Flow Augmentation Ends: ~Aug. 26<sup>th</sup>*
3. Alternative operation – In combination with option 1 or 2. During double testing, when units are not available from 0600-1900, close the RSW and have all spill occur through the conventional spill bays (deep spill), then have the RSW open again at night.
  - *Flow Augmentation Ends: ~1 day later with this operation*
4. Requested operation – Draft Dworshak up to 10 feet deeper than the typical 1,535 ft elevation target by September 1<sup>st</sup> to provide additional flow augmentation water. DWR board / SRPA releases of 200 KAF through September will be measured based on the observed elevation on midnight August 31<sup>st</sup>.



# COMPARISON OF FLOW AUGMENTATION END DATES

Comparison of Flow Augmentation End Dates





# REVIEW OF DWR DRAFT



Alternative	Flow Augmentation Ending	Days short of End of Aug	Additional Volume Needed (kaf)	End of Aug. Elevation (ft)	End of Sept. Elevation (ft)	Refill Probability by July 1st	Refill Probability by June 25th	Refill Probability by June 20th
Default Operation*	~Aug. 27 <sup>th</sup>	5	85	1,529	1,513	94.5%	94.0%	94.0%
RSW up to 12h a day	~Aug. 26 <sup>th</sup>	6	102	1,528	1,512	94.0%	94.0%	93.5%
Default and no daytime RSW during Doble testing	~Aug. 28 <sup>th</sup>	4	68	1,531	1,515	95.0%	94.5%	94.0%
RSW up to 12h a day and no daytime RSW during Doble testing	~Aug. 27 <sup>th</sup>	5	85	1,529	1,513	94.5%	94.0%	94.0%

\* Current operations that are being implemented under SOR

Note: Updated and in-depth analysis completed on refill, preliminary numbers have been updated.  
Standard refill probabilities for July 1st and June 25<sup>th</sup> are 95.5% and Jun. 20<sup>th</sup> is 95.0%

- SRBA's 200 KAF is drafted between the end of August elevation and the end of September elevation.
- % Chance of refill is rounded down to the nearest 0.5%



# REVIEW OF DWORSHAK DRAFT



31 Aug Elevation [ft]	30 Sept Elevation [ft]	% Chance of Refill By 1 July	% Chance of Refill By 25 June	% Chance of Refill By 20 June
1,535	1,520	95.5%	95.5%	95.0%
1,534	1,519	95.0%	95.0%	95.0%
1,533	1,517	95.0%	95.0%	94.5%
1,532	1,516	95.0%	95.0%	94.5%
1,531	1,515	95.0%	94.5%	94.0%
1,530	1,514	94.5%	94.5%	94.0%
1,529	1,513	94.5%	94.0%	94.0%
1,528	1,512	94.0%	94.0%	93.5%
1,527	1,511	94.0%	94.0%	93.5%
1,526	1,510	94.0%	93.5%	93.0%
1,525	1,509	93.5%	93.5%	93.0%
1,524	1,508	93.5%	93.0%	92.5%
1,523	1,507	93.0%	93.0%	92.5%
1,522	1,506	93.0%	92.5%	92.0%
1,521	1,504	92.5%	92.5%	92.0%
1,520	1,503	92.5%	92.0%	91.5%
1,519	1,502	92.0%	91.5%	91.5%

- SRBA's 200 KAF is drafted between the end of August elevation and the end of September elevation.
- % Chance of refill is rounded down to the nearest 0.5%