2022 Drought Response Operations Plan

Note to Reader: The DROA Parties have been working to develop a Drought Response Operations Plan (Plan) to implement, if needed, as early as April of 2022. As described more fully below, this draft document identifies consistent provisions which will form the basis for the development of yearly Plans. Additionally, this draft document identifies the types of information the DROA Parties intend to include as part of any future Plans. It does not contain specific Drought Response Operations for 2022 but instead describes the process and the decision-making framework the DROA Parties intend to follow as they develop a Plan for 2022 and following years. Attachments will be the dynamic part of this work and will be completed as information becomes available.

The DROA Parties request a review of this draft document now, beginning in December of 2021, as an initial opportunity to obtain input regarding the more durable process and decision-making framework provisions. After receiving and considering input through this initial review, the DROA Parties will begin developing a Drought Response Operations Plan for implementation in 2022, if needed. No Plan can be developed until more information becomes known such as precipitation, snowpack, runoff, reservoir elevations, and other variables during the winter and spring of 2022. As the DROA Parties develop a Plan for 2022, they will engage in the consultation, coordination, and outreach described in this draft document as may be amended through this initial review process.

1. Introduction and Background

A Drought Response Operations Plan (Plan) describes planning procedures and processes needed to support a proposed Drought Response Operation under the Drought Response Operating Agreement (DROA).[1] A Plan is divided into two general components: 1) This Framework document (Framework) contains provisions the DROA Parties will use to form the basis for the development of yearly Plans and will remain relatively unchanged from year to year; and 2) attachments to this Framework (Attachments) identify Drought Response Operations for the year's Plan and will be updated annually and modified as needed during each year. This Framework and its Attachments together constitute the Plan. The DROA Parties may amend Plans as necessary based upon changing conditions. Drought Response Operations described in any Plan include operational adjustments, releases, and recovery within or from the Colorado River Storage Project Initial Units (Lake Powell, Flaming Gorge, Aspinall and Navajo) under DROA.

All Plans will describe annual Drought Response Operations from April of the Plan year to April of the following year, unless otherwise specified.

This Framework is organized as follows:

- Section 2 briefly describes the authorities that govern Drought Response Operations, including the basis for any proposed Drought Response Operations to reduce the magnitude and duration of a forecasted decline in Lake Powell water elevations below the Target Elevation. [2]

- Section 3 incorporates the summary of the information to be included in Attachment A Part 1. Attachment A Part 1 describes the current and projected hydrology for the applicable Plan.

- Section 4 incorporates the summary of the information to be included in Attachment A Part 2. Attachment A Part 2 describes the proposed Drought Response Operations for the applicable Plan.

- Section 5 explains how DROA's criteria and principles are applied to develop Drought Response Operations.

[1] DROA is one element of the package of documents known as the 2019 Colorado River Drought Contingency Plan (DCP). The DCP agreements in both the Upper Basin and Lower Basin provide tools to address the ongoing historic drought in the Colorado River Basin. The seven Colorado River Basin States submitted the DCP agreements to Congress, resulting in the "Colorado River Drought Contingency Plan Authorization Act," 2019 DCP Act, Pub. L. No. 116-14, 133 Stat. 850 (Apr. 16, 2019) ("the 2019 DCP Act"). Consistent with the 2019 DCP Act, the DCP agreements were executed in May of 2019, and the various DCP agreement parties have been implementing the agreements in the Upper and Lower Colorado River Basins since their execution.

[2] If there is a conflict between the content of this Plan and the provisions of DROA, the provisions of DROA control.

- Section 6 describes the methods that will be used to account for water released and recovered pursuant to any implemented Plan.

- Section 7 describes the consultation, coordination, and outreach that the DROA Parties will conduct when developing and before finalizing a Plan.

- Section 8 describes monitoring and the process for potential Plan amendments during implementation of a Plan.

This Framework does not address "emergency action" under DROA. In DROA, the Department of the Interior (Department) committed to conduct any emergency action, "to the greatest extent practicable, with advance consultation and coordination with the Upper Division States, through the [Upper Colorado River] Commission, and following consultation with the Governors' Representatives of the Colorado River Basin States."[3] Any releases made under an emergency action are subject to recovery pursuant to DROA. The Department "retains all applicable authority to make release from [Colorado River Storage Project Act] Initial Units and perform subsequent recovery of storage operations if actual hydrology or actual operating experience demonstrate an imminent need to protect the Target Elevation at Lake Powell."[4]

2. DROA Authorities

The operating principle of DROA is to minimize the risk of Lake Powell falling below a minimum "Target Elevation," expressly defined as a water surface elevation of 3,525 ft.[5] The Target Elevation was adopted to "minimiz[e] the risk of Lake Powell declining below minimum power pool (approximately elevation 3,490 feet msl) and to assist in maintaining Upper Division States' compliance with the Colorado River Compact."[6] DROA further states that the Target Elevation "appropriately balances the need to protect infrastructure, compact obligations, and operations at Glen Canyon Dam, as storage approaches minimum power pool with the Upper Division States' rights to put Colorado River System water to beneficial use."[7] Section I of DROA further describes the purposes of the Target Elevation.

Maintaining Lake Powell elevation above the Target Elevation helps allow the upstream Initial Units (Flaming Gorge, Aspinall, and Navajo Reservoirs) to continue to serve their Congressionally authorized purposes. Those purposes are articulated in the authorizing Colorado River Storage Project Act of 1956 (CRSPA):

> In order to initiate the comprehensive development of the water resources of the Upper Colorado River Basin, for the purposes, among others, of regulating the flow of the Colorado River, storing water for beneficial consumptive use, making it possible for the States of the Upper Basin to utilize, consistently with

[3] DROA §§ II(A)(3)(j) & II(A)(4)(e).
[4] DROA §§ II(A)(3)(j).
[5] DROA § II(A)(2) (defining "Target Elevation").
[6] DROA § II(A)(2).
[7] DROA § II(A)(2).

> the provisions of the Colorado River Compact, the apportionments made to and among them in the Colorado River Compact and the Upper Colorado River Basin Compact, respectively, providing for the reclamation of arid and semiarid land, for the control of floods, and for the generation of hydroelectric power, as an incident of the foregoing purposes, the Secretary of the Interior is hereby authorized (1) to construct, operate, and maintain the following initial units of the Colorado River storage project, consisting of dams, reservoirs, powerplants, transmission facilities and appurtenant works: Curecanti, Flaming Gorge, Navajo (dam and reservoir only), and Glen Canyon . . . .

The purposes first articulated in the CRSPA were reinforced by Congress' approval of DROA as part of the 2019 Colorado River Drought Contingency Plan Authorization Act ("2019 DCP Act").[8] DROA expressly states that its "primary goals"[9] concern "ensur[ing]" compact compliance, "while exercising their rights to develop and utilize the Upper Colorado River Basin's ("Upper Basin") Colorado River System compact apportionment" [10], "[m]aintain[ing] the ability to generate hydropower at Glen Canyon Dam" for a variety of purposes,[11] and "[m]inimiz[ing] adverse effects to resources and infrastructure in the Upper Basin."[12] In support of these authorized purposes and primary goals, DROA authorities and considerations attempt to ensure that the purposes of the authorized facilities are not negatively affected by Lake Powell falling below the Target Elevation and that actions taken to implement DROA minimize negative impacts to the operation of the Initial Units and those who depend on the operation of those units.[13]

3. Summary of Hydrologic Conditions and Projections

To formulate a yearly Plan, the DROA Parties will rely on the most current and projected hydrological information which will be outlined in Attachment A Part 1 and will include the following:

3.1 Current and projected elevations at Lake Powell, including graphic representation from the Bureau of Reclamation's (Reclamation) multi-year projections;

[8] 2019 DCP Act, Pub. L. No. 116-14, 133 Stat. 850 (Apr. 16, 2019).

[9] DROA § I(A).

[10] DROA § I(A)(1): "Help ensure the Upper Division States will continue fulfilling their interstate water compact obligations while exercising their rights to develop and utilize the Upper Colorado River Basin's ("Upper Basin") Colorado River System compact apportionment."

[11] DROA § I(A)(2): "Maintain the ability to generate hydropower at Glen Canyon Dam so as to protect: a. Continued operation and maintenance of the Initial Units and participating projects authorized under the [1956 Act]; b. Continued funding and implementation of environmental and other programs that are beneficial to the Colorado River System; c. Continued electrical service to power customers, including municipalities, cooperatives, irrigation districts, federal and state agencies and Native American Tribes, and the continued functioning of the western Interconnected Bulk Electric System that extends from Mexico to Canada and from California to Kansas and Nebraska; and d. Safety contingencies for nuclear power plant facilities within the Colorado River Basin."

[12] DROA § I(A)(3): "Minimize adverse effects to resources and infrastructure in the Upper Basin."

[13] DROA § II(A)(3)(b) (scope).

3.2 Reclamation's most recent Colorado River Mid-term Modeling System 24-Month Study (24-Month Study);

3.3 Identification of the first months when the 24-Month Study Minimum Probable inflow[14] and the Most Probable inflow each projected Lake Powell to be at or below the Target Elevation;

3.4 Current and projected elevations and the associated volumes at each of the Initial Units for the following 24 months, including any difference in volume from the projected elevations and the Target Elevation at Lake Powell, according to the 24-Month Study Minimum Probable inflow and Most Probable inflow;

3.5 Availability of water for Drought Response Operations at each of the Initial Units and the timing of such water availability; and

3.6 Summary of previous Drought Response Operations at each upstream Initial Unit (Flaming Gorge, Aspinall, Navajo), if any. The summary will include:

3.6.1 Previous Drought Response Operation Releases
3.6.2 Status of Recovery from previous Drought Response Operation Releases

4. Summary of Proposed Drought Response Operations:

As part of yearly Plans, the DROA Parties will provide a summary of Drought Response Operations in Attachment A Part 2, and that summary will include the following:

4.1 The 24-Month Study with projections for the Drought Response Operations incorporated for the Minimum, Maximum, and Most Probable inflow traces.

4.2 A description of operational adjustments at Glen Canyon Dam, if any, which will include a comparison of the operational adjustments to operations when no adjustments are made. This comparison may be provided through text, tables, figures, and graphs as needed.

4.3 A description of Drought Response Operations releases and recovery at affected Initial Units, as applicable. This will include the amount of Drought Response Operations water (rate, volume, and timing), a description of each reservoir's projected water level and surface area changes over the following 24 months.

[14] In the 24-Month Study, the first year of the Most Probable inflow trace is based on the 50th percentile of Colorado Basin River Forecast Center forecasts and the second year is based on the 50th percentile of historical flows. To represent dry and wet future conditions, the Minimum Probable and Maximum Probable traces use the 10th and 90th forecast percentiles in the first year and the 25th and 75th percentiles of historical flows in the second year, respectively.

5. Application of DROA's Process and Principles for Drought Response Operations

This section describes how a Plan will be developed to be consistent with the DROA provisions and principles, ensuring that the Plan meets the obligations imposed by the 2019 DCP Act.

5.1 DROA Planning Timeline

DROA relies on hydrologic projections and establishes a timeframe of approximately two years to plan for and implement Drought Response Operations with as much advance notice as possible to avoid Lake Powell declining below the Target Elevation.[15] The process begins when any Minimum Probable inflow trace of the 24-Month Study projects Lake Powell falling to or below the Target Elevation within the upcoming 24-month period of the study. This begins a process for more frequent monitoring, data collection, and coordination.[16]

The next phase of DROA planning occurs when any Most Probable inflow trace of the 24-Month Study shows Lake Powell declining to or below the Target Elevation in the upcoming 24-month study period.[17] When this occurs, the DROA Parties begin to develop a Plan pursuant to DROA[18] and this Framework, and then seek approval[19] and implementation[20] of that Plan, starting as early as the April[21] before Lake Powell is projected to decline below the Target Elevation. Attachment A Section 2 describes the proposed Drought Response Operations for the applicable Plan.

5.2 Scope of Drought Response Operations at the Initial Units

DROA calls for Drought Response Operations that fit within the flexibilities allowed by existing Initial Unit operations.[22] The proposed Drought Response Operations are designed to work within the existing flexibilities of each of the Initial Units, which are described generally for each Initial Unit in this Section 5.2 and in the applicable

[15] See DROA § II(A)(4).
[16] DROA § II(A)(4)(a).
[17] DROA § II(A)(4)(a)(iv)(2).
[18] DROA § II(A)(4)(b).
[19] DROA § II(A)(4)(c).
[20] DROA § II(A)(4)(d).
[21] DROA § II(A)(4)(b)(iv)(2).
[22] DROA § II(A)(3)(b): "Scope of Drought Response Operations: Any drought response operation, including drought response releases and recovery of storage operations, at a CRSPA Initial Unit will be managed with the maximum flexibility practicable consistent with: the Colorado River Compact; the Upper Colorado River Basin Compact; the Colorado River Storage Project Act; the Colorado River Basin Project Act; the San Juan-Chama Project Act (P.L. 87-483); the Northwestern New Mexico Rural Water Projects Act (P.L. 111-11); the project-specific criteria for each CRSPA Initial Unit, including the relevant Records of Decision, Biological Opinions and authorized purposes for each Unit (see Section I.C.2); legal obligations, including existing and future contracts related to water and/or hydropower; states' water right administration requirements and decrees; and all applicable rules and regulations promulgated thereunder."

Attachments.

5.2.1 General Release and Recovery Principles

DROA requires consideration of all the Initial Units for a Drought Response Operation.[23] Lake Powell operations and releases from the upstream Initial Units reservoirs are each governed by one or more Record of Decision and authorized purposes dictating constraints and flexibilities. For each Initial Unit, Reclamation's reservoir operator determines a release rate that meets prescribed criteria within an allowable range. For Drought Response Operations, three possible types of reservoir operations are considered:

- Operations without Drought Response – Reservoir operations absent Drought Response Operations. These operations will continue to be within each reservoir's allowable range. The allowable range is governed by physical constraints, regulatory constraints, dam safety considerations, safe channel capacity, public safety, and applicable state and federal law, among other things.

- Drought Release Operations – In addition to the constraints identified above, Drought Release Operations are also constrained by DROA[24] which dictates operations that must be completed according to authorizing legislation and agreements and will consider applicable existing and future contracts[25] related to water and/or hydropower, and each State's water rights administration and decrees, among other things. Drought Release Operations will be performed within each upstream Initial Unit's allowable range of releases, and above the Operations without Drought Response.

- Drought Response Recovery – Recovery of releases made pursuant to a prior Plan or when an emergency action is performed by storing more water when hydrology allows and/or reducing releases when hydrology does not allow. When operational releases reach the low end of the allowable operational range and cannot be reduced further, recovery cannot occur until conditions allow. Recovery is further addressed in Section 6.

As described above, it is important to emphasize that any Drought Response Operation must be consistent with any constraint on Initial Unit operations,[26] including the Law of the River,

[23] DROA § II(A)(3)(c): "Participation from all CRSPA Initial Units: Recognizing the shared risk of extended drought and acknowledging the Upper Division States' continuing responsibilities to maintain compact compliance within the Upper Basin, a drought response operation contemplated by this Drought Response Operations Agreement shall ensure that ALL CRSPA Initial Units will be considered for drought response operations..."

[24] DROA § II(A)(3)(b).

[25] DROA Section II(A)(3)(b) states that "future contracts" are among the parameters considered in any Drought Response Operation. Accordingly, the DROA Parties will consider contracts that have been executed after the effective date of DROA. Any contract executed after a Drought Response Operation has begun will be addressed in an amendment to the applicable Plan, if necessary.

[26] DROA § II(A)(3)(b).

Records of Decision, Biological Opinions, authorized purposes for individual Initial Units, states' water right administration requirements, contracts, and any other constraints that affect operation of the Initial Units. Additionally, impacts to river flows and upstream Initial Unit reservoir water levels related to recreation visitation and the economic value of recreation will be considered, along with potential downstream flooding risks. To determine what flexibilities may be available, the DROA Parties will work with the existing entities and processes that govern Initial Unit operations to develop a Plan that will both minimize the risk of Lake Powell falling below the Target Elevation and maintain consistency with Initial Unit operation. Depending on the Initial Unit, these entities include Federal agencies, Tribes, States, contractors, water users, applicable advisory groups, non-governmental organizations, and the public. Early communication with such entities will be critical and will occur as described in Section 7 of this Framework. The DROA Parties will also maintain a long-term focus to ensure appropriate operation of Initial Units for their authorized purposes into the future.

5.2.2 Lake Powell Monthly Operational Adjustments

Glen Canyon Dam provides 26.2 million acre-feet of water storage capacity in Lake Powell. As Lake Powell fulfills its authorized purposes, its elevation fluctuates depending on the amount of spring runoff from the mountains, releases required under current law, and the amount of water carried over from the previous year. Each year, the lake level typically increases between May and July from runoff followed by a decrease in lake level throughout the remainder of the year.

DROA states that "[o]perational adjustments in monthly volumes at Glen Canyon Dam will be considered first to minimize the risk of Lake Powell declining below the Target Elevation consistent with the Criteria for Coordinated Long-Range Operation of Colorado River Reservoirs, which is currently implemented through the 2007 Interim Guidelines."[27] Monthly releases from Glen Canyon Dam are determined by the 2016 Record of Decision for the Glen Canyon Dam Long-Term Experimental and Management Plan (LTEMP), which addresses hourly, daily, monthly, and experimental releases from Glen Canyon Dam and a variety of resources below Lake Powell in accordance with the Grand Canyon Protection Act of 1992. These operational parameters determine the flexibility for any Drought Response Operation. The 2007 Interim Guidelines control annual release volumes, and any monthly adjustments to Glen Canyon Dam releases do not alter the annual release volume requirements and cannot change the annual release volumes.

LTEMP expressly provides for modifications to Glen Canyon Dam monthly releases "to respond to low reservoir conditions as a result of drought in the Colorado River Basin."[28]

[27] DROA § II(A)(3)(c)(i).

[28] LTEMP ROD, Attachment B, § 1.2, p. B-7: "In addition, Reclamation may make modifications under circumstances that may include operations that are prudent or necessary for the safety of dams, public health and safety, other emergency situations, or other unanticipated or unforeseen activities arising from actual operating experience (including, in coordination with the Basin States, actions to respond to low reservoir conditions as a result of drought in the Colorado River Basin)."

LTEMP requires Reclamation to make such adjustments "in coordination with the Basin States,"[29] through a process described in LTEMP,[30] including a Glen Canyon Monthly Operations Call, along with updates to the Glen Canyon Dam Adaptive Management Program (GCDAMP). Explanations for monthly operational adjustments may include an analysis pursuant to the parameters defined under LTEMP.[31]

The DROA Parties will consider the following criteria, without limitation and subject to existing law and regulation, when assessing operational adjustments at Lake Powell:

1. Glen Canyon Dam monthly volume calculations as projected by Reclamation prior to Drought Response Operations.

2. During years when early forecasts indicate that operational adjustments at Glen Canyon Dam may be needed to maintain the Target Elevation, smaller incremental monthly adjustments shall be considered before the April 24-Month Study forecast in order to have sufficient time to maintain the required volume needed in Lake Powell and to minimize more significant impacts to monthly flow volumes later in the water year.

3. Any monthly release volume adjustments made under a Plan will be incorporated into Glen Canyon Dam operations and offset to ensure the Dam's required annual release volume is not modified[32].

Attachment B addresses Glen Canyon Dam with respect to the current Plan.

5.2.3 Flaming Gorge

Flaming Gorge is the largest upstream Initial Unit and is situated high in the Upper Colorado River Basin across the Utah and Wyoming border. When the reservoir is full at elevation 6,040 feet above mean sea level, it has a total capacity of 3,788,800 acre-feet with an active capacity of 3,749,000 acre-feet and a surface area of 42,020 acres. The Flaming Gorge Annual Operation Plan (FG AOP) may be amended and releases made within the flexibility of the 2006 Flaming Gorge Record of Decision and within the provisions of DROA.

Flaming Gorge is operated for authorized purposes, including water storage, contract releases, power production, recreation, and environmental conditions downstream of the reservoir for endangered fish recovery pursuant to the 2005 Biological Opinion and 2006 Flaming Gorge Record of Decision. Operating criteria have been developed to produce the

[29] LTEMP ROD, Attachment B, § 1.2, p. B-7.

[30] LTEMP ROD, Attachment B, § 1.1.

[31] LTEMP ROD, Attachment B, § 1.3 Implementation Process for Experiments Under Alternative D.

[32] Under the 2007 Interim Guidelines Section XI.G.7.D. "The Secretary will base annual determinations regarding the operations of Lake Powell and Lake Mead on these Guidelines, unless extraordinary circumstances arise. Such circumstances could include operations that are prudent or necessary for safety of dams, public health and safety, other emergency situations, or other unanticipated or unforeseen activities arising from actual operating experience."

necessary environmental parameters under a variety of hydrologic conditions.[33]

The allowable range of Flaming Gorge operations is a function of the period of the year, hydrologic conditions, and ongoing or planned studies related to adaptive management in support of the endangered fish recovery program. Current operations at Flaming Gorge reflect ongoing experimentation that has been coordinated by and through the Flaming Gorge Technical Working Group and with the Flaming Gorge Working Group stakeholders.

5.2.3.1. Flaming Gorge Operations

Flaming Gorge operations are established in the spring based on forecasted runoff for the next year until the following spring. The year is broken into three periods: Spring, Base Flow, and Transition.

Specific operations for the Spring Period are established in the FG AOP for each given year and its timing varies depending on yearly hydrology. The Base Flow Period follows the Spring Period and typically constitutes flows from mid-July through the end of February. The Transition Period runs from March 1st through the beginning of the Spring Period or peak release. Details of potential flows during each of the periods can be found in Attachment C and the FG AOP.

5.2.3.2. Flaming Gorge Operating Range during Drought Response Operations

The range of flows meeting required environmental conditions downstream of the dam for each hydrologic condition is included in Tables in Appendix 1 to Attachment C.

Drought Response Operations must remain within the range prescribed in the tables for the corresponding hydrologic conditions within the authorized flexibilities. Further, pursuant to DROA Section II(A)(5), any proposed changes in release targets (release and recovery flow) will be coordinated with the Flaming Gorge Working Group.

Attachment C addresses Flaming Gorge with respect to the current Plan.

5.2.4 Aspinall

The Wayne N. Aspinall Unit is a series of three consecutive dams and reservoirs on the Gunnison River in Colorado: Blue Mesa, Morrow Point, and Crystal. Blue Mesa Reservoir is the most upstream facility of the Aspinall Unit and serves as its primary storage reservoir. Blue Mesa Reservoir has a total capacity of 938,469 acre-feet at elevation 7,519.4 feet above mean sea level, including an active pool of 747,898 acre-feet. Key reservoir elevations are described in Attachment D.

5.2.4.1. Aspinall Current Reservoir Operations

[33] These criteria are found in several documents, including the Environmental Impact Statement, Record of Decision, Biological Opinion, and the FG AOP, among others.

The Aspinall Unit (Aspinall) operates in accordance with its federally authorized purposes, multiple state-decreed water rights and agreements, executed contracts and pursuant to the 2012 Aspinall Record of Decision.
Blue Mesa storage peaks late in the spring runoff period and reservoir elevations decline as releases are made to satisfy States' water rights administration and decrees, to meet authorized purposes including power generation, for flood control, for downstream target flows pursuant to the 2012 Aspinall Record of Decision, and to meet the December 31 target elevation of 7,490 feet to prevent icing issues upstream of the reservoir. Downstream target flows vary by hydrologic year type and are determined by May 1 forecasts of April through July inflow into Blue Mesa Reservoir as detailed in Attachment D.

5.2.4.1.1. Contracted Water at Aspinall

Aspinall currently has various amounts of water under contract for delivery downstream, or for augmentation of depletions upstream in any given year. Current contracts are listed in Attachment D. Water under contract is not available for Drought Response Operations.

5.2.4.1.2. Taylor Park Exchange Agreement

The Taylor Park Reservoir Operation and Storage Exchange Agreement (1975) allows for the exchange of water stored in Taylor Park Reservoir and Blue Mesa Reservoir to improve utilization and management of available water supplies under the water rights of the Uncompahgre Project and Blue Mesa. The maximum amount of Taylor Park Reservoir exchange water that can be stored within Blue Mesa Reservoir at any time throughout the year is 106,230 acre-feet. The amount of Taylor Park Reservoir exchange water stored in Blue Mesa Reservoir is for diversion by the Uncompahgre Project at the Gunnison Tunnel and is determined through accounting managed by the Colorado Division of Water Resources. This water is not available for release pursuant to DROA.

5.2.4.1.3. Aspinall Subordination Agreement

The Subordination Agreement, dated June 1, 2000, formalizes the commitment made by the United States during the planning of the Aspinall Unit to allow subordination of Aspinall Rights up to 60,000 acre-feet per year to in-basin water users so that Aspinall would not interfere with future water development in the Upper Gunnison River Basin. A decree entered in Case No. 03CW263 (October 10, 2006), Water Court, Water Division No. 4, for a plan for augmentation permitted the subordination of Aspinall Rights to augment existing and future water rights exercised for all decreed beneficial purposes within the Gunnison River Basin through any decreed structure or facility upstream of the Crystal Reservoir Dam. Accounting for the plan for augmentation is the responsibility of the State of Colorado Division Engineer's Office, Water Division No. 4.

Attachment D addresses Aspinall with respect to the current Plan.

5.2.5 Navajo Reservoir

Navajo Dam is located in San Juan County, New Mexico, and the reservoir extends upstream from New Mexico into Colorado. The reservoir has a total capacity of 1,647,940 acre-feet, including an active capacity of 1,021,910 acre-feet.[34] Maximum active storage is at elevation 6,085 ft above mean sea level. Minimum active storage is elevation 5,990 ft, which is the minimum operating level for the Navajo Indian Irrigation Project (NIIP) and the Navajo-Gallup Water Supply Project Cutter Lateral intake.

5.2.5.1. Current Navajo Reservoir Operations

5.2.5.1.1. Contracted Water at Navajo Reservoir

Navajo Reservoir contracted water volumes are described below. These volumes represent the full allocation of water contracts and may differ from actual annual use.

i. Williams Gas Processing (expires 3/31/28): 50 af/yr.

ii. Navajo Nation Settlement Contract (no expiration): 508,000 af/yr for NIIP, which includes 22,650 af/yr of diversion (20,780 af/yr of depletion) for the Navajo-Gallup Water Supply Project.

iii. Jicarilla Apache Nation Settlement Contract (no expiration): not to exceed 33,500 af/yr diversion (25,500 af/yr of depletion) for use in New Mexico from the Navajo Reservoir Supply.

Shortages to contracts at Navajo Reservoir will be handled according to the provisions of Public Law No. 87-483,[35] as amended by Public Law No. 111-11.[36] In the case of severe drought with anticipated shortages to the Navajo Reservoir water users, the Navajo Reservoir Operations ROD allows for consideration of a temporary revision to spring peak release criteria or lowering of baseflow targets in the critical habitat reach.

5.2.5.1.2. Navajo Reservoir Requirements related to Endangered Species

Navajo Reservoir is operated consistent with the Navajo Reservoir Operations Biological Opinion issued for the Animas-La Plata Project and the flow recommendations of the San Juan River Recovery Implementation Program (SJRIP). Those require operating the reservoir to mimic the natural hydrograph of the river and to maintain certain flow targets. Further detail is provided in Attachment E.

5.2.5.1.3. Other Reclamation Operations at Navajo Reservoir

Reclamation makes other releases for the purposes of channel maintenance, downstream

[34] Reclamation Technical Report, ENV-2021-002, Navajo Reservoir 2019 Sedimentation Survey

[35] https://www.govinfo.gov/content/pkg/STATUTE-76/pdf/STATUTE-76-Pg96.pdf

[36] https://www.congress.gov/111/plaws/publ11/PLAW-111publ11.pdf

channel work, requests from downstream coal power plants, requests from other agencies, or other activities as needed. Modifying such operations could be used for DROA recovery, so long as such actions do not interfere with Navajo Reservoir's authorized purposes. Water available for Drought Response Operations may include Spring Peak Releases and Excess Water as those terms are defined in Attachment E.

Attachment E addresses Navajo Reservoir with respect to the current Plan.

5.3 Effectiveness

DROA requires consideration of whether a proposed release will be effective in maintaining the Target Elevation. This includes the option to proceed with releases that may not completely protect the Target Elevation and the option not to recommend a release that is not sufficiently protective of the Target Elevation.[37]

DROA relies on available storage in all four Initial Units to reduce the risk of Lake Powell dropping below the Target Elevation. If dry conditions persist or worsen, available storage volumes for potential adjustments or releases may be insufficient to protect the Target Elevation at Lake Powell. As such, Drought Response Operations may be ineffective and therefore futile.

The effectiveness of a Plan is difficult to predict prior to knowing actual hydrologic conditions. The forecasts on which modeling projections rely can be highly variable and may not reflect future hydrologic conditions. For illustration, projections in 2021 predict Lake Powell will contain anywhere between 4.8 and 13.3 million acre-feet for the upcoming 12-month period. Likewise, 24-Month Study projections have predicted volumes ranging from 4.5 and 17.3 million acre-feet in a subsequent 2-year period. Moreover, those projections only represent the most likely 80% of the modeled possibilities; they do not reflect the wettest or driest possible projections.

In certain years, releases from the upstream Initial Units may be insufficient to reduce the risk of Lake Powell falling below the Target Elevation. For example, the driest projection in the October 2021 24-Month Study shows Lake Powell approximately 2.8 million acre-feet below the volume associated with the Target Elevation by August of 2022. In comparison, volumes of storage available in the CRSP Initial Units for potential adjustments or releases in any single year may be less than one million acre-feet depending on the year's resource conditions.

Before the DROA Parties can assess the effectiveness or futility of any Drought Response Operation, the Plan must first meet the requirements established in the "Scope of

[37] DROA § II(A)(3)(d): "Effectiveness: The Parties agree that a drought response release from a CRSPA Initial Unit may be recommended even if it is determined that such release would not, by itself, fully achieve the intent or goals of this Drought Response Operations Agreement. Such releases, however, may not be recommended if they are ultimately determined to be futile to achieve the goals or intent of this Drought Response Operations Agreement."

Drought Response Operations"[38] provision, including, among other things, the following:

a. applicable laws and regulations;
b. intrastate water rights administration requirements and decrees; and
c. ability to meet contractual obligations related to any upstream Initial Unit.

If a proposed Plan meets DROA requirements, the DROA Parties will assess the effectiveness or futility of a Drought Response Operation based on whether, and to what extent, the Drought Response Operation will reduce the risk of Lake Powell falling below the Target Elevation during the next 12-month period, as projected by the most recent 24-Month Study. In making such an assessment, the DROA Parties may rely on current or projected operations at Lake Powell, and other information that any DROA Party deems relevant. The DROA Parties will specifically consider the following criteria, without limitation:

1. The likelihood that the Drought Response Operation will increase the risk of a net decrease in the elevation at Lake Powell over any consecutive 12-month period based on the most recent 24-Month Study;

2. The extent to which conducting a Drought Response Operation for certain durations and at certain times during the water year might affect the ability of the released water to reach Lake Powell;

3. The extent to which a Drought Response Operation changes the risk of Reclamation being unable to meet obligations related to an upstream Initial Unit in future years at times after the 12-month period when a Drought Response Operation would occur;[39]

4. The degree to which a Drought Response Operation minimizes, to the extent practicable, impacts of the Drought Response Operation to natural resource conditions;[40]

5. The degree to which a Drought Response Operation minimizes, to the extent practicable, impacts to the Upper Colorado River Basin Fund and impacts to the reliability of the Western Interconnected Bulk Electrical System;[41]

6. The extent to which a Drought Response Operation minimizes adverse effects to resources and infrastructure in the Upper Basin[42] and provides additional certainty on

[38]DROA § II(A)(3)(b)
[39]DROA § II(A)(3)(b).
[40] DROA § II(A)(3)(f).
[41] DROA § II(A)(3)(g).
[42] DROA § I(A)(3).

Colorado River water management,[43] including but not limited to associated economic implications; and

7. The extent to which a Drought Response Operation recovery at a particular Initial Unit will occur or has occurred by October 1, 2026.[44]

Attachment A contains an overview of effectiveness and an explanation of how a determination was made.

5.4 Natural Resources Considerations

Subject to specific feedback for each Initial Unit that might be affected by Drought Response Operations, general natural resource considerations include the following:

To the extent practicable, Drought Response Operations should be made to mimic the natural timing of streamflow. Most Initial Unit operations, for example, contain an option for releasing additional water at times that coincide with natural high flows in the spring. Releasing water during these windows will generally align with existing operations, provide ecological benefits, and may support operational flexibilities related to retaining water in storage until more information about runoff is known in the spring.

In addition to other limitations described herein, specific considerations for each Initial Unit were provided by the relevant natural resource agencies and include the following:

Lake Powell:

- minimizing spring reservoir elevation drop and corresponding risk of non-native fish pass-through by reducing releases from January-April;
- transferring most of the withheld winter volume as a spring peak flow in May or June; and
- balancing sediment erosion and summer peak hydropower production.

Flaming Gorge:

- releasing most of the Drought Response Operation volume during a naturally timed spring peak;
- following, among other things, experimental recommendations of the Upper Colorado River Endangered Fishes Recovery Program for biologically-triggered peak flow timing to support larval razorback sucker, flows to limit smallmouth bass reproduction and summer base flows supportive of young-of-year Colorado pikeminnow; and
- not exceeding recommended baseflows between December and March.

[43] DROA § I(B)(3).

[44] DROA § II(A)(6). "Operations to recover storage after a drought response operation has been implemented will continue as long as necessary to recover from any drought response operations taken before October 1, 2026."

Aspinall:

- limiting the overall volumes used from Blue Mesa; and
- releasing most of the Drought Response Operation volume during a naturally timed spring peak, with the next preference for releases in fall and least preferred released Jan-April.

Navajo:

- consistency with the hydrograph recommended by the SJRIP;
- meeting recommended high spring flows when available; and
- ensuring the ability to meet future releases recommended by the SJRIP.

Attachment F contains an overview of the consideration of natural resource conditions and an explanation of how a determination was made for each specific Plan.

5.5 Impacts to the Basin Fund and Bulk Electrical System

DROA requires consideration of drought response operations that "help minimize, to the extent practicable, impacts to the Upper Colorado River Basin Fund and impacts to the reliability of the Western Interconnected Bulk Electrical System."[45] Maintaining the ability to generate hydropower at Glen Canyon Dam helps maintain water facility operations and maintenance, environmental and other programs, electrical service to power customers, and functioning of the Western Interconnected Bulk Electric System.[46]

Concerns about the Basin Fund's solvency and the viability of hydropower have grown as the current drought has persisted. The Western Area Power Administration (WAPA) is the agency responsible for marketing the power produced from the Initial Units, of which approximately 75% is produced at Glen Canyon.

WAPA supports Drought Response Operations when they are necessary to protect the Target Elevation at Lake Powell. In general, when Drought Response Operations are necessary, WAPA has proposed specific considerations for mitigation to hydropower generation, when practicable, as follows:

a. Operations at Glen Canyon Dam:

- Planning for monthly volume releases should consider maximizing hydropower production during winter and summer peak electrical demand. For fall operations, October through November, releases from Glen Canyon Dam should be reduced. Reduced releases in December and January should be avoided. For spring operations, monthly release volumes should be modified to retain water in storage until after spring

[45] DROA § II(A)(3)(g): "Impacts to Basin Fund and Bulk Electric System: Drought response operations at CRSPA Initial Units will consider the timing, duration, and magnitude of water releases to help minimize, to the extent practicable, impacts to the Upper Colorado River Basin Fund and impacts to the reliability of the western Interconnected Bulk Electrical System, within the scope identified in Section II.A.3.b."

[46] DROA § I(A)(2).

runoff thereby allowing larger release volumes in July through September to maximize the value of hydropower and reduce days spent below the Target Elevation.

- Specific considerations for projected Lake Powell elevation of 3,490, which is considered minimum power pool.

b. Operations at Flaming Gorge: Drought Response Operations from Flaming Gorge should primarily be scheduled during the summer months, June through September. Bypasses should be avoided whenever possible unless essential to avoid Lake Powell dropping below the minimum power pool elevation.

c. Operations at the Aspinall Unit: Drought Response Operations from the Aspinall Unit should primarily be scheduled during the summer months, June through September, and secondarily from the winter months, December through February. Bypasses should be avoided whenever possible unless essential to avoid Lake Powell dropping below the minimum power pool elevation.

d. There is no CRSP power generation at Navajo Dam and therefore WAPA provided no recommendations.

The general proposals described here will be considered, in addition to other DROA considerations, in Attachment G, which will contain an overview of impacts to the Basin Fund and Bulk Electrical System and an explanation of how a determination was made for each specific Plan.

5.6 Released Water Distribution and Transit Loss

5.6.1. Released Water Distribution

Drought Response Operations releases from the upstream Initial Units need to occur for the duration and at times of year identified by the Upper Division State(s) to optimize the amount of released water that reaches Lake Powell. Optimization includes, but is not limited to, consideration of intervening uses. Notice to the downstream Upper Division State(s) will be provided prior to the initiation of such releases. Each Upper Division State, through the exclusive authority vested in each for the administration and distribution of its waters, will ensure that released water is directed to each state line or to Lake Powell pursuant to state law, as applicable.

5.6.2. Transit Loss

Transit losses are generally factored in as part of Reclamation's existing models, which estimate loss and gain volumes related to water conveyance from the Upper Basin to Lake Powell. Using those existing models, Reclamation can estimate the adjustments to Lake Powell elevation levels based on any Drought Response Operations from the upstream Initial Units. Therefore, the DROA Parties will not separately estimate transit

losses above and beyond the relationships that are captured in the existing models. The Upper Division States will not be bound to relationships assumed in Reclamation's models for other operational activities.

6. Accounting and Recovery

DROA requires monitoring of Drought Response Operations, including releases from or recovery at the upstream Initial Units.[47] One purpose of monitoring is to determine when to conclude Drought Response Operations, including monitoring the recovery of released water.

6.1. Accounting

Monitoring will be achieved through the development, implementation, and maintenance of a water accounting system that exhibits the functional requirements and salient characteristics described hereafter:

1) Definitions:
   a. Account: A ledger of credit and debit entries kept individually for each upstream Initial Unit to record the release or recovery of Drought Response Operation water. The DROA Parties will establish Accounts beginning with the initial adjustment of releases from each upstream Initial Unit.

   b. Account Balance: The status of releases or recovery of Drought Response Operation water in each upstream Initial Unit reservoir portrayed in each Account. This is calculated as the sum of all Drought Response Operation released volumes minus the sum of all Drought Response Operation recovered volumes to date.

   c. Credit and Debit: For accounting purposes, the terms Credit and Debit are used to reflect released (Credit) and recovered (Debit) volumes of water, respectively, from each Initial Unit.

   d. Actual Condition: This reflects the condition of each upstream Initial Unit under Drought Response Operations and is the observed reservoir elevation, storage, and discharge from each Unit.

   e. Regular Operating Target Elevation: Established elevations for each Initial Unit that indicates full recovery when met as described in Attachment C through E.

   f. Operations Without Drought Response Operations: Facility operations had the Storage Condition Without Drought Response been the Actual Condition. Operations Without Drought Response require operational judgement and will be consistent with historical operations and current operational policy at each upstream Initial Unit reservoir.

[47] DROA § II(A)(3)(h).

g. Storage Condition Without Drought Response: This is the storage condition of each upstream Initial Unit had Drought Response Operations not been implemented. The Storage Condition Without Drought Response for each upstream Initial Unit is its observed storage plus its current Drought Response Operation Account Balance.

2) The accounting platform will be integrated into Reclamation's monthly operations modeling.

3) Monthly accounting will include forward-looking projections and backward-looking calculations:

a. Forward-looking projection: Through modeling, a projection for each Account Balance will be determined for planning purposes only. An upstream Initial Unit's actual Account Balance can only be updated in the backward-looking mode (below). Forward-looking projections will not prevent facility operators from making necessary operational adjustments in response to emerging information.

b. Backward-looking calculation: This calculates each month's Credit or Debit to each Account Balance by subtracting the release volume that would have occurred without Drought Response Operations from the actual volume released (with Drought Response Operations). Each month's Credit or Debit is added to the prior Account Balance to calculate the current month's Account Balance.

4) Monthly Reporting:

a. Monthly reports will be made available for each upstream Initial Unit Account and will contain the following:
   i. Drought Response Operation Credits;
   ii. Drought Response Operation Debits; and
   iii. End of month Account Balance.

b. Monthly reporting will continue for each upstream Initial Unit until recovery is completed, and will resume each time an Account Balance accrues.

Accounting for release and recovery volumes will be based on releases measured according to the established method at each upstream Initial Unit. Entries in the appropriate Account for each upstream Initial Unit will be fully documented and supportable. Ledger values (Credits and Debits) will be traceable to their origination, including as available; meter readings through powerplants and bypasses, modeling rulesets, annual operation plans including EISs, RODs, and approved experimental releases and/or documentation of decision-making related to the Condition Without Drought Response Operations.

The monthly operations model and the accounting results will be made available to the public on Reclamation's website [insert link]. Reclamation will consider timely feedback from the public on accounting results.

6.2. Recovery

An essential element of any Drought Response Operation is recovering any water released as part of a Plan.[48] Full recovery occurs when the Initial Unit has either "recovered the cumulative volume of water that was released" from a Drought Response Operation[49] or when the Initial Unit "has reached the regular operating target elevation"[50] based on hydrologic conditions and actual operating experience at each Initial Unit at the time of recovery. Each proposed Plan needs a description of how recovery will be achieved under the current or any future Plan, taking into consideration the status of recovery of each Initial Unit from previous Drought Response Operation releases.

To minimize the risk of Lake Powell falling below the Target Elevation, recovery of Drought Response Operations at the upstream Initial Units should occur after water storage conditions at Lake Powell have improved.[51] However, this will not preclude the potential for Dual Operations, in accordance with DROA[52].

DROA specifies that operations to recover storage after a Drought Response Operation has been implemented will continue as long as necessary to recover from any Drought Response Operations conducted before October 1, 2026.[53]

Specifics regarding recovery for each upstream Initial Unit are in Attachments C through E.

7. Consultation, Coordination, & Outreach

[48] DROA § II(A)(3)(e): "Recovery of Storage at CRSPA Initial Units: Recovery of storage at the CRSPA Initial Units is essential to any drought response operation. Consistent with Section II.A.3.b-c, the drought response operations process will be completed only after each CRSPA Initial Unit has recovered the storage as defined below."

[49] DROA § II(A)(3)(e)(i)(1): "The CRSPA Initial Unit, operating consistent with Section II.A.3.b, has recovered the cumulative volume of water that was released for implementation of drought response operations to minimize the risk of Lake Powell declining below the Target Elevation."

[50] DROA § II(A)(3)(e)(i)(2): "The water elevation at the CRSPA Initial Unit has reached the regular operating target elevation for that facility, for example, deicing target elevation at the Aspinall Unit, the current end-of- water-year storage target at Navajo Reservoir, or the May 1 Upper Level Drawdown Elevation target at Flaming Gorge Reservoir."

[51] DROA § II(A)(3)(e)(i): "Storage at a CRSPA Initial Unit is recovered when the first of either of the following occurs: (1) The CRSPA Unit...has recovered the cumulative volume of water that was released for implementation of drought response operations...; or (2) the water elevation at the CRSPA Initial Unit has reached the regular operating target elevation for that facility…"

[52] DROA § II(A)(3)(e)(ii): "Hydrologic variability within the Upper Basin may render releases from a CRSPA Initial Unit ineffective in achieving the intent and goal of this Drought Response Operations Agreement…Moreover, drought response releases from any CRSPA Initial Unit do not preclude recovery of storage actions at another Unit simultaneously."

[53] DROA § II(A)(6): "....Operations to recover storage after a drought response operation has been implemented will continue as long as necessary to recover from any drought response operations taken before October 1, 2026."

DROA contains various provisions for consultation, coordination, and outreach from the DROA Parties to non-DROA entities during the development and implementation of Plans.[54] In years when they are needed, the DROA Parties anticipate developing draft Plans during the late winter and early spring (February to April) of each year as more reliable hydrologic information becomes available. The DROA Parties anticipate the finalization of yearly plans in April of each year, with implementation occurring throughout the year until April of the following year. As such, the consultation, coordination, and outreach described in this section will need to occur during the February to April time period each year. The DROA Parties intend to provide draft Drought Response Operations concepts and Plans as they become available,[55] usually during this February to April time period each year.

Consistent with the DROA provisions, the DROA Parties will conduct consultation, coordination, and outreach as follows:

7.1. Consultation with the Lower Division States

DROA requires consultation with the Lower Division States several times. First, prior to finalizing a Plan, DROA requires providing the terms of a draft Plan to the Governors' Representatives of the Lower Division States.[56] DROA then requires the DROA Parties to consider and address, as appropriate, any questions or concerns regarding the terms of the draft Plan.[57]

Second, when implementing a Plan, the DROA Parties will "[b]e available to respond to the Lower Division States' questions or concerns, should they arise, regarding ongoing implementation of Drought Response Operations."[58]

Third, the DROA Parties will consult with the Lower Division States when "the Parties agree that the finalized Drought Response Operations Plan needs to be modified, amended, or supplemented for the purpose of more specifically clarifying the scope and detail of recovery of storage."[59]

7.2. Outreach to and consultation with Native American Tribes

DROA requires outreach and notification to Native American Tribes "relevant to the respective CRSPA Initial Units of plans and concepts for drought response operations as they

[54] During "Emergency Action," as defined in DROA, DROA §§ II(A)(3)(j) & II(A)(4)(e).The Department committed to conduct any Emergency Action, "to the greatest extent practicable, with advance consultation and coordination with the Upper Division States, through the Commission, and following consultation with the Governors' Representatives of the Colorado River Basin States consistent with the Agreement Concerning Colorado River Drought Contingency Management and Operations ("Companion Agreement")."

[55] DROA § II(A)(5).

[56] DROA § II(A)(4)(b)(iii)

[57] DROA § II(A)(4)(b)(iii).

[58] DROA § II(A)(4)(d)(ii).

[59] DROA § II(A)(4)(d)(iv).

become available."[60] The DROA Parties will provide regular updates on the status of Drought Response Operations planning for Native American Tribes as information becomes available.

The DROA Parties will specifically involve Upper Basin Tribes. The DROA Parties will also offer opportunities for all Colorado River Basin Native American Tribes to participate. Participation may include providing written input on the development of a Plan, exchanging background documents and data, and meeting for individual informal discussions. Additionally, the Department will offer informal and formal Government-to-Government consultations with Tribes. Discussions between the Tribes and the Department do not preclude other DROA Parties from discussing potential Plans with Tribes as appropriate.

Any DROA discussions with Native American Tribes are in addition to and do not replace opportunities that Tribes may have for input and consultation regarding operations of Initial Units or other authorities that govern the Tribal-federal government relationships.

DROA requires that water rights and other interests of Tribal Nations, often memorialized in settlements and contracts, be considered as part of Initial Unit Operations that cannot change as part of Drought Response Operations.[61] As part of development of this Framework, several Tribal Nations commented on the need to protect their water rights and other aspects of Initial Unit operations as part of any Plan. Tribal involvement in the development of Drought Response Operations will ensure that Tribal rights remain protected and that Drought Response Operations consider the preferences of individual Tribes within the flexibilities available for a particular Drought Response Operation.

7.3. Coordination within the Department of the Interior

Reclamation will arrange for discussions and coordination among agencies within the Department regarding Drought Response Operations, as appropriate. Such discussions and coordination are in addition to and do not replace coordination with Departmental agencies that occur as part of the Initial Units' operations.

7.4. Coordination with WAPA

Reclamation has an agreement to consult with WAPA[62] regarding Drought Response Operations and will coordinate with WAPA pursuant to that agreement. Such coordination is in addition to and does not replace discussions with WAPA that occur as part of the Initial Units' operations.

7.5. Coordination with Initial Unit Workgroups

[60] DROA § II(A)(5) "public outreach regarding drought response operations will include, but may not be limited to, notifying Native American Tribes, local governments, interested stakeholders, and operational and technical workgroups relevant to the respective CRSPA Initial Units of plans and concepts for drought response operations as they become available."

[61] DROA § II(A)(3)(b).

[62] Contract No. 19-WC-40-746, dated June 7, 2019 between Bureau of Reclamation and Western Area Power Administration.

The DROA Parties will coordinate with the appropriate workgroups involved with Initial Unit operations including, but not limited to the Glen Canyon Dam Adaptive Management Work Group, Flaming Gorge Technical Work Group, Flaming Gorge Work Group, San Juan River Basin Recovery Implementation Program, and Upper Colorado River Endangered Fish Recovery Program.

7.6. Outreach to other stakeholders and interested entities

The DROA Parties will provide regular updates on the status of Drought Response Operations planning for water users, NGOs, other stakeholders, and interested entities. The DROA Parties will also offer opportunities for such entities and stakeholders to provide written comments on any draft Plan. The Upper Division States have the primary responsibility to conduct outreach to water users within their respective state, while the Federal government retains responsibility to conduct outreach concerning Federal contracts.

7.7. Coordination among the DROA Parties

DROA requires that the DROA Parties "will coordinate on any public outreach for drought response operations at the CRSPA Initial Units" and that "[s]uch coordination will begin prior to outreach activities with the goal of streamlining discussions and avoiding or resolving differences.[63] A DROA Party conducting public outreach activity will notify the other DROA Parties in advance of such outreach and, if applicable, be prepared to describe the anticipated scope of such outreach. Public outreach under this provision does not include internal communications within an individual DROA Party's organization necessary for that DROA Party's internal consideration of a proposed Plan.

Pursuant to DROA, the Upper Division State Commissioners and the Upper Colorado River Commission (UCRC) will review and consider a final Plan after consultation with the Governors' Representatives of the Lower Division States. Upon approval of the final Plan by both the Upper Division State Commissioners and the UCRC, the UCRC will forward the final Plan to the Secretary for consideration and approval.[64]

Attachment H describes consultation, coordination, and outreach that was conducted. It may not be possible for all concerns raised during Outreach to be mitigated.

8. Monitoring and Potential Amendments During Plan Implementation

DROA requires monitoring activities as appropriate as part of any Plan.[65] Modeling projections relied upon for a Plan cannot predict precise conditions at a given time in the Upper

[63] DROA § II(A)(5).

[64] DROA § II(A)(4)(c).

[65] DROA § II(A)(3)(h): "Monitoring: The Parties agree to include monitoring activities as appropriate as part of any drought response operations (release or recovery of storage). The Parties will incorporate the results of such monitoring into consideration of whether to begin, end, or modify drought response operations."

Basin. Accordingly, the DROA Parties intend for any Plan to provide sufficient flexibility to begin, end, or adjust Drought Response Operations as needed based on actual hydrologic conditions.

During the implementation of a Plan, the DROA Parties will coordinate weekly, or at such intervals as otherwise agreed to, to conduct monitoring activities related to the Drought Response Operations. Monitoring activities will include consideration of the most current hydrologic conditions and projections as described in Section 3 herein, as well as application of the principles described in Section 5 herein. The DROA Parties may amend Plans as necessary based upon changing conditions.

Based upon monitoring activities, and only upon mutual agreement of the DROA Parties,[66] any Plan may be modified, adjusted, or ended through the adoption of an amendment to the applicable Attachment(s). Amendments to Attachments will include all of the types of information included in the original Attachment(s) and will incorporate a description of monitoring activities and monitoring activity results. Amendments to Attachments will fully describe the reasons for the amendment(s) and will supersede the original Attachment(s) or any preceding amendments.

Any Plan amendments may need to be implemented quickly due to changing hydrology to achieve the purpose and intent of a Plan.[67] Except when an imminent need does not permit sufficient time, the DROA Parties will use their best efforts to satisfy the consultation, coordination, and outreach provisions as described in Section 7 of this Framework.

In addition to the monitoring activities described in this Section, any DROA Party may request a meeting with other DROA Parties to consider any Plan amendments.

[66] The Secretary retains all applicable authority as described in DROA § II(A)(4)(e).

[67] DROA § II(A)(4)(b)(ii): Plans will "Provide for timely adjustments in drought response operations based upon actual monthly hydrology to achieve the purpose and intent of this Drought Response Operations Agreement."