

Hoop Valley Tribe

Drought Contingency Plan  
Public Water System

Hoop Valley Public Utilities District  
PO Box 656  
Hoop CA, 95546

Hoop Valley Public Utilities District  
I.D. #TWS-090605126

**Rev. Date 09/15/2014**



## Table of Contents

Table of Contents .....	2
Declaration of policy, purpose, and intent .....	1
Drought Task Force .....	2
Designated Official .....	2
Definitions.....	3
Water Use priorities .....	4
Criteria for initiation and termination of drought response stages .....	4
Coordination with regional partners .....	5
Public education and notification.....	5
Summary inventory of water supply and demand .....	7
Table 1: Estimated minimum water supply .....	8
Water demand .....	8
Table 2: Average water use demand.....	8
Determining if a water shortage is imminent.....	9
Triggering criteria and stages of action .....	10
Table 3: Level of water shortage, triggering criteria, and demand reduction goals .....	10
Stage 1: Minor/abnormally dry conditions .....	11
Stage 2: Severe conditions (Warning) .....	11
Stage 3: Exceptional conditions (Emergency).....	12
Response actions.....	12
Stage 1 response actions .....	13
Water use allocations .....	18
Table 4: Stage water use allocations.....	18
Table 5: Stage 3 and rationing residential water use allocations requirements .....	19
Table 6: Water needs for farm animals.....	20
Residential customer single-family.....	20
Residential customer master-metered multi-family.....	21
Commercial customers.....	21
Enforcement.....	22
Variances.....	24
Revenue and expenditure analysis .....	25
APPENDIX.....	27
Drought Contingency Plan Enforcement Ordinance .....	27
Resolution 14-01, Declaring a Local Emergency and imminent Threat of Disaster Due To drought Conditions On The Hoopa Valley Indian reservation .....	27
Resolution 14-18, Forming a Tribal Drought Task Force .....	27

## **Declaration of policy, purpose, and intent**

### **1.1. General**

The Hoopa Tribe finds that all the Hoopa Reservation and territories natural resources are interconnected and that the water resource has cultural, spiritual and economic values that guide the appropriate use, management, and protection of that resource, and that a condition of all water and land use activities in the watershed and drainage basins of the Reservation and its territories.

To ensure that the Reservation residents have sufficient water for cultural, spiritual, domestic, agricultural, stock, instream, and other uses, and that the Tribe has sufficient water for Reservation economic development and ....

In order to conserve the available water supply and protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse environmental impacts of water supply shortage or other water supply emergency conditions, the Hoopa Valley Tribe hereby adopts the following regulations and restrictions on the delivery and consumption of water through an ordinance/or resolution.

### **1.2 Purpose**

The purpose of the Hoopa Valley Tribe Drought Contingency Plan (Plan) is to establish a framework of forward-leaning planning and objectives, managerial and technical actions, and potential response systems in order to prevent, or better respond to, a drought-related emergency or critical situation. The overall goal of the Plan, and the contingency planning process, is to facilitate rapid emergency response. The intention of the Plan is to be functional, flexible, and easy to implement, and also serve as a tool for maintaining control over the events or limiting the risk of loss of control.

The primary focus is placed on best management practices to manage water use demand, while evaluating options for alternative water supply sources. Water uses regulated or prohibited under the Plan are considered to be non-essential and continuation of such uses during times of water shortage or other emergency water supply condition are deemed to constitute a waste of water which subjects the offender(s) to penalties as defined in this Plan.

### **1.3. Application**

The provisions of this Plan shall apply to all individuals within the Hoopa Valley Reservation utilizing water resources managed by the Hoopa Valley Tribe.

## **Drought Task Force**

The Hoopa Valley Drought Task Force shall have administration and oversight authority over this plan. The drought task force members include the following:

- Hoopa Valley Tribal Chairperson
- Director Office of Emergency Services
- Director Hoopa Valley Public Utilities District
- Director, Hoopa Valley Tribal Environmental Protection Agency
- Director Hoopa Tribal Fisheries
- Chief, Wildland Fire Department
- Chief, Hoopa VFD

## **Designated Official**

The designated official(s) identified in the manner listed below, or his/her designee, is hereby authorized and directed to implement the applicable provisions of this Plan upon determination that such implementation is necessary to protect public health, safety, and welfare. The designated official(s) or his/her designee shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan.

The designated official authorized to implement response in drought stage levels 1 and 2 shall be the Director of Public Utilities. The designated officials authorized to implement a response at Stages 3 shall be in concurrence of the Director of Public Utilities, the Director of the Office of Emergency Services and the Tribal Chair.

## Definitions

For the purposes of this Plan, the following definitions shall

- A.** Aesthetic water use: water use for ornamental or decorative purposes such as fountains, reflecting pools, and water gardens.
- B.** Commercial and institutional water use: water use which is integral to the operations of commercial and non-profit establishments and governmental entities such as retail establishments, hotels and motels, restaurants, and office buildings. The term is also referred to as non-residential water use.
- C.** Conservation: those practices, techniques, and technologies that reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water or increase the recycling and reuse of water so that a supply is conserved and made available for future or alternative uses.
- D.** Customer: any person, company, or organization using water supplied by the public water system.
- E.** Domestic water use: water use for personal needs or for household or sanitary purposes such as drinking, bathing, heating, cooking, sanitation, or for cleaning a residence. The term is also referred to as residential water use.
- F.** Drought level or stage: severity of the drought conditions indicated by the impact and/or vulnerability triggering criteria for the water source and capacity to meet demand, and corresponding best management practices to mitigate impacts.
- G.** Even number address: street addresses, box numbers, or rural postal route numbers ending in 0, 2, 4, 6, or 8 and locations without addresses.
- H.** Industrial water use: the use of water in processes designed to convert materials of lower value into forms having greater usability and value.
- I.** Landscape irrigation use: water used for the irrigation and maintenance of landscaped areas, whether publicly or privately owned,
- J.** Non-essential water use: water uses that are neither essential nor required for the protection of public, health and community safety.
- K.** Non-residential water use: the term is also referred to as commercial or institutional water

use.

- L.** Odd numbered address: street addresses, box numbers, or rural postal route numbers ending in 1, 3, 5, 7, or 9.
- M.** Public water system: a system for the provision to the public of water for human consumption through pipes or other constructed conveyances. The term is also referred to as community water system.
- N.** Residential water use: the term is also referred to as domestic water use.
- O.** Cultural and Spiritual Water Use: The Hoopa Tribe's view on water is that it is a sacred and spiritual entity. Water use, practices and techniques are integral and vital to the Cultural and Spiritual life of the Hupa People.

## **Water Use priorities**

When a reduction in water use is necessary as a result of drought conditions, the following use priorities shall be used in developing demand reduction programs and allocations during a water shortage emergency

1. Health and safety: residential home interior uses, sanitation, and fire fighting
2. Commercial, industrial, and governmental
3. Existing landscaping: especially trees and shrubs
4. New demand: projects without permits when shortage is declared

## **Criteria for initiation and termination of drought response stages**

The designated official shall monitor water supply on a periodic bases as determined by the severity of the drought, and determine when conditions warrant initiation or termination of each stage of the Plan based on the specified triggering criteria. The triggering criteria are based on public health risks (likelihood and impacts) and an analysis of the anticipated vulnerability of the water source under drought conditions, and system capacity limits.

## Coordination with regional partners

The public water system(s) is in or adjacent to an area with other potential regional partners. As appropriate, this Plan will be provided to other regional partners for the purpose of effective and efficient planning and coordination of resources for drought emergency response. The regional partners for drought emergency response include:

- A. Yurok Tribe
- B. Department of Water Resources
- C. Karuk Tribe
- D. Humboldt County Public Health
- E. Willow Creek Public Utility District
- F. United States Forest Service
- G. Humboldt County OES
- H. Indian Health Service
- I. Orleans Community Water District



## Public education and notification

Community outreach, education, and notification about the Plan will include information about the conditions under which each stage is to be initiated or terminated, the drought response measures to be implemented in each stage, and the specific actions required of the public.

The more severe the water shortage, the more vigorous the public information campaign will need to be. Any public communications strategy undertaken in connection with a water shortage should contain the following fundamental attributes:

- Timely: Information should be disseminated well in advance of voluntary or mandatory

actions that are to take effect, repeated often, and updated at regular intervals.

- **Credible:** Information should strive to be clear, professional, consistent, straight forward, reasoned, and honest to build trust and community support.
- **Multi-modal:** Information should be made available to the public using a variety of methods; for example using the internet, newsletters, radio, and public meetings.
- **Open:** The public water system will actively listen to, engage, and involve its customers, solicit feedback, address identified concerns, and respond to public input in a manner that is respectful, appreciative, welcome to creative solutions, and acknowledges each individual's sacrifice, inconvenience, and contribution to the solution.
- **Coordinated:** The public water system should collaborate with other Tribal departments and other impacted entities to ensure that the community as a whole has a synchronized and coordinated approach.
- **Action oriented:** Information should always contain positive action steps people can take to help foster a spirit of cooperation and create an overall atmosphere that encourages the people to conserve water for the public good.

A valuable technique in communication is to have a prepared and concise public message for each stage of the water shortage as described in the Plan. These statements are included within the response action for each stage, and intended to help communications be consistent, stay on message, and set the tone for subsequent communications through the duration of the incident.

There are various methods to carry out communications and public outreach. The designated official will consider the following techniques and methods to notify the public:

- Announcement at public events and meetings
- Presentations and open forums at community meetings
- Publication in a newspaper of general circulation
- Press releases using other local media;
- Direct mail to each customer; e.g. utility bill inserts
- Telephone hotline
- Public service announcements
- Signs posted in public places; e.g. posting a bulletin at the tribal offices
- Take-home fliers/posters at schools, churches



- Public information booths at events
- Outdoor signs
- Drought response center
- Announcements on the official tribal Website
- Notifying other tribal offices, departments, schools, and other agencies as appropriate

The designated official will notify the following individuals or agencies:

- Tribal chairperson and members of the tribal council
- Tribal water utility board
- Tribal environmental department
- Critical water users, e.g. health clinics, schools  
All Tribal Entities and Programs
- County Office of Emergency Services (OES)
- Indian Health Service District/Field Office
- Other Federal entities; e.g. USDA, FEMA, BIA, BOR, EPA, NMFS and others

## **Summary inventory of water supply and demand**

### **1.1. Water supply**

The public water system is primarily supplied by the Trinity River although there are other sources available when treated. A brief description of each source is provided in the Table below. A detailed description of each water source is provided in the Appendix. While production from specific water supply source will often vary year to year, due to a variety of factors, it is anticipated that during a drought condition, the water supply would drastically change in quantity and quality.

**Table 1: Estimated minimum water supply**

Water supply source	Estimated minimum water supply gallons per day (GPD)
Source no. 1 Trinity River	300,000
Source no. 2 Telescope Water System	50,000
Total all sources	350,000

## Water demand

The public water system has a current water demand from residential and non-residential uses including, commercial buildings, schools, tribal offices and health clinics. A brief description of each water use demand is provided in the Table below. A detailed description of each water use demand is provided in the Table 2, and includes average demand] seasonal peak demands, special/critical use demands; e.g. health clinics.

Irrigation water is not pulled from the treated water. Rather this water comes from separate diversions on the tributaries.

**Table 2: Average water use demand**

Customer type	Number of connections	Total water demand
Residential	900	700,000
Non-residential	8	44,000
Total All demands	908	744,000

The average water demand is based on a use of:

- 3,000 to 7,000 gallons per household per month
- 350 to 650 GPD per residential connection
- 7000 to 7,500 GPD for Klamath Trinity School District
- 6000 to 5,000 GPD for Kimaw Medical center
- 3000 - 3,000 GPD for all other non-residential connections.
- 0 to 2,000 GPD for all irrigation, represents unmetered and untreated irrigation diversions

## **Determining if a water shortage is imminent**

In normal or wet years when the water supply outlook is favorable, there is generally sufficient supply to meet the existing demand. However, after an unusually dry winter or period of consecutive dry years, there is an increased likelihood the water supply would not meet the demand. It is critical during this situation to undertake an analysis of whether water supplies will be deficient relative to the estimated water needs for the coming dry season. If possible, the analysis should be performed before the end of the rainy season in time to decide appropriate actions and to provide adequate notice to the public. There is a chance that late winter rains will change the water supply outlook, and therefore, the situation often remains dynamic through the end of April.

Starting in April of each year, the Drought Task Force shall convene to conduct an assessment, using data reported from USGS, and USBR, as well as relevant water quality and flow data collected by Tribal Departments from the tributaries and main stem of the Trinity River within the Hoopa Valley Reservation. The assessment shall be reported to Tribal Council at the last meeting in April along with a recommendation, if water conditions require it, for a resolution declaring a state of emergency due to drought conditions.

Council approval of the resolution declaring a state of emergency will also authorize the Drought Task Force to initiate its processes for establishing the severity of the drought and implementing any necessary water use restrictions outlined in sections 8 and 9 below. Using the best available information, the Drought Task Force will determine the degree of the water shortfall following a four-step process, which includes:

1. Develop a monthly forecast of water supply available from all sources.
2. Compare the water supply available to the anticipated water demand.
3. Evaluate whether the available water supply is adequate to meet the demand over the projected time period of dry weather conditions, and any anticipated water shortfall. Implement any water shortage/drought response actions as necessary.
4. Implement water shortage/drought response actions as necessary

## Triggering criteria and stages of action

One of the key elements of the Plan is a framework of incremental or staged triggering criteria for the drought severity and corresponding response actions. Each stage is triggered by an anticipated or actual water shortage condition, and each stage has several triggering criteria. The triggering criteria described below are based on an analysis of the vulnerability of the water source under anticipated drought conditions and system capacity limits. The drought condition stage, water shortage triggering criteria, and corresponding demand reduction goals are presented in the Table below.

**Table 3: Level of water shortage, triggering criteria, and demand reduction goals**

Stage	Stage title	Water shortage condition and triggering criteria	Demand reduction goal	Program type
1	Normal	Abnormally dry, minor shortage: 0-10%	10%	Voluntary
2	Warning	Severe drought: 25-35%	25%	Mandatory
3	Emergency	Exceptional drought: over 50%	Over 50%	Mandatory

The public notice of drought stage shall be issued no later than May 1. The drought stage shall be reassessed by the Task Force on a monthly basis, and the Task force shall reissue an increased drought stage notice, should water conditions require it. A water shortage may trigger any stage of response actions and include best management practices for supply management and demand reduction. The Drought Task Force will determine the most appropriate stage to implement based on actual conditions at the time of the event. Successive stages of response actions will be declared only after exhausting efforts to make a prior stage successful.

In some cases it may be necessary for the Task Force to immediately implement an advanced stage of the Plan. This may occur due to information that indicates likely increased severity in the drought conditions (e.g. to serve as a preemptive action) or when the health and safety of the community are at an increased risk. The response actions are designed to be flexible so that there is an appropriate response to the specific situation occurring at a particular time. The conditions that may trigger specific stages of the Plan are specified below.

## **Stage 1: Minor/abnormally dry conditions**

- When flows in the Trinity River at Hoopa, based on historical data shows that flows in tributaries or in the main stem indicate they are equal to or less than 75 % of normal flows
- Public Utilities shall issue a notice on May 1, which shall be updated on a monthly basis if drought conditions change and the drought stage must be increased.
- It shall be encouraged that all community members voluntarily reduce daily water use by 10%

## **Stage 2: Severe conditions (Warning)**

- When flows in the Trinity River at Hoopa, based on historical data shows that flows in tributaries or in the main stem indicate they are 50 % of normal flows and the total water source yield is unable to meet the water demand averaged over each person at 50 gallons per person per day, the Task Force will implement the mandatory water restrictions of Stage 2, severe dry conditions.
- Public Utilities shall issue a notice on May 1, which shall be updated on a monthly basis if drought conditions change and the drought stage must be increased
- All community members are required to reduce water use by 25%
- PUD will start the process of maintaining accountability for non compliance, and define mitigation measures, which may include additional notices, citations or imposing additional fees for overuse and mismanagement of water resources.

### **Stage 3: Exceptional conditions (Emergency)**

- When flows in the Trinity River at Hoopa based on historical data shows that flows in tributaries or in the main stem indicate they are less than 50 % of normal flows, the Task Force will implement the mandatory water restrictions of stage 3, exceptional conditions.
- Public Utilities shall issue a notice on May 1, which shall be updated on a monthly basis if drought conditions change and the drought stage must be increased
- All community members are required to reduce water use by 50%
- PUD will start the process of maintaining accountability for non compliance, and define mitigation measures, which may include additional notices, citations or imposing additional fees for overuse and mismanagement of water resources.

### **Response actions**

The Plan provides stages of response actions to manage and mitigate the impacts indicated by each triggering criteria and condition. The Management of bypass flows (instream flows) in Reservation tributaries is of fundamental importance. Tribal Fisheries is charged with providing to PUD recommendations for bypass of flows adequate for protection of aquatic life including salmon, steelhead, lamprey and other native species. To this end, monitoring of flows and fish habitat conditions below PUD diversions will provide data for interpretation of instream flow needs and consequent limitations on stream flow diversion for domestic and/or agricultural use. The response actions provide for a combination of best management practices for both water supply management and reduction in water demand. The response approaches are designed to be flexible so that there is an appropriate action to the specific drought situation occurring at a particular time.

The response actions included in each stage are cumulative, meaning that if Stage 2 is implemented, then all of the measures in Stage 1 and 2 shall be implemented. Likewise, if ultimately Stage 3 is implemented, all of the measures in Stages 1 and 2 shall be implemented as well.

A brief description of the response actions for each stage of the Plan are specified below.

## Stage 1 response actions

Target and public message

At stage 1, the community shall be encouraged to achieve a voluntary reduction of 10%.

### 1.1.1. Communication, coordination, and planning

Communication, coordination, and planning activities include:

A. Initiate public information outreach campaign to:

- Prepare and distribute educational information
- Notify customers of the water shortage, the need to conserve water, and the importance of significant water use reductions
- Notify customers with large landscapes of irrigation restrictions
- Provide customers with practical information on ways to improve water use efficiency
- Implement customer meter reading program
- Request customers to reduce their water use by the percentage listed above

B. Notify Federal, State, and Local entities.

C. Begin initial evaluation of potential temporary and/or long-term needs for infrastructure improvements and funding opportunities.

### 1.1.2. Supply management

Best management practices for supply management include:

A. Reduce flushing of water mains.

B. Initiate leak detection and repair program.

C. PUD will develop and manage a program for water waste.

D. Initiate use of reclaimed water for non-potable purposes.

### 1.1.3. Demand reduction

For demand reductions include:

- A. Water customers are requested to voluntarily limit the irrigation of landscaped areas to two days a week.
- B. Irrigate landscapes only between the hours of 8:00 P.M. to 10:00 A.M. on designated watering days.
- C. Water customers are requested to practice water conservation and to minimize or discontinue water use for non-essential purposes including:
  1. Willfully or negligently wasting water;
  2. Irrigation or sprinkling systems and devices that are not properly designed, installed, maintained, and operated to prevent wastage of water;
  3. Irrigation or sprinkling of any yard, ground, premise, or vegetation unless the watering device is controlled by an automatic shut-off device, or a person is in immediate attendance of the hose or watering device;
  4. Irrigation or sprinkling of landscape areas.,
  5. Use of water to wash down any sidewalks, walkways, driveways, parking lots, basketball courts, or other hard-surfaced areas;
  6. Use of water for dust control;
  7. Use of water to wash down buildings or structures for purposes other than immediate fire protection;
  8. Flushing gutters or permitting water to run or accumulate in any gutter or street;
  9. Use of water to fill, refill, or add to any indoor or outdoor swimming pools or Jacuzzi-type pools;
  10. Use of water in a fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system;
  11. Use of water from hydrants for construction purposes without a permit or any other purposes other than firefighting.
  12. Main stem and Tributary Areas of interest for the purpose of drafting water to be mitigated by Person(s) for specific use.
  13. All emergency use draft locations are to be set with a petroleum catch system for



environmental impact control by specific user.

## **Stage 2 response actions**

### **1.1.1. Target and public message**

At stage 2, the community shall be required to achieve a mandatory reduction of 25%.

### **1.1.2. Communication, coordination, and planning**

Communication, coordination, and planning activities include:

#### **A. Intensify and expand public information outreach campaign to:**

- Notify customers of the water use allocations
- Inform customers of ban on open burning
- Expand and strengthen water conservation education, activities, and programs

#### **B. Identify priorities for water supplies.**

#### **C. Coordinate with Federal, State, and Local entities**

#### **D. Coordinate with local health directors to assess public health threats and take appropriate actions.**

#### **E. Provide regular situational reports to Federal entities and County Office of Emergency Services.**

#### **F. Deploy temporary and/or long-term infrastructure improvements for water supply augmentation such as emergency interconnection, rehabilitation of existing water wells, construction of new water wells, re-confirm arrangements for water hauling etc.**

#### **G. Invoke ban on open burning.**

#### **H. Increase customer service training for staff.**

#### **I. Review and adopt enforcement rates and appeals board to process requests for exceptions.**

### **1.1.3. Supply management Best management practices for supply management include:**

#### **A. Discontinue flushing of water mains; except for emergency purposes only.**

#### **B. Intensify leak detection and repair program.**

C. Intensify and expand program for water waste patrols; e.g. increase staff.

D. Use of reclaimed water for non-potable purposes.

**1.1.4. Demand reduction Best management practices for demand reduction include:**

A. Implement Stage 3 water consumption allocations for all customers (see Table 4).

B. Water customers are required to limit the irrigation of landscaped areas to one day a week.

C. Use of water to wash any motor vehicle, motorbike, boat, trailer, or other vehicle is prohibited.

D. The use of water for construction purposes from designated fire hydrants under special permit is to be discontinued.

### **Stage 3 response actions**

**1.1.1. Target and public message**

At stage 3, the community shall be required to achieve a mandatory reduction of 50+%

Communication, coordination, and planning

Communication, coordination, and planning activities include:

A. Continue to intensify public information outreach campaign to:

B.

- Notify customers of the water use allocations
- Notify customers of public water points; e.g. for bottled water or portable water storage tanks
- Notify vulnerable populations of potential movement/relocations

C. Identify priorities for water supplies.

D. Coordinate with Federal, State, and Local entities.

E. Coordinate with local health directors to monitor and assess public health threats and take appropriate actions.

F. Provide regular situational reports to Federal, state, and local entities.

- G. Continue use of water supply augmentation measures such as emergency interconnection, use of existing water wells, use of new water wells, water hauling etc.
- H. Continue ban on open burning.
- I. Plan with local partners for monitoring and potential movement of vulnerable populations out of areas with limited or no water supply.

**1.1.2. Supply management best management practices**

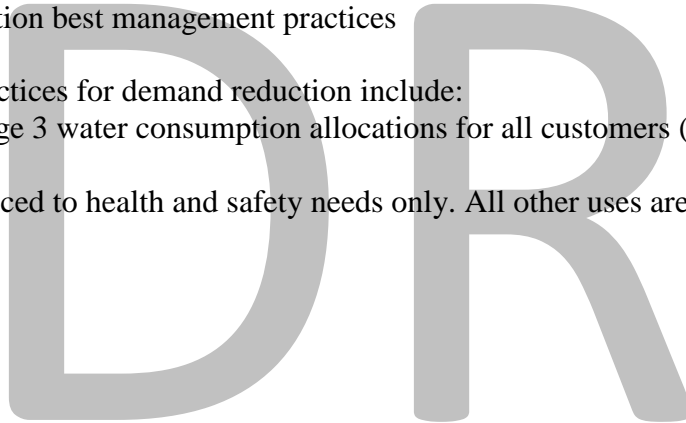
Best management practices for supply management include:

- A. Discontinue flushing of water mains; for emergency purposes only.
- B. Intensify leak detection and repair program.
- C. Intensify program for water waste patrols.
- D. Use of reclaimed water for non-potable purposes.

**1.1.3. Demand reduction best management practices**

Best management practices for demand reduction include:

- A. Implement Stage 3 water consumption allocations for all customers (see Table 4, pg 22).
- B. Water use reduced to health and safety needs only. All other uses are prohibited.



## Water use allocations

### 1.1. General

In the event that water shortage conditions threaten public health, safety, and welfare, the designated official/s for the appropriate stage will allocate water according to the following water allocation plan in the Table listed below.

**Table 4: Stage water use allocations**

Customer/connection type	Stage 1	Stage 2	Stage 3
Residential	Normal or 200 GPCD	75 GPCD	25 GPCD
Commercial/institutional	Normal 500 GPD	85% of average	50% of average
Landscape irrigation	Normal to 90% of normal use	50% of average	0% of average

Note: gallons per capita per day is (GPCD)

The residential water use allocations are based on water use priorities for health and safety and were calculated based on minimum domestic uses including drinking, cooking, personal washing, sanitation, and washing clothes. In addition, these water uses have been compared to actual data, in particular during the wintertime period. The Table below provides a more detailed presentation of the basis for the residential water uses and requirements for Stage 3 and rationing water allocations.

**Table 5: Stage 3 and rationing residential water use allocations requirements**

Residential water uses	Stage 3 requirements (gpcd)	Rationing requirements (gpcd)
Drinking	2.5	2.5
Cooking	2.5	2.0
Personal washing	12.5	7.5
Sanitation	2.5	1.5
Washing clothes	2.5	1.5
Cleaning home	2.5	0
Growing food/garden	0	0
Total	25	15

Residential customers may have some livestock, and will be entitled to an allocation to meet the needs of the animals. Residential customers with livestock should follow water conservation practices including repairing leaks, dripping faucets, practice of filling water tubs and tanks, and cleaning floors and equipment. The Table below provides a list of daily water needs of some common animals.

**Table 6: Water needs for farm animals**

Type of animal	Daily water requirements (gallons per day)
Horse	12
Cow	20-45
Beef animal	8-12
Swine/pig	3-5
Sheep/goats	2-4
Poultry/fowl (per 100)	8-15

### **Residential customer single-family**

The allocation to residential water customers residing in a single-family dwelling shall be based on the persons per household at the level given in Table 4. A “household” means the residential premises served by the customer’s water service line and/or water meter. Persons per household include only those persons currently physically residing at the premises and expected to reside there for the entire billing period. It shall be assumed that a particular customer’s household is comprised of two (2) persons unless the customer notifies the designated official of a greater number of persons per household.

It shall be the customer’s responsibility to go to the office of the designated official to complete and sign the necessary form claiming more than two (2) persons per household. New customers may claim more persons per household at the time of applying for water service on the form prescribed by the designated official. When the number of persons per household increases so as to place the customer in a different allocation category, the customer may notify the designated official and the change will be implemented in the next practicable billing period. If the number of persons in a household is reduced, the customer shall notify the designated official in writing within two (2) days. In prescribing the method for claiming more than two (2) persons per household, the designated official shall adopt methods to insure the accuracy of the claim.

## **Residential customer master-metered multi-family**

The allocation to a customer billed from a master meter which jointly measures water to multiple permanent residential dwelling units (e.g. apartments, mobile homes) shall be allocated based on 10 indicate number of persons in each dwelling unit per month. It shall be assumed that such a customer's meter serves two dwelling units unless the customer notifies the designated official of a greater number on a form prescribed by the designated official. It shall be the customer's responsibility to go to the office of the designated official to complete and sign the form claiming more than 5indicate number of dwellings. A dwelling unit may be claimed under this provision whether it is occupied or not. New customers may claim more dwelling units at the time of applying for water service on the form prescribed by the designated official. If the number of dwelling units served by a master meter is reduced, the customer shall notify the designated official in writing within two (2) days. In prescribing the method for claiming more than 5 dwelling units, the designated official shall adopt methods to insure the accuracy of the claim. Any person who knowingly, recklessly, or with negligence falsely reports the number of dwelling units served by a master meter or fails to timely notify the designated official of a reduction in the number of person in a household shall be fined not less than \$50.00

## **Commercial customers**

A monthly water allocation shall be established by the designated official, or his/her designee, for each non-residential commercial customer. The non-residential customer's allocation shall be based on Table 4, pg 22, and the customer's usage for corresponding month's billing period for the previous 12 months. If the customer's billing history is shorter than 12 months, the monthly average for the period for which there is a record shall be used for any monthly period for which no history exists.

The designated official shall give his/her best effort to see that notice of each non-residential customer's allocation is mailed to such customer. If, however, a customer does not receive such notice, it shall be the customer's responsibility to contact the designated official to determine the allocation. Upon request of the customer or at the initiative of the designated official, the allocation may be reduced or increased if, (1) the designated period does not accurately reflect the customer's normal water usage, (2) one non-residential customer agrees to transfer part of its allocation to another non-residential customer, or (3) other objective evidence demonstrates that

the designated allocation is inaccurate under present conditions. Customer's may appeal an allocation to the designated official.

## Enforcement

All residential, residential multi-family and Non-residential commercial customers shall pay the following surcharges in the event of an over allocation of water during stage 2 and 3 drought conditions:

For the first 1,000 gallons over allocation: \$10.00

For the second 1,000 gallons over allocation: \$25.00

For the third 1,000 gallons over allocation: \$50.00

For each additional 1,000 gallons over allocation: \$75.00

Surcharges are cumulative

This Plan is designed to place the responsibility for managing water resources during a water shortage emergency on the entire community. Care has been taken in the design of the Plan not to penalize any customer who has undertaken good-faith and diligent measures to conserve water. However, for the protection of the water resources and ability to provide sufficient water for public health and safety priorities, enforcement and penalties are required for those customers who knowingly or intentionally use water in a manner contrary to the Plan.

Enforcement provisions include the following:

- A. No person shall knowingly or intentionally allow the use of water from the public water system for any purpose in a manner contrary to any provision of this Plan, or in an amount in excess of that permitted by the drought response stage in effect at the time pursuant to action taken by the designated official in accordance with provisions of this Plan.
- B. Any person who violates this Plan shall be fined in addition to over allocation fees:
  1. For the first incident, the fee shall be deferred and the customer warned against any further violations within the next 12 months.
  2. For the second incident, the fee shall be not less than \$25.00. Each day that one or more of the provisions in this Plan is violated shall constitute a separate offense.



3. If a person is convicted of a third incident or more distinct violations of this Plan within a one-year period, the designated official shall, upon due notice to the customer, be authorized to:
  - i. Require the customer to repair any defects in the water system of such customer within 14 days of notice;
  - ii. Installation by the designated official of flow restrictors or termination of water service for exterior use;
  - iii. Termination of all water service to a customer unless in the opinion of the designated official such termination would result in an unreasonable risk to the health and safety of the persons;
  - iv. Services discontinued under such circumstances shall be restored only upon payment of a re-connection charge, hereby established at \$75.00 and any other costs incurred by the public water system in discontinuing service. In addition, suitable assurance must be given to the designated official that the same action shall not be repeated while the Plan is in effect. Compliance with this plan may also be sought through injunctive relief in the Public Utilities Board of Directors
  - v. Compliance with this plan may also be sought through injunctive relief in the Tribal Court
- C. Any person, including a person classified as a water customer of the public water system, in apparent control of the property where a violation occurs or originates shall be presumed to be the violator, and proof that the violation occurred on the person's property shall constitute a rebuttable presumption that the person in apparent control of the property committed the violation, but any such person shall have the right to show that he/she did not commit the violation. Parents shall be presumed to be responsible for violations of their minor children and proof that a violation, committed by a child, occurred on property within the parents' control shall constitute a rebuttable presumption that the parent committed the violation, but any such parent may be excused if he/she proves that he/she had previously directed the child not to use the water as it was used in violation of this Plan and that the parent could not have reasonably known of the violation.
- D. Any employee of the public water system, or police officer, may issue a citation or notice to a person he/she reasonably believes to be in violation of this Plan. Service of the citation shall be complete upon delivery of the citation to the alleged violator, or to a person over 18 years of age who is a member of the violator's immediate family or is a resident of the violator's residence.
- E. The decision to issue a citation pursuant to this ordinance may be appealed by filing a complaint in the Hoopa Valley Tribal Court within ten (10) days of receipt of notice of such action.

- F. The Hoopa Valley Tribal Court shall have personal and subject matter jurisdiction over all persons to adjudicate alleged violations of this ordinance, and shall issue any and all orders reasonably necessary to carry out the provisions of this ordinance, including but not limited to assessment of civil fines, injunctive relief and/or declaratory relief. Fines and costs assessed herein may be ordered paid by attachment of future per capita payments or other tribal funds due and payable to the violator.

Because there are currently no and/or a limited number of single-family residential customers with a meter and are billed for water use based on a monthly flat rate, no penalties can be assessed for excessive water use based on a metered volume of water. However, separate enforcement is in two sections:

- 1) Violation of this plan due to an over allocation of metered water
- 2) Violation of plan due to observed negligent, intentional, or reckless use of water regardless of whether individual is a customer of PUD - severity of fine dependent on drought state and gravity of offense. Enforcement of violations of the Plan will be made based on other factors including visual observations of irrigation practices, water used for washing vehicles, dust control, and other acts of negligently wasting water.

## **Variations**

The Task Force may in writing grant temporary variance for existing water uses otherwise prohibited under this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the health, sanitation, or fire protection for the public or the person requesting such variance and if one or more of the following conditions are met:

- Compliance with this Plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the Plan is in effect, and
- Alternative methods can be implemented which will achieve the same level of reduction in water use.

Persons requesting a variance from the provisions of this Plan shall file a petition for variance with the public water system within 5 days after the Plan or a particular drought response stage has been invoked. All petitions for variances shall be reviewed by the designated official and shall include the following:

- A. Name and address of the petitioner(s).

- B. Purpose of water use.
- C. Specific provision(s) of the Plan from which the petitioner is requesting relief.
- D. Detailed statement as to how the specific provision of the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Plan.
- E. Description of the relief requested.
- F. Period of time for which the variance is sought.
- G. Alternative water use restrictions or other measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
- H. Other pertinent information.

Variations granted by the public water system shall be subject to the following conditions, unless waived or modified by the designated official:

- Variations granted shall include a timetable for compliance.
- Variations granted shall expire when the Plan is no longer in effect, unless the petitioner has failed to meet specified requirements.

No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

## **Revenue and expenditure analysis**

### **Potential revenue impacts**

The public water system's revenues from water use charges are derived from customers and uses including Residential, Commercial and non-residential, Schools, Tribal Offices and Health Clinics. As customer water use decreases based on the mandatory restrictions and water allocations, the revenue would decrease with overages by customer's description of the impact to the revenue as the customers use less water. This reduction in revenue will impact the Hoopa PUDs ability to continue operations.

## Potential expenditure impacts

During a water shortage and activation of this Plan, the expenditures for water-related services may be impacted. Expenditures may increase based on numerous factors including:

- Increased water conservation program costs to implement, monitor, and enforce new or more intensive activities.
- Increased staffing costs for operation and maintenance of facilities to ensure efficient operation of available facilities
- Increased costs for acquisition of alternative water supplies and associated facilities including bringing up another alternate water system and filtration system. I.E.: costs for alternative water supplies. Interconnection use agreements, purchase of additional water, and water hauling services.
- If wells are used, increased costs for groundwater pumping, if additional groundwater pumping is needed to compensate for decreased surface water supplies or if more energy is required because of increased pumping lifts associated with decreasing groundwater.

With assumed increases in certain expenditures, overall water expenditures may increase during the various stages of the Plan. These increases in expenditures, coupled with reductions in revenue for metered rate customers could potentially impact the public water system's budget and financial status.

## Mechanism for determining actual water use reductions

The system's water production from the Trinity River is continuously monitored by Indian Health Service and Hoopa Public Utilities District. Flow in the Trinity River at Hoopa is continuously gauged by US Geological Survey via facilities located adjacent to the Julius Marshall Plant.

During Stage 1 or Stage 2, weekly water production figures will be reported to the designated official. The designated official will then compare the weekly production to the target weekly production and, in consideration of instream flow bypass needs in Reservation tributaries, define reduction goals, and verify goals are being achieved. Weekly reports would then be forwarded to the Chairperson, and the Drought Task Force. And. If the reduction goals are not met, the designated official will notify the Drought Task Force and consider potential corrective actions; e.g. implementation of additional water use restrictions.

During Stage 3 the procedure would remain the same, with the addition of a daily report being provided to the Drought Task Force and other required Tribal entities.

## **APPENDIX**

### **Drought Contingency Plan Enforcement Ordinance**

**Resolution 14-01, Declaring a Local Emergency and imminent Threat of Disaster Due To drought Conditions On The Hoopa Valley Indian reservation**

**Resolution 14-18, Forming a Tribal Drought Task Force**

DR