

KLAMATH BASIN RESTORATION AGREEMENT

DROUGHT PLAN

July 11, 2011

1. Introduction

1.1. Background and Purpose

The Klamath Basin Restoration Agreement (Restoration Agreement) includes a number of programs related to water diversion and use, and improvements for fish habitat and passage. The Parties to the Agreement recognized that additional measures would be needed in certain low-water years and committed to developing a Drought Plan under Section 19.2 of the Agreement. The Drought Plan's purpose and use is limited exclusively to implementation of the applicable terms of the Restoration Agreement.

In the instances of Drought and Extreme Drought, the Parties intended that water and resource management actions be taken such that no Klamath Basin interest would bear an unreasonable portion of burdens imposed or the risk of loss or injury. Nothing in the Drought Plan is intended to limit the applicability or effect of the Endangered Species Act or other Applicable Law. Neither the Restoration Agreement nor this Drought Plan creates responsibilities for non-Parties to the Restoration Agreement. While not altering rights of any Party or non-Party that exist outside the Restoration Agreement and this Plan, Drought Plan implementation is not intended to require any action which affects water use from Clear Lake or Gerber Reservoirs, or operation of Harpold Dam. This Drought Plan is subject to Section 2 and all other provisions of the Restoration Agreement, which is incorporated by reference as if set forth fully herein, and does not alter the authority of any Party or non-Party over the management and use of water consistent with Applicable Law and the Restoration Agreement. This Drought Plan is intended to be consistent with, and incorporates the provisions of the Restoration Agreement but does not constitute an amendment to the Restoration Agreement. In the event of a conflict between the Drought Plan and the Restoration Agreement, the Restoration Agreement shall control.

This Drought Plan has been developed by the Drought Plan Lead Entity identified in the Restoration Agreement. The Lead Entity is comprised of: Klamath Tribes, Karuk Tribe, Yurok Tribe, Upper Klamath Water Users Association, the Klamath Water and Power Agency, the Klamath Basin National Wildlife Refuges, Oregon Water Resources Department, California Department of Fish and Game, and Trout Unlimited, as the representative of the conservation and non-tribal fishing Parties to the Restoration Agreement.

1.2. Summary of provisions

Section 3 of the Drought Plan describes the organization for implementing the Drought Plan. The Oregon Water Resources Department (OWRD) is designated as the entity responsible for declaring, and revoking a declaration of, Drought or Extreme Drought. Section 3 also describes the Drought Fund Administration Entity and funding procedures. It also describes the role of the Technical Advisory Team (TAT).

Section 4 describes the processes by which OWRD will declare or revoke a declaration of Drought and Extreme Drought. The Technical Advisory Team (TAT) will monitor water conditions between the end of the growing season and March 1st of the next year. If conditions indicate the potential for Drought or Extreme Drought conditions or low elevations in Upper Klamath Lake, the TAT may recommend measures that can be taken prior to March 1st to address the potential of Drought or Extreme Drought.

In January, February and March of each year, OWRD will make a preliminary determination as to whether or not the potential for Drought or Extreme Drought exists and provide notice to Klamath Basin communities. OWRD would make a decision to declare Drought or Extreme Drought by April 5th.

Section 5 describes the preparation of the drought response. The steps include the quantification of available water from the measures described in Sections 6 and 7; this information will be used to develop and implement the Drought Plan. This section also describes the fisheries management considerations for implementing the Drought Plan.

Section 6 describes the voluntary measures that will be used to implement the Drought Plan, including conservation and management programs, use of stored water, and reductions in the use of surface water for irrigation. The section also describes the next priority of other measures.

Section 7 describes the provisions and conditions for limiting or reducing diversions to the Klamath Reclamation Project in Extreme Drought conditions. The section describes the provisions before the DIVERSION limitations as described in Section 15 of the Restoration Agreement are in effect and the provisions after they are in effect.

Section 8 describes the adaptive management provisions to assess and improve the actions under the Drought Plan.

Section 9 describes a process for the periodic review and amendment of the Drought Plan.

2. Definitions

Most of the definitions in the Drought Plan are from the Klamath Basin Restoration Agreement and are repeated here for convenience. Several definitions were developed for the Drought Plan and are also included in this section.

Administration Entity means: an entity responsible for implementing, enforcing, or administering one or more provisions of this Drought Plan. The term is intended to have the same meaning as the term “Enforcement Entity” in Section 19.2.2.A.vii of the Restoration Agreement.

Applicable Law means: general law which (i) exists outside of the Restoration Agreement, including a Constitution, statute, regulation, court decision, or common law, and (ii) applies to obligations or activities of Parties contemplated by the Restoration Agreement. The use of this term is not intended to create a contractual obligation to comply with any law that would not otherwise apply.

Authorizing Legislation means: the legislation enacted by Congress to authorize and implement the Restoration Agreement.

Differential means: the difference between: a) the applicable Extreme Drought declaration threshold for a given year as determined under Section 4.1.3; and b) the sum of the October through March Upper Klamath Lake net inflow and the April 1 Forecast used in making a declaration under Section 4.3 in that year. The Differential must be calculated in units of thousand acre-feet for determination of the Section 7.2.2 Calculation Quantity.

DIVERSION shall have the meaning assigned by Appendix E-1, Term 1.b of the Restoration Agreement.

Drought means: a hydrologic condition that meets the criteria for Drought set forth in Section 4.1.2.2.

Drought Fund Administration Entity means: the National Fish and Wildlife Foundation.

Environmental Water means: the quantity and quality of water produced pursuant to Section 20 of the Restoration Agreement or other provisions of the Restoration Agreement to benefit Fish Species and other aquatic resources.

Extreme Drought means: a hydrologic condition that meets the criteria for Extreme Drought set forth in Sections 4.1.3 and 4.3.

Forecast means: the 50% exceedence forecast as of a given date as specified in Section 4 of the Drought Plan by the Natural Resource Conservation Service estimated for April through September Net Inflow into Upper Klamath Lake.

Forbearance Agreement means: a voluntary transaction between a landowner/water user and another entity under which the water user agrees by contract to forego withdrawal or use of water pursuant to the terms and conditions of the contract.

Instream Use means: the use of water in lakes, rivers, and their tributaries.

Klamath Reclamation Project means: all land in the Upper Klamath River Basin which is any one or more of the following: (i) within the boundary or service area of any public district or other water distribution entity which, or land of any individual or other entity who, has contracted with the United States, pursuant to the Federal Reclamation laws for water service or for the repayment of the costs of construction, operation and maintenance of irrigation, drainage or other reclamation works benefiting such district or other entity, and/or operation and maintenance of such works, and all land of individuals or companies or other entities who are parties to contracts with the United States of such nature; (ii) within the Service Area of the Klamath Reclamation Project as identified on the map incorporated by reference under Article II.B and D of the Klamath River Basin Compact; or (iii) within the boundaries of Tule Lake National Wildlife Refuge or Lower Klamath National Wildlife Refuge.

Klamath Water and Power Agency (KWAPA) means: an intergovernmental and joint powers entity currently made up of water agencies within the Klamath Reclamation Project, as established under an intergovernmental agreement on June 12, 2008 pursuant to Oregon Revised Statutes Chapter 190 and Chapter 5 (commencing with section 6500) of Division 7 of Title 1 of the California Government Code.

Lease or Leasing means: an agreement to change use of a water right, consistent with applicable law, for a period of time fixed in the agreement, and includes temporary instream water rights.

Managed Environmental Water means: the quantity and quality of Environmental Water that is legally stored or maintained, or could legally be stored or maintained, in Upper Klamath Lake or any subsequently-developed stored water under the authority of Reclamation or other federal agency. This is a subset of Environmental Water, which includes water not stored or otherwise maintained in Upper Klamath Lake.

Net Inflow into Upper Klamath Lake (UKL) means: the net volume of water flowing into Upper Klamath Lake over a specified time period. Net inflow is calculated as the change in lake storage from time t to $t+1$, plus the outflow from the lake over the same time period. For the purposes of this Drought Plan, calculations of Net Inflow into Upper Klamath Lake shall include pumped storage operations of Agency Lake Ranch and outflows from Upper Klamath Lake that include diversions through the Westside Canal at Link River Dam that bypass the Link River flow gauge.

Notice shall mean: written notice pursuant to the requirements and procedures of Section 7.1 of the Restoration Agreement.

OWRD means: Oregon Water Resources Department.

Participant means: non-Parties who participate in one or more of the programs in the Restoration Agreement.

Party or **Parties** means: the signatories of the Restoration Agreement from among the entities listed in Section 1.1.1 of the Restoration Agreement and, with respect to Federal Agency Parties, as provided in Section 1.1.2. Additional entities may become Parties after the Effective Date as provided in Sections 1.1.3, 7.2.2, 37, and 38 of the Restoration Agreement.

Reclamation means: the U.S. Department of the Interior’s Bureau of Reclamation.

Restoration Agreement means: the Klamath Basin Restoration Agreement.

Section 7.2.2 Calculation Quantity has the following meaning: a) if the Differential (D) is more than zero but less than 175 thousand acre-feet, the “Section 7.2.2 Calculation Quantity” means the result of the following: $-0.0048D^2 + 1.696D - 0.3$ (in thousand acre-feet); and b) if the Differential is 175 thousand acre-feet or more, the “Section 7.2.2 Calculation Quantity” means 150 thousand acre-feet.

Timely means: performance of an obligation or act by the deadline established in the applicable provision, or otherwise in a manner reasonably calculated to achieve the bargained-for benefits of the Restoration Agreement.

WURP means: the Water Use Retirement Program provided in Section 16.2.2 of the Restoration Agreement.

3. Organization

3.1. Declaration Entity

OWRD is the entity responsible for declaring and revoking a declaration of Drought and Extreme Drought in accordance with the procedures established under Section 4 of the Drought Plan. Appendix C provides illustrative examples of how OWRD would make determinations under the procedures and thresholds specified in Section 4.

3.2. Klamath Drought Fund Administration Entity and Funding Procedures

3.2.1. General

Section 14.3.3 of the Restoration Agreement provides for the establishment of the Klamath Drought Fund (Fund), to be administered by the National Fish and Wildlife Foundation (NFWF). NFWF will, if necessary, enter into one or more agreements with entities that provide funds for the Fund, and will establish further procedures related to the distribution of Fund resources as appropriate. As contemplated by the

Restoration Agreement, money deposited in the Fund will remain available until expended. Money in the Fund will be distributed in accordance with the Restoration Agreement and the terms specified below. Overall, the amount of money within the Fund will be significant to the ability to implement certain measures in a given year and, in the administration of the Drought Plan, the parties will be required to consider the impact of disbursements in one year on the availability of funds for expenditure in subsequent years.

3.2.2. Funding Sources

The Parties recognize that adequate funding is important to realize the goals of the Restoration Agreement and to prevent adverse impacts that the Restoration Agreement seeks to avoid and which can and do result in need for disaster funds that exceed the cost of appropriate “up-front” planning such as contemplated by this Drought Plan. The Parties (other than the Federal Parties, who are obliged to reserve their position) have committed to pursue appropriations and other sources of funds for deposit to the Fund. Appendix C-2 to the Restoration Agreement, as revised by the Klamath Basin Coordinating Council in May of 2011, reflects appropriation of funds for the explicit purpose of deposit into the Fund beginning in fiscal year 2021. The non-federal members of the Lead Entity also contemplate that this funding would continue beyond the fifteen-year horizon of Appendix C-2 as revised. This specific item is not, however, the only source of money for implementation of this Drought Plan or deposit to the Fund. In general, consistent with sections 4.1.1 and 4.2 of the Restoration Agreement, Parties will support reprogramming of funds and re-allocation of funds not otherwise needed for a program, and funds from any available source, for deposit to the Fund. In addition, the Restoration Agreement provides in Section 20.4 for an interim flow and lake level program, which includes activities that will make water available for Instream purposes. These actions are similar to those contemplated in Section 6.1 of this Drought Plan, and thus the scope of actions under Section 20.4 may be affected by a declaration of Drought or Extreme Drought in a given year. This also underscores the importance of the need to be able to use total funding under Section 20.4 flexibly over time.

3.2.3. Expenditure Plans

Based on the analysis described in Section 5, the entity or entities responsible for implementing or enforcing specific actions in anticipation of, or response to, Drought or Extreme Drought (Administration Entities) each will Timely submit an expenditure plan to NFWF. If there is more than one expenditure plan required, the relevant parties submitting such plans will coordinate in their submission, and confer with NFWF in order

to achieve efficiency and consistency. Each expenditure plan shall to the maximum extent practicable include all expenditures contemplated for a given activity during the period in which the expenditures will be made for a declared Drought or Extreme Drought. NFWF will approve or disapprove an expenditure plan within 20 days of receipt and disburse funds as soon as practicable thereafter. If NFWF disapproves an expenditure plan in whole or in part, it will confer with the submitting Administration Entity to identify modifications to the expenditure plan as appropriate, and may approve a modified expenditure plan. To the extent funds are disbursed in accordance with an expenditure plan but not utilized, they will be returned to NFWF and the Fund for subsequent use. Each Administration Entity shall provide an annual report to NFWF that describes all expenditures or reimbursements from the Fund during the year covered by the report. Rights of the United States and limitations on the liability of the United States are as provided in section 14.3.3 of the Restoration Agreement.

3.2.4. Other

The Restoration Agreement contemplates that Fund resources may be used to reduce diversion or use of surface water for consumptive purposes and maintain the water for Instream Use. While this is not the only permissible use of Fund resources, one objective of the Drought Plan is to avoid or mitigate the impacts of involuntary water shortage for consumptive users of water. Resources in the Fund should be made available to compensate Parties, parties in the Klamath Reclamation Project, or Participants who suffer injury as a consequence of performance of Extreme Drought measures under the Restoration Agreement and this Drought Plan. To this end, to the maximum extent feasible and consistent with this Drought Plan, sufficient sums should be maintained in the Fund on an ongoing basis to address such injury. Within the Klamath Reclamation Project, KWAPA will be the entity for distributing any such compensation, according to procedures developed by KWAPA in consultation with NFWF and in accordance with an expenditure plan prepared by KWAPA. For other areas, the Administration Entity shall be a federal agency or other party approved by NFWF.

3.2.5. Amendment.

After enactment of the Authorizing Legislation and after NFWF becomes a party to the Restoration Agreement if it becomes a Party, this section 3 may be amended in accordance with the procedures of Restoration Agreement section 19.2.3, without amendment of the other provisions of this Drought Plan.

3.3. Technical Advisory Team

The Technical Advisory Team (TAT) is established in the Restoration Agreement. One of the responsibilities of the TAT is to provide recommendations related to the Drought Plan under Section 19.2 of the Restoration Agreement.

Appendix D-2 of the Restoration Agreement describes the purpose and function, organization and membership, roles and responsibilities, and operations of the TAT. The Parties to the Restoration Agreement will develop a charter under the Federal Advisory Committee Act for the TAT; until the charter is in place, the Restoration Agreement establishes an Interim TAT. For more information, see Appendix D-2 of the Restoration Agreement.

The TAT provides recommendations to the Secretary of the Interior concerning Managed Environmental Water in accordance with Section 20.3 of the Restoration Agreement and Applicable Law.

The TAT is a year-round technical body. Pre-season activities will consist of development of recommendations for use of Managed Environmental Water in an Annual Water Management Plan, and recommending actions on management of winter lake and river operations, especially pertaining to storage and release rates at Link River Dam that need to be addressed due to changing forecasts. In-season (March through October), the TAT will ensure that timely recommendations are forwarded to the Secretary of the Interior (Secretary) to accomplish the purposes of Section 20 of the Restoration Agreement, consistent with recommendations in the Annual Water Management Plan as adjusted on the basis of continuous information and analysis. A significant task will be recommending management of releases from Link River Dam taking into consideration anticipated and actual irrigation and refuge diversions and return flows, and desired fishery conservation objectives. Post-season activities will consist of a review of the previous year's analyses and performances, and updating TAT operating procedures as needed. The TAT will report to the KBCC on a scheduled basis and upload information on the Internet regularly.

This section describes the TAT's research and analysis, pre-season monitoring and recommendation, and in-season monitoring and recommendation under this Drought Plan.

3.3.1. Research and Analysis

The quality of meteorological and hydrological networks is highly variable within the Klamath Basin. Responsibility for collecting, analyzing, and disseminating data is divided between many government authorities. The TAT's challenge under this Drought Plan is to coordinate and integrate the data and analyses to provide recommendations to decision makers and the public so they receive early warning of emerging

drought conditions. To prepare for the Drought Plan activities, the TAT will undertake the following tasks:

Task 1: Investigate other watersheds that use comprehensive automated meteorological and hydrological networks and apply their lessons learned, where appropriate. Considerable experience has developed in recent years with automated weather data networks that provide rapid access to climate data. These networks can be invaluable in monitoring emerging and ongoing drought conditions.

Task 2: Inventory and evaluate data quantity and quality from current observation networks. Many networks monitor key elements of the Klamath Basin hydrologic system. Most of these networks are operated by federal or state agencies, but other networks also exist and could provide critical information. Meteorological data are important but represent only one part of a comprehensive monitoring system. Other physical indicators (soil moisture, streamflow, and reservoir and groundwater levels) could be monitored to reflect impacts of drought on agriculture, households, industry, energy production, transportation, recreation and tourism, and other water users.

Task 3: Determine the data needs of primary users. Developing new or modifying existing data collection systems is most effective when the people who will be using the data are consulted early and often. Soliciting input on expected new products or obtaining feedback on existing products is critical to ensuring that products meet the needs of primary users and, therefore, will be used in decision making. Training on how to use or apply products in routine decision making is also essential.

Task 4: Develop or modify current data and information delivery systems to transmit information regarding the risk of drought conditions to the appropriate parties.

3.3.2. Monitoring and Recommendations

Under Section 19.2.4 of the Restoration Agreement, the TAT will provide recommendations to the Declaration Entity regarding whether the conditions for a Drought or Extreme Drought exist as defined by this Drought Plan. This may include verifying the quality assurance and quality control on the data and analysis used to make any Drought or Extreme Drought preliminary or final declaration.

As provided in Section 19.2.2.B of the Restoration Agreement, the TAT will also provide recommendations to the Administration Entities regarding which of the measures listed in Sections 6 through 8 of this Drought Plan, alone or in combination, should be employed.

For the period during which a declaration of Drought or Extreme Drought designated pursuant to Section 4 of this Drought Plan is in effect, the TAT will meet twice monthly or more often if necessary, to facilitate in-season operations related to Managed Environmental Water. The principal purpose of the meetings will be to review the status of the recommendations and operations from the preceding time period, project operating data, biological data, and to make new recommendations on management of Environmental Water for Klamath River flows and Upper Klamath Lake levels for the following week(s). Consistent with Section 19.2.2.B of the Restoration Agreement, equal consideration will be given to Upper Klamath Lake and Klamath River flow issues, as they are part of the same Klamath Basin ecosystem. The TAT process for making recommendations on the management of Environmental Water is described in Section III of Appendix D-2 of the Restoration Agreement.

4. Drought Declaration Process

4.1. Preparatory Actions

4.1.1. Pre-Season Recommendations from the Technical Advisory Team

The TAT will monitor Upper Klamath Lake levels, precipitation, and other factors pertaining to water supply and hydrologic conditions. If conditions indicate the potential for Drought or Extreme Drought conditions or low elevations in Upper Klamath Lake, the TAT will recommend measures that could be taken prior to the declaration under Section 4.3 to address the potential for Drought or Extreme Drought.

Early detection of particularly dry conditions in the upper Klamath Basin may allow for adjustments to Upper Klamath Lake and Klamath River water management during the late fall, winter, and early spring periods. The purpose of such water management adjustments is to conserve water so that it is available for lake, river, wildlife refuges, agricultural, and other purposes during critical late spring and summer periods in a manner consistent with the Restoration Agreement.

4.1.2 OWRD annual report on WURP progress

OWRD will issue its annual report to the KBCC quantifying progress toward achievement of the WURP in December of each year until such time that OWRD makes the determination that the WURP purpose has been achieved in accordance with Section 16.2.2.F.i of the Restoration Agreement. OWRD will determine progress toward achievement of the WURP purpose in a manner consistent with Sections 16.2.2 (B), (D), and

(F) of the KBRA, and will report such progress as the amount of increased flow rounded to the nearest 1,000 acre feet.

OWRD will confer with the NRCS to determine the extent (expressed as a best estimate rounded to the nearest 1,000 acre-feet) to which NRCS's April through September Forecasts are expected to reflect WURP-related inflows into Upper Klamath Lake. OWRD will account for NRCS's best estimate and adjust its quantification of progress toward achievement of the WURP for the purpose of establishing annual thresholds under 4.1.3 and include this information in the report to the KBCC.

4.1.3 Establishing Annual Thresholds

Thresholds for determining the potential for Drought or Extreme Drought under Section 4.2, and for declarations of Drought or Extreme Drought under Section 4.3, are established in the following manner.

During December of the preceding calendar year, the progress toward achieving the WURP purpose to be utilized for the purpose of establishing annual thresholds will be reported by OWRD under subsection 4.1.2. For each monthly criterion, the quantity so reported will be added to the baseline thresholds for each month and with respect to both Drought and Extreme Drought in Table 1. The adjusted thresholds will be the basis for determining the potential for Drought or Extreme Drought under Section 4.2, and for declaring Drought or Extreme Drought under Section 4.3.

Table 1. Thresholds for Net Inflow into UKL (realized plus Forecast) during the water year for the declaration by OWRD of potential or actual conditions of Drought or Extreme Drought. The thresholds and related actions by OWRD pertain to each monthly criterion with respect to which OWRD will make a determination under Sections 4.2 and 4.3. Thresholds will begin at the baseline values, and will increase annually by any quantity of water OWRD reports to have been produced under the WURP (as adjusted for the NRCS Forecast), in accordance with Section 4.1.2. Total net inflow into Upper Klamath Lake means the net volume of water flowing into Upper Klamath Lake over a specified time period. Net inflow is calculated as the change in lake storage from time t to t+1, plus the outflow from the lake over the same time period. For the purposes of this Drought Plan, calculations of Net Inflow into Upper Klamath Lake shall include pumped storage operations of Agency Lake Ranch and outflows from Upper Klamath Lake that include diversions through the Westside Canal at Link River Dam that bypass the Link River flow gauge. The Forecast means the 50% exceedence forecast as of a given date as specified in Section 4 of the Drought Plan by the Natural Resource Conservation Service estimated for April through September Net Inflow into Upper Klamath Lake.

Month	Monthly criterion (computed as the sum of a) and b) components for each month)	Declaration by OWRD when monthly criterion fails to exceed initiation threshold	Thresholds (acre feet)	
			Baseline prior to implementing WURP	After WURP purpose has been achieved
January	a) Total net inflow into Upper Klamath Lake from October through December b) January 1 Forecast	Potential for Extreme Drought	613,000	642,000
		Potential for Drought	658,000	687,000
February	a) Total net inflow into Upper Klamath Lake from October through January b) February 1 Forecast	Potential for Extreme Drought	600,000	629,000
		Potential for Drought	688,000	717,000
March	a) Total net inflow into Upper Klamath Lake from October through February b) March 1 Forecast	Potential for Extreme Drought	664,000	693,000
		Potential for Drought	787,000	816,000
April	a) Total net inflow into Upper Klamath Lake from October through March b) April 1 Forecast	Extreme Drought	699,000	729,000
		Drought	849,000	879,000

4.2. Preliminary Determination and Consultation

For the purposes of this Drought Plan, each year OWRD will determine whether the potential for Drought or Extreme Drought exists, using the monthly criteria and thresholds established under subsection 4.1.3.

4.2.1. Notice of the Potential for Drought or Extreme Drought

As soon as practicable after making a determination that the potential for Drought or Extreme Drought exists, and making best efforts to accomplish the determination by the fifth day of the month, OWRD will provide Notice that the potential for Drought or Extreme Drought exists. For January, OWRD will provide Notice on its website that the potential for Drought or Extreme Drought exists. For February and March, OWRD will provide Notice on its website and to affected Klamath Basin communities that the potential for Drought or Extreme Drought exists; the Notice will include information regarding funding and programs available under this Drought Plan or other programs in the event OWRD subsequently declares a Drought or Extreme Drought.

If OWRD determines in March that the potential for Drought or Extreme Drought exists, OWRD will request a meeting before any declaration in Section 4.3 with the Technical Advisory Team (TAT) and Administration Entity for the purposes of reviewing the latest hydrological data and forecasts in light of the criteria for Drought or Extreme Drought below and, if appropriate, preliminary planning related to Section 4.1.1.

4.3. Declaration of Drought or Extreme Drought

For the purposes of this Drought Plan, by April 5th of each year OWRD will determine whether Drought or Extreme Drought conditions exist, and if so, issue a declaration of Drought or Extreme Drought using the monthly criteria and thresholds established under subsection 4.1.3. A declaration of Extreme Drought will remain in effect through the end of the calendar year in which it is made and thus terminates on December 31 of that year, unless earlier revoked under Section 4.4. A declaration of Drought will remain in effect until the end of October in the calendar year in which it is made, unless it is earlier revoked under Section 4.4.

Within seven days of a declaration of Drought or Extreme Drought by OWRD, the Administration Entities, with the assistance of the TAT and OWRD, shall determine the scope (magnitude) of the Drought, including the amount and sources of water reasonably likely to be available within the Klamath Basin. The Administration Entities will identify actions that could be taken to ensure that available water is managed so that no Klamath Basin interests bear an unreasonable portion of burdens imposed.

4.4. Revoking a Declaration

OWRD may recommend convening a meeting of the TAT, Administration Entities and representatives of the USGS and NRCS to provide an opportunity for these entities to review the latest hydrological data and forecasts, and any other relevant information, and recommend to OWRD whether conditions warrant revoking a declaration of Drought or Extreme Drought in accordance with the Drought Plan. OWRD will make the final decision whether revoking a declaration of Drought or Extreme Drought is warranted.

4.4.1. Revocation Before September 30

Conditions that could warrant revoking a declaration of Drought or Extreme Drought before the end of September vary by completion phase of the WURP described in Section 4.2.1. A declaration of Drought may be revoked if October through September Net Inflow into UKL is likely to exceed: a) a baseline of 861,000 acre feet before WURP implementation; b) the 861,000 acre feet baseline plus the WURP-progress adjustment

described in Section 4.1.2 during WURP implementation; or, c) 891,000 acre feet after OWRD has determined that the WURP purpose has been achieved. A declaration of Extreme Drought may be revoked if October through September Net Inflow into UKL is likely to exceed: e) a baseline of 702,000 acre feet before WURP implementation; f) the 702,000 acre feet baseline plus the WURP-progress adjustment described in Section 4.1.2 during WURP implementation; or, g) 732,000 acre feet after OWRD has determined that the WURP purpose has been achieved.

4.4.2. Revocation After October 1

If an Extreme Drought declaration has not otherwise been revoked prior to October 8, OWRD shall determine by October 8 whether the Extreme Drought declaration should be revoked, and shall follow this same procedure on November 8 and December 8. Revocation of the declaration shall be in accordance with the monthly criteria and termination thresholds in Table 2.

Table 2. Termination thresholds of Net Inflow into UKL applicable during October through December for the revocation by OWRD of an Extreme Drought declaration. The termination thresholds pertain to the appropriate monthly criterion, and vary by completion phase of the WURP as described in Section 4.2.1.

Month	Monthly criterion	Declaration by OWRD when monthly criterion exceeds termination threshold	Termination thresholds (acre feet)	
			Baseline prior to implementing WURP	After WURP purpose has been achieved
October	Total net inflow into Upper Klamath Lake during September	Revoke Extreme Drought by October 8	29,500	32,000
November	Total net inflow into Upper Klamath Lake from September through October	Revoke Extreme Drought by November 8	84,000	87,400
December	Total net inflow into Upper Klamath Lake during September through November	Revoke Extreme Drought by December 8	164,900	168,300

4.5. Relationship to Applicable Law

This Drought Plan serves exclusively to implement the Restoration Agreement. It is not intended to, and does not prescribe when drought or extreme drought or an emergency exists for any other purpose, or the responses to dry or drought conditions that may occur under other processes. In this regard, it is recognized also that the Restoration Agreement itself includes measures that will provide

response to drought or extreme drought, including, but not limited to, the sliding scale of diversion limitations in Attachment A of Appendix E-1, the water use retirement provisions of Section 16, habitat restoration activities, and other measures.

4.5.1. Oregon Existing Drought Protocols and Provisions

Oregon law regarding the Governor’s authority to declare an emergency when a severe, continuing drought results in the lack of water resources that threatens the availability of essential services and jeopardizes the peace, health, safety and welfare of the people of Oregon is set out in ORS 536.700 *et seq.* In addition, ORS 536.700 *et seq.* sets out the actions that the Governor may take to address the emergency after the Governor declares that a severe, continuing drought exists, or is likely to exist.

4.5.2. California Existing Drought Protocols and Provisions

Under Government Code 8558(b) The Governor of California may declare a “State of Emergency” when “conditions of disaster or extreme peril to persons or property within the state caused by such conditions as ... drought ...which by reason of their magnitude are or are likely to be beyond the controls of the services, personnel, equipment and facilities of any county, city, and require the combined forces of a mutual aid region or regions to combat...” This declaration is a prerequisite to federal assistance.

4.5.3. Reclamation Existing Drought Protocols and Provisions

Under current federal law, the Reclamation States Emergency Drought Relief Act of 1991, as amended, provides for the Secretary of the Interior to provide temporary measures to address drought conditions when the Governor of an affected State, or the governing body on an Indian Reservation, requests assistance, and the Secretary determines that such assistance is merited or upon approval of a drought contingency plan as provided in the Act.

4.5.4. Relationship of this Drought Plan to those provisions/protocols.

OWRD’s declaration of Drought or Extreme Drought under this Drought Plan does not invoke and is not based upon ORS 536.700 *et seq.*, nor does it invoke laws of California or the United States. However, the Administration Entity and the Parties will, to the extent practicable, coordinate responses under this Drought Plan with responses that may occur or be available under state, federal, or local law.

4.6. Enforceability of Drought declaration and revocation of Drought declaration

4.6.1. Contractual Obligations

Except as provided in this Section 4.6, Section 7.4.1 of the Restoration Agreement is incorporated as if set forth fully herein. The Lead Entity does not intend that OWRD's actions pursuant to Section 4.1.2 or 4.2 of the KBRA Drought Plan shall be subject to judicial review, except to the extent that such actions may be reviewable under Applicable Law. In the event that an action taken by OWRD pursuant to Section 4.1.2 or 4.2 of the KBRA Drought Plan is subject to judicial review, Section 4.6.2 and 4.6.3 of the KBRA Drought Plan shall apply.

4.6.2. Venue

The venue for any action that may exist against OWRD related to its performance or determination under this plan shall be as provided under Applicable Law.

4.6.3. Choice of Law

The laws of the State of Oregon (without giving effect to its conflicts of law principles) govern all matters arising out of or relating to OWRD's actions or obligations pursuant to Section 4.1.2 or 4.2 of the KBRA Drought Plan.

5. Preparation of In-Season Drought Response

5.1. Quantification of Available Water

5.1.1. Estimates of Water Made Available When a Declaration of Drought or Extreme Drought Has Been Declared

When it has declared Drought or Extreme Drought, OWRD will, in consultation with the TAT, and as early as practicable, calculate any amounts of water expected to be made available during March - October, as follows: (1) the reduction in diversion of surface water resulting from implementation of measures in Section 6.1.1; (2) the amount of water made available for instream uses under Section 6.1.2; (3) the reduction in diversion of surface water resulting from implementation of measures in Sections 6.1.3 and 6.1.4; (4) the reduction in diversion of surface water resulting from actions described in Section 6.2.1 and 6.2.2; and (5) the reduction in diversion of surface water resulting from implementation of measures under Section 7. OWRD will periodically update these calculations as information becomes available, in order to inform

implementation of other provisions of this Drought Plan. OWRD's calculations as of May 31 as they relate to sections other than Section 7 shall be the basis for ultimate implementation of Section 7.2.2. The TAT may review the methods and calculations used by OWRD for these purposes, and may recommend changes to OWRD. If the TAT makes such a recommendation, OWRD will work with the TAT to refine OWRD's methods and calculations for use under this section.

5.1.2. Use of Information; Prioritization

The TAT and the Administration Entity will use information under Sections 5.1.1 for developing and implementing responses as provided in Sections 5.2 and 6 and 7. With respect to the measures in Sections 6 and 7 of this Drought Plan, the responses will be consistent with the order of priority established in Section 19.2.2.B of the Restoration Agreement.

5.2. Fisheries Management Considerations

5.2.1. Process to Evaluate Drought Risk to Environmental Resources.

This section outlines a process to develop and assess alternative instream water management scenarios when Drought or Extreme Drought conditions are very likely as described in Section 4.1.1. It is recognized that, just as the measures in Sections 6 and 7 may increase water availability for Instream Use, intensified management of water available for instream use may reduce the scope of measures taken under Sections 6 and 7. The TAT will:

- A. Evaluate hydrological and climatological conditions as described in Section 4.1.1.
- B. Using the best available scientific information, compile and evaluate relevant data on the status of fish species of concern to evaluate potential risks of Drought or Extreme Drought. Species of concern include anadromous salmonids, resident salmonids, resident suckers, and other endemic species of cultural, recreational and commercial interest. Data may include but are not limited to species range, distribution, and abundance; environmental factors that may influence drought risks include but are not limited to: current and predicted water quality and water quantity conditions, disease information, proposed hatchery actions, habitat availability and quality, and fishing data.

- C. Conduct a risk assessment of alternative water management scenarios, assess the range of alternatives, including no action, and prepare a summary document for consideration by the Administration Entities

5.2.2. Process to Evaluate and Adapt Water and Resource Management Strategies.

The TAT shall strive for innovative and flexible approaches to optimize Instream Use of water during periods of Drought or Extreme Drought. Based on information (e.g., 5.2.1.), the TAT will develop alternative water management scenarios to manage risks to all species of concern and make recommendations on how to use the available water to provide the most benefit.

6. Implementation of the Drought Plan

6.1. Voluntary Transactions

Responses to Drought or Extreme Drought will include voluntary measures which, in order of priority and pursuit, include: conservation; use of “new” stored water; and use of groundwater and leasing or forbearance agreements, as described in Sections 6.1.1, 6.1.2, and 6.1.3.

6.1.1. Conservation and Management

Water conservation actions can assist in stretching available water supplies by reducing demand or optimizing water use and management. Water management planning and conservation activities by public agencies and individual water users will presumably occur with or without this Drought Plan. In addition, certain water conservation activities will likely be employed in the implementation of the On-Project Plan contemplated by Section 15.2 of the Restoration Agreement and the water use retirement program contemplated by Section 16 of the Restoration Agreement.

Certain additional water conservation activities and programs may provide response to Drought and Extreme Drought in the implementation of this Drought Plan. The activities may be long-term in nature (i.e., result in conservation in most or all years including Drought and Extreme Drought) or may be short-term responses to Drought or Extreme Drought.

Water conservation and management activities may include, but are not limited to, municipal and agricultural water management planning, participation in USDA programs such as the Conservation Reserve

Program, Conservation Reserve Enhancement Program, and Environmental Quality Incentive Program, and other activities.

6.1.2. Use of Stored Water

A. Investigation and Evaluation

Under the Restoration Agreement and the Klamath Basin Water Supply Enhancement Act, Reclamation will continue to evaluate opportunities to increase storage opportunities in the Upper Klamath Basin. Opportunities for increased storage could include on-stream, off-stream, or groundwater storage. Reclamation has completed the Klamath Basin Water Supply Investigation alternatives report and will continue, in coordination with the Parties, to evaluate opportunities with the potential to improve surface water supply conditions in the Upper Klamath Basin.

B. Use

Subject to Reclamation's and OWRD's reservations of responsibilities and obligations, new stored water (i.e., water developed under Section 18.3 of the Restoration Agreement) will be used as part of the response to Drought and Extreme Drought declarations based on recommendations from the TAT.

6.1.3. Reduction in Use of Surface Water for Irrigation

As a next layer of response, voluntary transactions will be solicited to reduce the use of surface water for irrigation; such reductions under this Drought Plan are in addition to administration of the On-Project Plan under Section 15.2 of the Restoration Agreement and the water use retirement under Section 16. During the period when Section 20.4 of the Restoration Agreement is applicable, transactions under the Drought Plan may be part of, or supplementary to, transactions under Section 20.4 of the Restoration Agreement.

The voluntary transactions may include agreements for water leasing, forbearance, short-term transfers, appropriate groundwater substitution, or other actions to reduce diversions of water. Under the Restoration Agreement and this Drought Plan, there is no preference or priority as between actions in the Klamath Reclamation Project and the Off-Project areas or as between actions involving groundwater substitution versus land idling, forbearance agreements, or similar measures.

6.1.3.1. Within Klamath Reclamation Project

A. General

For actions under Section 6.1.3 in the Klamath Reclamation Project, KWAPA will be the Administration Entity. After considering the recommendations of the TAT with respect to the amount of reduction of surface water to be pursued in the Klamath Reclamation Project, and subject to the availability of funding and the provisions of Section 19.2 of the Restoration Agreement, KWAPA will prepare and submit an expenditure plan and pursue the implementation of voluntary transactions. With respect to use of groundwater, and consistent with Applicable Law, KWAPA and OWRD will cooperate in facilitating issuance of drought permits under ORS 536.750. All groundwater use under this Drought Plan is subject to applicable state and local law and KWAPA will consult with OWRD, DWR, and local governments. In addition, KWAPA will not enter into agreements related to groundwater use that, themselves or in combination with administration of the On-Project Plan, result in an “Adverse Impact” as defined in Section 15.2.4.A of the Restoration Agreement, unless that limitation is waived by the KBCC, upon the advice and with the approval of the TAT, as provided in Section 19.2.2.B.iii.b of the Restoration Agreement.

B. Additional Provisions Applicable Prior to the Effectiveness of Diversion Limitations in Restoration Agreement Appendix E-1

In accordance with Section 15.2.2.B.iii.b of the Restoration Agreement, during the period after the applicable deadline for the full implementation of the On-Project Plan in Section 15.3.8.A of the Restoration Agreement and before Appendix E-1 of the Restoration Agreement is effective, the Secretary may direct KWAPA to administer the On-Project Plan in a specified manner. Such direction may be part of the response to Drought or Extreme Drought.

C. Additional Provisions Applicable After Effectiveness of Diversion Limitations in Restoration Agreement Appendix E-1

After Appendix E-1 to the Restoration Agreement has become effective, as soon as practicable following any declaration of Drought or Extreme Drought, OWRD will calculate the foregone consumptive use of water resulting from forbearance

or lease agreements entered by KWAPA under Section 6.1.3.1.A with respect to surface water. The quantity so calculated is hereafter referred to as the “DIVERSION Adjustment Quantity.” DIVERSION in the March - October period will not exceed the otherwise applicable March-October DIVERSION quantity, less the DIVERSION Adjustment Quantity. This provision is applicable in the context of both Drought and Extreme Drought under this Drought Plan. OWRD will provide preliminary calculations on May 1, and an updated Notice by May 31, and may conduct similar calculations thereafter.

6.1.3.2. Off-Project

The Administration Entity for entering into voluntary transactions outside the Klamath Reclamation Project will be NFWF or a Party approved by NFWF.

6.1.4. Further Water Management Measures

In addition to the activities contemplated by Sections 6.1 through 6.3, it is recognized that other, sometimes overlapping, opportunities may exist as a response to Drought or Extreme Drought. These include, but are not necessarily limited to:

District Transfers—Opportunities for various permanent and temporary transfers of water rights, including transfers within irrigation districts, may be available.

Instream Water Rights – Oregon law allows water right holders to sell, lease, or donate water rights to be converted to instream water rights. This is done through short-term lease agreements or by a formal transfer of the existing right from current use to a new type of use.

Limited License – Under certain circumstances, OWRD may issue limited licenses so that landowners can avoid irreparable crop damage by continuing the use of water after the close of the irrigation season. In addition, a limited license may be used for irrigation purposes in cases where the license is issued for the use of stored water, provided certain criteria are met.

Conserved Water – Oregon law allows a water right holder to submit a conserved water application to OWRD and receive authorization to use a portion of the conserved water on additional lands, apply the water to new uses, lease or sell to another user or dedicate the water to instream use. The percentage of saved water that may be applied to new uses or lands

depends on the amount of state or federal funding contributed to the conservation project.

Permanent and Temporary Transfer – Oregon law allows a water right holder to apply to OWRD to permanently transfer the place of use, point of diversion, or character of use of an existing water right under certain conditions. Oregon law also allows a water right holder to apply to OWRD to temporarily transfer the place of use, point of diversion or point of appropriation of an existing water right for a period not to exceed five years.

6.2. Other Measures

6.2.3. General.

Whether under this Drought Plan or otherwise, responses that may occur to Drought or Extreme Drought are not necessarily limited to the measures stated in Sections 5.2 and 6.1 above. Section 19.2.2.B.iv of the Restoration Agreement refers generally to “other measures” beyond those of Section 19.2.2.B.i through 19.2.2.B.iii that would constitute response. No specific further measures beyond those identified in the Restoration Agreement and Sections 5.2 and 6.1 have been identified at this time.

6.2.4. Water Right Calls

Sections 5 and 6.1 above identify certain management actions or types of actions that can be taken in response to Drought or Extreme Drought. To the extent that such actions affect water diversions, they are based on voluntary measures. The intent of this Drought Plan, consistent with the Restoration Agreement is that such voluntary measures are preferable to involuntary measures, and the Restoration Agreement and this Drought Plan are expected to reduce the need for or occurrence of water right calls. However, with or without the Restoration Agreement, to the extent that Parties or non-Parties have water rights that are senior to other water rights, they have rights under Applicable Law to make water right calls to provide water to satisfy their senior water right(s), which may curtail junior use involuntarily. In this regard, Section 19.2.2.B.iv of the Restoration Agreement expresses that a response to Drought or Extreme Drought will include that “Parties with water rights will make water right calls to bring additional water to Upper Klamath Lake as early as practicable in years of Drought or Extreme Drought.” Nothing in this Drought Plan defines or limits the circumstances under which any Party is entitled to make a water right call. Nor are water right calls a specific implementation measure of the KBRA or this Drought Plan themselves, recognizing that Section 19.2.2.B.v. of the Restoration Agreement and Section 7.3 of this Drought Plan condition certain further actions on water

rights calls having been made, and recognizing that this Drought Plan contemplates evaluation of the expected hydrologic implications of any enforcement of water rights that may occur. Further, nothing in the Restoration Agreement or this Drought Plan modifies or limits Oregon water law or other Applicable Law or governs the action of any person or agency when a water right call is made; such actions are controlled by Applicable Law. OWRD and SWRCB are the entities that regulate or enforce water rights within their respective jurisdictions. For the purposes of Section 7.3 of the Drought Plan and Section 19.2.2.B.v of the KBRA, a call is made when the entity holding a water right requests regulation in favor of the water right from OWRD. OWRD's decision to regulate or not regulate based on a call will be made based on Applicable Law and policy.

A. Before Order of Determination in Oregon Water Adjudication

OWRD does not regulate a water right in favor of or against claimed but undetermined water rights (*i.e.* pre-1909 rights under state law and federal reserved water rights; ORS 539.130(4), 539.170, 539.200). While the positions and rights of other Parties are retained as to this issue, the result is that OWRD will, prior to the entry of an enforceable adjudicatory order in the Klamath Basin Adjudication (KBA), regulate only as between water rights of record as defined in ORS 540.045(4). Without characterizing OWRD's obligations in response to a water right call, Appendix A to this Drought Plan identifies currently permitted and certificated rights relevant to the terms of Section 7.3.

B. After Order of Determination and Decree

Following the issuance of the Findings of Fact and Order of Determination (FFOD) under ORS 539.130, OWRD is obliged to enforce water right calls based on water rights determined in the FFOD, unless stayed by the Circuit Court. Following the transmittal to OWRD of a judgment or decree of the Circuit Court issued under ORS 539.150, OWRD is obliged to enforce water right calls based on water rights determined in the judgment or decree. Without any view as to the validity of any water right claim, and without characterizing OWRD's obligations in response to a water right call, Appendix B to this Drought Plan identifies KBA water right claims of Parties which, if approved in whole or in part in the FFOD or judgment/decree, are relevant to the terms of Section 7.3.

7. Limitations on Klamath Reclamation Project Diversion

Section 19.2.2.B.v of the Restoration Agreement provides that if there is an Extreme Drought and the measures identified in Section 6 above are insufficient, the applicable DIVERSION in Appendix E-1, as modified by Restoration Agreement Section 19.2.2.B.iii.a (i.e., Section 6 of this Drought Plan) can be reduced. This section describes the process and potential reduction of applicable DIVERSION, the last priority under the Restoration Agreement and this Drought Plan.

7.1. Before Applicability of DIVERSION Limitations

Limitation on DIVERSION will become applicable upon the filing and approval by OWRD or the Circuit Court as applicable (see Section 15.3.1.A of the Restoration Agreement) of Appendix E-1 of the Restoration Agreement. Prior to such time, under this Drought Plan, responses to Extreme Drought may include measures identified in Sections 5 and 6 of this Drought Plan, as well as measures identified in Sections 20.4, 15.2.2.B.iii.b and 16 of the Restoration Agreement as applicable.

7.2. After Applicability of DIVERSION Limitations

7.2.1 Generally

Following the effectiveness of the limitations on diversion in Appendix E-1 of the Restoration Agreement, response to Extreme Drought under this Drought Plan can include further limitations to the limitations on DIVERSION specified in Appendix E-1. Section 7.2.2 below relates to March-October DIVERSION. Section 7.2.3 below relates to DIVERSION during November and December.

The specific terms in Sections 7.2.2 and 7.2.3 were developed based upon, and will be implemented in light of, the following general principles and terms: the purpose and scope stated in Section 19.1 of the Restoration Agreement; and, to the maximum extent feasible, the Drought Plan will protect Klamath Basin Communities, and provide sufficient quantities of water to meet the biologically essential river flows and lake elevations in periods of Extreme Drought; and any determination that there is to be a reduction from otherwise-applicable DIVERSION for a given period, and the determination of the amount of any such reduction for a given period, will be based on consideration of any benefits or lack of benefits that may be realized under programs in the Restoration Agreement and the Klamath Hydroelectric Settlement Agreement or the lack of implementation of provisions of the two agreements. Nothing within this Section 7.2 is intended to limit the applicability of the Endangered Species Act or other Applicable Law.

7.2.2 March – October DIVERSION

Following the effectiveness of the limitations on diversion in Appendix E-1 of the Restoration Agreement, upon a declaration of an Extreme Drought under Section 4.3 and the decision by the Restoration Agreement Fish Managers as described below, otherwise applicable March-October DIVERSION will be reduced, and the amount of such reduction will be considered not available for diversion. The amount of reduction from the otherwise applicable March-October DIVERSION will not exceed the greater of: (i) the DIVERSION Adjustment Quantity; or (ii) the result of the following equation: Section 7.2.2 Calculation Quantity minus the quantity of water determined by OWRD under Section 5.1.1 likely to result from the implementation of measures and actions described in Section 6. In order for this further limitation to be effective, the Restoration Agreement Fish Managers must determine by majority vote whether there will be a reduction, and how much the reduction will be, by April 12. Any amount determined under (ii) will subsequently, automatically, adjust based on OWRD's calculations under Section 5.1 as of May 31, if such calculation is different than OWRD's calculation as of the time of the Fish Managers' determination. Any revocation of an Extreme Drought declaration occurring in October shall have no effect on the further limitations established under this Section 7.2.2.

7.2.3 November and December DIVERSION

Following the effectiveness of the limitations on diversion in Appendix E-1 of the Restoration Agreement, upon a declaration of Extreme Drought under Section 4.3, limitations may be established on DIVERSION to occur in November and December, as provided below.

- A. If on October 15, a declaration of Extreme Drought remains in effect, the Restoration Agreement Fish Managers may determine by majority vote a DIVERSION quantity for November-December, as a not to exceed value. In determining whether to specify such a value, the Restoration Agreement Fish Managers shall take into consideration all factors brought to their attention, and the goals of the Restoration Agreement. The Restoration Agreement Fish Managers may revise the November-December DIVERSION quantity upward at any time, and shall subsequently make the decision in Section 7.2.3.B, subject to the terms of Section 7.2.3.B. November-December DIVERSION in excess of quantities specified by the Restoration Agreement Fish

Managers by October 15 shall not be considered available for diversion, subject to Section 7.2.3.B.

- B.** If OWRD revokes a declaration of Extreme Drought in November, the decision of the Restoration Agreement Fish Managers under Section 7.2.3.A shall no longer have any effect. However, if on November 15, a declaration of Extreme Drought remains in effect, the Restoration Agreement Fish Managers shall consider whether to revise upward the November-December quantity established under Section 7.2.3.A. In determining whether to revise the quantity, the Restoration Agreement Fish Managers shall consider all factors brought to their attention, and the goals of the Restoration Agreement. Any such revised value shall replace the value established under Section 7.2.3.A. The Restoration Agreement Fish Managers shall consider and act upon this issue by November 15, and may take similar action at any time thereafter before the declaration of Extreme Drought becomes ineffective on December 31. If in December OWRD revokes a declaration of Extreme Drought (i.e., revocation before December 31), limitations decided by the Restoration Agreement Fish Managers shall no longer be applicable.

7.2.4 Fish Managers

For the purpose of this Section 7.2 of this Drought Plan, the Restoration Agreement Fish Managers are: the Klamath Tribes, the Yurok Tribe, the Karuk Tribe, the California Department of Fish and Game, the Oregon Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service.

7.3. Conditions

Notwithstanding Section 7.2 no reduction in DIVERSION shall occur under this Drought Plan unless: (i) there is a formal declaration of Extreme Drought under Section 4.1 and the declaration is not revoked under Section 4.2; (ii) the Administration Entities make diligent efforts to exploit each measure in Sections 6.1.1, 6.1.2.B, and 6.1.3 as provided in Section 19.2.2.B in the Restoration Agreement; (iii) not later March 1st, Parties authorized to make calls under the water rights identified in Appendices A and B make such calls, and such Parties' water right calls remain in effect through the period that a declaration of Extreme Drought is in effect. For the purposes of condition (iii) in the preceding sentence, it is understood that the referenced water right calls are subject to any limitations or conditions contained in valid stipulations, contracts

or other agreements in effect upon or before the Effective Date of the Restoration Agreement, but no others; provided, and as recognized in Section 6.2.4, it is understood that regulation by OWRD shall be based on Applicable Law and is unaffected by this Drought Plan. Non-performance by KWAPA or KPWU shall not be a basis for failure to achieve the conditions in ii and iii respectively.

8. Adaptive Management

The Drought Plan will utilize state-of-the-art adaptive management methodologies in order to assess and improve actions that affect the aquatic resources of the Klamath Basin. The Adaptive Management provisions will occur within the framework of the Drought Plan and the Restoration Agreement and do not modify the Drought Plan or the Restoration Agreement.

Adaptive Management is a structured iterative process of optimal decision making in the face of uncertainty, with an aim to reducing uncertainty over time via system monitoring. In this way, decision making simultaneously maximizes one or more resource objectives and, either passively or actively, accrues information needed to improve future management. Adaptive Management is often characterized as "learning by doing."

8.1. Need for Adaptive Management

The Drought Plan will be implemented over the life of the KBRA. Because there are many scientific and social uncertainties with respect to achieving the objectives of the Drought Plan, project managers must design a process to learn from the implementation of the Drought Plan. Based on that learning, future actions can be modified and improved. This Adaptive Management approach, which includes monitoring and experimentation to address critical questions, is the process by which information on key uncertainties will be generated, analyzed, disseminated and incorporated into project decision-making. According to the National Research Council, the elements of an effective Adaptive Management Plan include:

- A. Clear restoration goals and targets;
- B. Sound baseline/reference conditions;
- C. An effective process for learning from restoration and management actions;
- D. An explicit process for refining and improving future restoration actions; and
- E. An effective peer review process.

8.2. Elements of the Adaptive Management provisions

The Adaptive Management approach for the Drought Plan will include:

8.2.1. Drought Plan Goals

The Parties intend that water and resource management actions be taken such that no Klamath Basin interest would bear an unreasonable portion of burdens imposed or the risk of loss or injury as described in Section 19.1 of the Restoration Agreement.

8.2.2. Baseline/reference Conditions

To establish baseline conditions, the TAT will review and use available data from a variety of sources, including without limitation USGS, NRCS, BOR, Oregon, California, Tribes, and PacifiCorp.

8.2.3. Effective Process for Learning from Management Actions

For the purposes of this Drought Plan, Section 3.3 describes certain functions of the TAT which will contribute to and inform an adaptive management process, in part by producing specific recommendations regarding hydrologic, meteorological, and climatological monitoring; forecasting methodologies for future conditions; and effectiveness of implemented measures to achieve the purposes of the Drought Plan and the KBRA at Section 19.2.2. Recommendations from the TAT will account for outside factors including but not limited to climate change.

8.2.4. An explicit process for refining and improving future Drought Plan actions.

The TAT shall make specific recommendations to the KBCC or other appropriate entities regarding the scientific issues discussed above each year by January 31.

8.2.5. The TAT shall also make specific recommendations for a peer review process;

Scientific review shall utilize, not exclude, local scientific knowledge. The purpose is to assist local scientists with adaptive management application.

8.2.6. Information Dissemination

Drought Plan Adaptive Management recommendations shall be made to the KBCC for implementation. The KBCC shall determine further outreach strategies.

9. Periodic Review and Amendment

The Drought Plan Lead Entity may propose to amend the Drought Plan consistent with Section 19.2.3.A. of the Restoration Agreement. The time periods for review, consideration of comments, adoption of an amendment by the Lead Entity, Dispute Resolution, submittal of an amendment to the Fund Administration Entity and action by the Fund Administration Entity, and action by the Drought Panel, if required, shall be consistent with the time periods specified in Sections 19.2.3.B through 19.2.3.L of the Restoration Agreement.

APPENDIX A
to Klamath Basin Restoration Agreement
Drought Plan

Parties to the KBRA Water Rights Pursuant to Permit or License

The following are water rights pursuant to permit referenced in Section 7.3 of the Drought Plan:

Oregon Fish and Wildlife Department
Certificate No. 28569

Klamath Drainage District:

Permit No. 43334, or any license on that permit.

Permits issued on Applications _____, or any license on any such application and permit.

APPENDIX B
to Klamath Basin Restoration Agreement
Drought Plan

Parties to the KBRA Water Rights Claims in Klamath Basin Adjudication

The water rights referred to in Section 7.3 of the Drought Plan include any right recognized in whole or in part in the Findings of Fact and Order of Determination, or Decree, for the following claims in the Klamath Basin Adjudication:

Oregon Department of Fish and Wildlife

186

U.S. Bureau of Indian Affairs

622 671 672 673

Klamath Tribes

612 616
(Portion pertaining to
Klamath River)

U.S. Forest Service

377	378	379	380	382
383	384	385	386	387
388				
389	390	391	392	393
469	470	471	472	474
476	478	479	480	481
483	484	485	487	488
490	491	493	494	495
496	497	500	501	502
503	504	506	507	509
510	512	513	515	516
518	519	521	522	524
525	527	528	529	530
532	533	535	536	538
539	541	542	544	545
547	548	549	550	552
553	555	557	558	560
561	563	564	565	566
568	569	571	572	574
575	577	578	579	580
582	583	585	586	588

589	709	710	712	713
715	716	718	719	721
722	724	725	726	727
732				

U.S. Fish and Wildlife Service

3	300	301	302	303
304	305	306	307	308
309	310	311	312	313
314	315	316	317	318
319	320			

U.S. Bureau of Reclamation

293	294	295	296	297
298	299			

U.S. Bureau of Land Management

198	325	328	329	330
331	332	333	334	335
337	338	339	340	343
344	346	347	348	349
350	351	352	353	354
355	358	362	363	364
365	366	368	369	370
371	372	373	374	375
376				

Klamath Project Water Users

193	289	290		
321, including 321-1 through 321-18			322, including 322-1 through 322-3	
323, including 323-1 through 323-3			324	

APPENDIX C
to Klamath Basin Restoration Agreement
Drought Plan

Drought Plan Declaration and Revocation Examples

The following is an example demonstrating how the declaration section (section 4) of the Drought Plan is implemented under a specified hypothetical set of hydrologic conditions. For the purposes of this example, we assume that the purpose of the Water Use Retirement Program (WURP) has been achieved, making the higher thresholds from Table 1 of the Drought Plan effective.

January

Assume actual October-December Net Inflow to Upper Klamath Lake (UKL) of 237,000 acre-feet (af) and a January 1 Forecast of 273,000 af. The sum of these numbers is 510,000 af, which is lower than the January threshold for declaring the potential for Extreme Drought (642,000 af; Table 1). As a result, OWRD will determine that the potential for Extreme Drought exists. By January 5 (or shortly thereafter), OWRD will post its determination of the potential for Extreme Drought on its website.

February

Assume actual Net Inflow to UKL from October-January of 344,000 af and a February 1 Forecast of 284,000 af. The sum is 628,000 af, which is lower than the February potential for Extreme Drought threshold of 629,000 af (Table 1). OWRD will determine that the potential for Extreme Drought exists and will post a determination of the potential for Extreme Drought on its website and provide related information to affected Klamath Basin communities by February 5 (or shortly thereafter).

March

Assume actual Net Inflow to UKL from October-February of 443,000 af and a March 1 Forecast of 288,000 af. The sum is 731,000 af, which is higher than the potential Extreme Drought threshold (693,000 af) but lower than the potential Drought threshold (816,000 af) for the month of March (Table 1). OWRD will determine that the potential for Drought exists and posts this determination on its website and provide related information to affected Klamath Basin communities by March 5 (or shortly thereafter).

April

Assume a actual Net Inflow to UKL from October-March of 573,000 af and a April 1 Forecast of 308,000 af. The sum is 881,000 af, which is higher than both the Extreme Drought threshold (729,000 af) and Drought threshold (879,000 af) for the purposes of the ultimate determination of Drought or Extreme Drought under this Drought Plan for the year (Table 1). As a result, OWRD will determine that Drought conditions do not exist and will not issue a declaration of Drought or Extreme Drought under this Drought Plan.

Table 1. Example showing how the declaration section of the Drought Plan is implemented in table form.

Period	Actual Net Inflow to UKL to Date	Forecast	Sum of Actual Net Inflow to UKL and Forecast	Decision
Jan. 1	237,000 af	273,000 af	510,000 af	Determine potential for Extreme Drought at this time, OWRD posts determination on its website by January 5, (or shortly thereafter)
	Potential Drought Threshold		687,000 af	
	Potential Extreme Drought Threshold		642,000 af	
Feb. 1	344,000 af	284,000 af	628,000 af	Determine potential for Extreme Drought at this time, OWRD posts determination on its website and provides information to affected communities by February 5, (or shortly thereafter)
	Potential Drought Threshold		717,000 af	
	Potential Extreme Drought Threshold		629,000 af	
Mar. 1	443,000 af	288,000 af	731,000 af	Determine potential for Drought at this time, OWRD posts determination on its website and provides information to affected communities by March 5, (or shortly thereafter)
	Potential Drought Threshold		816,000 af	
	Potential Extreme Drought Threshold		693,000 af	
Apr. 1	573,000 af	308,000 af	881,000 af	Determination that the conditions for a declaration of Drought or Extreme Drought do not exist. No Drought or Extreme Drought exists for purposes of this Drought Plan.
	Drought Threshold		879,000 af	
	Extreme Drought Threshold		729,000 af	

The process resets in January of the following year using October through December actual Net Inflow to UKL and the January Forecast.

The following is a second example, using a different set of hypothetical hydrologic conditions. As in Example 1, we assume that the purpose of the Water Use Retirement Program (WURP) has been achieved, making the higher thresholds from Table 1 and Table 2 of the drought plan effective.

DECLARATION

January

Assume actual October-December Net Inflow to Upper Klamath Lake (UKL) of 226,000 acre-feet (af) and a January 1 Forecast of 249,000 af. The sum is 475,000 af. This is lower than the January threshold for declaring the potential for Extreme Drought (642,000 af; Table 2), and as a result, OWRD will determine that the potential for Extreme Drought exists. By January 5 (or shortly thereafter), OWRD will post its determination of the potential for Extreme Drought on its website.

February

Assume actual Net Inflow to UKL from October-January of 315,000 af and a February 1 Forecast of 226,000 af. The sum is 541,000 af, which is lower than the potential for Extreme Drought threshold of 629,000 af for the month of February (Table 2). As a result, OWRD will determine that the potential for Extreme Drought exists. By February 5 (or shortly thereafter), OWRD will post its determination of the potential for Extreme drought on its website and provide related information to affected Klamath Basin communities.

March

Assume actual Net Inflow to UKL from October-February of 393,000 af and a March 1 Forecast of 217,000 af, The sum is 610,000 af, which is lower than the potential for Extreme Drought threshold (693,000 af; Table 2). As a result, OWRD will determine that the potential for Extreme Drought exists. By March 5 (or shortly thereafter), OWRD will post a determination of the potential for Extreme Drought on its website and provide related information to affected Klamath Basin communities.

April

Assume actual Net Inflow to UKL from October-March of 499,000 af and an April 1 Forecast of 217,000 af. The sum is 716,000 af, which is lower than the Extreme Drought threshold (729,000 af) (Table 2). OWRD will determine that Extreme Drought conditions exist. By April 5, OWRD will post a declaration of Extreme Drought on its website and include information regarding associated funding and programs available to help affected communities and others address conditions of Extreme Drought. This declaration remains in effect until December 31 unless revoked under procedures below.

REVOCATION

April - September

At any time between the April declaration of Extreme Drought and September 30th, OWRD may recommend convening a meeting of Technical Advisory Team, Administrative Entity and federal agency (USGS, NRCS) representatives to review hydrologic conditions and

the most recent forecasts to determine if revocation of the declaration of Extreme Drought is warranted. A declaration of Extreme Drought may be revoked if the October-September Net Inflow into UKL is likely to exceed 732,000 af. OWRD will make the final decision as to whether or not a revocation is warranted. If OWRD decides that revocation is warranted, the decision and associated information will be posted on the OWRD website.

October

In this hypothetical, the Extreme Drought declaration was not revoked before October. The process for considering revocation then changes to consideration of Net Inflow to UKL in September and succeeding months. Assume actual Net Inflow to UKL during the month of September of 29,000 af; the declaration of Extreme Drought will continue because the actual Net Inflow are lower than the applicable threshold (32,000 af; Table 2) that needs to be exceeded for the declaration to be revoked. OWRD will post the decision on its website by October 8.

November

Assume actual Net Inflow to UKL in September-October of 86,000 af; then the declaration of Extreme Drought will continue because the actual net inflow is lower than the applicable threshold (87,400 af; Table 2) that needs to be exceeded for the declaration to be revoked. OWRD will post the decision on its website by November 8.

December

Assume actual Net Inflow to UKL in September-November of 172,000 af, then the declaration of Extreme Drought will be revoked because the actual net inflow is above the applicable threshold (87,400 af; Table 2) that needs to be exceeded for the declaration to be revoked. OWRD will post the decision to revoke the declaration on its website by December 8.

Table 2. Example showing how the declaration and revocation section of the Drought Plan is implemented in table form.

DECLARATION – January through April				
Period	Actual Net Inflow to UKL to Date	Forecast	Sum of Actual Net Inflow to UKL and Forecast	Decision
Jan. 1	226,000 af	249,000 af	475,000 af	Determine potential for Extreme Drought at this time, OWRD posts determination on its website by January 5, (or shortly thereafter).
	Potential Drought Threshold		687,000 af	
	Potential Extreme Drought Threshold		642,000 af	
Feb. 1	315,000 af	226,000 af	541,000 af	Determine potential for Extreme Drought at this time, OWRD posts determination on its website and provides notice to affected communities by February 5, (or shortly thereafter) .
	Potential Drought Threshold		717,000 af	
	Potential Extreme Drought Threshold		629,000 af	
Mar. 1	393,000 af	217,000 af	610,000 af	Determine potential for Extreme Drought at this time, OWRD posts determination on its website and provides notice to affected communities by March 5, (or shortly thereafter).
	Potential Drought Threshold		816,000 af	
	Potential Extreme Drought Threshold		693,000 af	
Apr. 1	499,000 af	217,000 af	716,000 af	Declare Extreme Drought and announce by April 5, including notice to communities. Declaration remains in effect until December 31 unless revoked.
	Drought Threshold		879,000 af	
	Extreme Drought Threshold		729,000 af	
REVOICATION – May through December				
Apr – Sep	Likely inflows to Upper Klamath Lake for water year on date of OWRD convened meeting.		722,000 af	Evidence suggests Net Inflow to Upper Klamath Lake for Oct - Sep is not likely to exceed 732,000 af. OWRD does not revoke Extreme Drought declaration.
	Applicable Extreme Drought revocation threshold		732,000 af	
Oct. 1	Actual September Net Inflow into UKL		29,000 af	Extreme Drought declaration persists.
	Applicable Extreme Drought revocation Threshold		32,000 af	
Nov. 1	Actual Sep-Oct Net Inflow into UKL		86,000 af	Extreme Drought declaration persists.
	Applicable Extreme Drought revocation Threshold		87,400 af	

Dec. 1	Actual Sep-Nov Net Inflow into UKL	172,000 af	Extreme Drought declaration revoked by December 8.
	Applicable Extreme Drought Termination threshold	168,300 af	

The process resets in January of the following year using October through December actual Net Inflow to UKL and the January Forecast.