

Staff Report

for the Board of Directors' Meeting of November 8, 2017

TO: Board of Directors
FROM: Chip Close, Water Operations Manager
DATE: October 25, 2017
SUBJECT: Drought Contingency Plan Review

OPERATIONS

RECOMMENDATION:

Review and discuss the District's Drought Contingency Plan.

BACKGROUND:

Per Board request, Staff has provided a copy of the District's Drought Contingency Plan for review and discussion.

The plan was last updated on November 18, 2015 and included the following modifications:

- Incorporated the District's Water Conservation Regulation (Section 3.05 of District's Rules and Regulation)
- Updated formatting throughout with clear separation between each drought stage
- Updated water supply calculations and trigger points
- Separation of drought actions by customer type (i.e. Ag vs Treated)
- Provided specific action items that the District can utilize to monitor customer compliance
- Incorporated the District's actions during a water supply shortage

State regulations require a review/update of the Drought Contingency Plan every five years.

BUDGETARY IMPACT:

None

Attachments (1):

- Drought Contingency Plan

NEVADA IRRIGATION DISTRICT

Drought Contingency Plan

(Adopted by the Board of Directors, November 18, 2015)

The purpose of the Nevada Irrigation District's Drought Contingency (Plan) is to provide guidance to staff and customers to help minimize drought or water supply shortage impacts. The plan identifies drought action levels, appropriate agency responses, water demand reduction goals, and provides recommended demand management measures to assist customers in water conservation.

The District currently supplies about 150,000 acre feet (AF) of water for all classes of customers, and has non-recoverable in stream flow requirements of 7,700 AF. Historically, 7,500 AF of water is purchased from PG&E annually and is required to provide reliable flows in the system and meet District operational needs. The District has determined 78,000 AF of carry over storage to be the minimum amount of water that the District will endeavor to hold over from water season to water season for the health and safety of the District domestic and agricultural water users. The minimum carryover amount will be evaluated every five years and will be updated as deemed necessary by the District.

Prior to the beginning of the irrigation season, but no later than the first board meeting in April, the District will evaluate its forecasted water supply to determine what water supply stage will apply during the year. In order to effect the most current information the March snow survey results, current reservoir levels, forecasted runoff, and availability of PG&E contract water (Contract) will be analyzed to make a preliminary determination of the District's water supplies

The mandatory reduction measures implemented through this plan are designed to preserve minimal supplies for public health and safety. Mandatory reduction stages will trigger the formation of the Drought Hardship Committee whose purpose is to review hardship applications and determine whether additional water can be provided to the applicants with an economic hardship and/ or those utilizing best management practices.

In the event the State Water Resources Control Board imposes regulations that differ from the regulations in this plan, the District may impose additional mandated restrictions through the resolution process to comply.

Water Availability Guidance

	Forecasted Available Supply April 1st	Demand Reduction Targets	Operational Changes	Rate Changes
Normal Operations	> 235,700	Encourage Conservation	Normal Operation	Standard Rates
Stage 1	235,700 to 205,700	10 – 20% Voluntary Usage Reduction	<ul style="list-style-type: none"> Leak repair receives higher priority Increase public outreach and drought awareness Target 75% of end of month October storage for carryover. 	Standard Rates
Stage 2	205,700 to 198,200	10 – 25% Mandatory Usage Reduction	<ul style="list-style-type: none"> Communicate mandatory reduction targets to retail customers Purchase of available Contract water to achieve a target carryover of 90,000 acre feet Distribution system flushing only for public health & safety Organize Drought Hardship Committee 	<ul style="list-style-type: none"> Implement Contract water purchase rates to reimburse the District for the costs associated with purchase of water above the 7,500 acre feet for normal operational needs. Charges to be reimbursed through the appropriate funding mechanisms. Water purchased will be utilized to meet carryover target.
Stage 3	198,200 to 175,700	25 - 40% Mandatory Usage Reduction	<ul style="list-style-type: none"> Purchase of available Contract water to achieve a target carryover of 80,000 acre feet 	<ul style="list-style-type: none"> Implement Contract water purchase rates Implement Conservation Rates as established in the Districts Rate Schedule
Stage 4	<175,700	> 40% Mandatory - Reductions based on available allotment and target carryover.	<ul style="list-style-type: none"> Purchase full allotment of Contract water to achieve target carryover of 78,000 acre feet 	<ul style="list-style-type: none"> Implement Contract water purchase rates Implement Conservation Rates as established in the Districts Rate Schedule

Stage 1
(Voluntary 10 to 20%)

Treated Water and Municipal Water Customer Reduction Actions

- Customers shall comply with the Conservation Regulations as spelled out in section 3.05 of the Districts Rules and Regulations
- Request restaurant owners to only serve water upon request
- Limit fire department practice drills and flow testing of hydrants

Ag Water Reduction Actions

- Allow Ag customers to voluntarily reduce purchase allotment for the year while reserving their right to return to their previous purchase allotment in the following year if water supply is available
- Declare no new or increased Surplus water availability
- Limit new raw water sales and increases to 1 miners inch

District Actions

- Increase public outreach to inform customers of reduction targets
- Target 75% of historical end of month October storage for carryover.
- Limit District flushing program to areas required by regulation or as needed for public health and safety
- District leak repair receives higher priority
- Inform Municipal customers of the reduction targets

Stage 2
(Mandatory 10 – 25%)

All of Stage 1 recommendation shall remain in place, except where they are replaced by more restrictive actions in this stage

Treated Water and Municipal Water Customer Reduction Actions

- Customers shall limit outdoor water use to every other day
- Customers shall adjust outdoor water timers to reduce each watering zone by the target reduction percentage (10 - 25%)
- Large landscapes with treated water accounts shall reduce their usage by the target reduction percentage (10 - 25%)
- Corresponding with the fall daylight savings time change, customers shall limit outdoor watering to 1 day a week.
 - Saturdays for even addresses and Sundays for odd addresses.

Ag Water Reduction Actions

- Declare no Surplus water availability to outside District customers
- Limit new raw water sales and increases to ½ miners inch
- Impose Irrigation season delivery alternatives with a target reduction of 10 - 25%
- Declare no new or increase fall or winter water sales

District Actions

- Inform Municipal customers of the reduction targets of 10 - 25%
- Purchase available Contract water to achieve a minimum target carryover storage of 90,000 acre feet for the end of October
- Implement Contract water purchase rates through the appropriate funding mechanism to cover procurement costs
- Organize Drought Hardship Committee

Stage 3

(Mandatory 25 – 40%)

All of Stage 2 restrictions shall remain in place, except where they are replaced by more restrictive actions in this stage

Treated Water and Municipal Water Customer Reduction Actions

- Outdoor watering shall be limited to three days a week
 - Customers with an even - numbered street address shall limit watering to Tuesday, Thursday, and Saturday.
 - Customers with an odd - numbered street address shall limit outdoor watering to Wednesday, Friday, and Sunday
- Customers shall adjust outdoor water timers to reduce each watering zone by the target reduction percentage (25 - 40%)
- Large landscapes with treated water accounts shall reduce their usage by the target reduction percentage (25 - 40%)
- Irrigation of ornamental turf on public street medians with potable water shall be prohibited

Ag Water Reduction Actions

- Declare no Surplus water availability
- Declare no new or increased Ag water sales
- Impose Irrigation season delivery alternatives with a target reduction of 25 - 40%
- Declare no fall water availability

District Actions

- Purchase available Contract water to achieve a minimum target carryover storage of 80,000 acre feet for the end of October
- Dedicate additional staff hours for water waste notification and patrolling
- Implement conservation rates as established in the Districts rates schedule

Stage 4
(Mandatory > 40%)

All of Stage 3 restrictions shall remain in place, except where they are replaced by more restrictive actions in this stage

Treated Water and Municipal Water Customer Reduction Actions

- Outdoor watering shall be limited to two days a week
 - Customers with an even – numbered street address shall limit outdoor watering to Wednesday and Saturday.
 - Customers with an odd - numbered street address shall limit outdoor watering to Thursday and Sunday
- Customers shall adjust outdoor water timers to reduce each watering zone by the target reduction percentage (40%)
- Large landscapes with treated water accounts shall reduce their usage by the target reduction percentage (>40%)

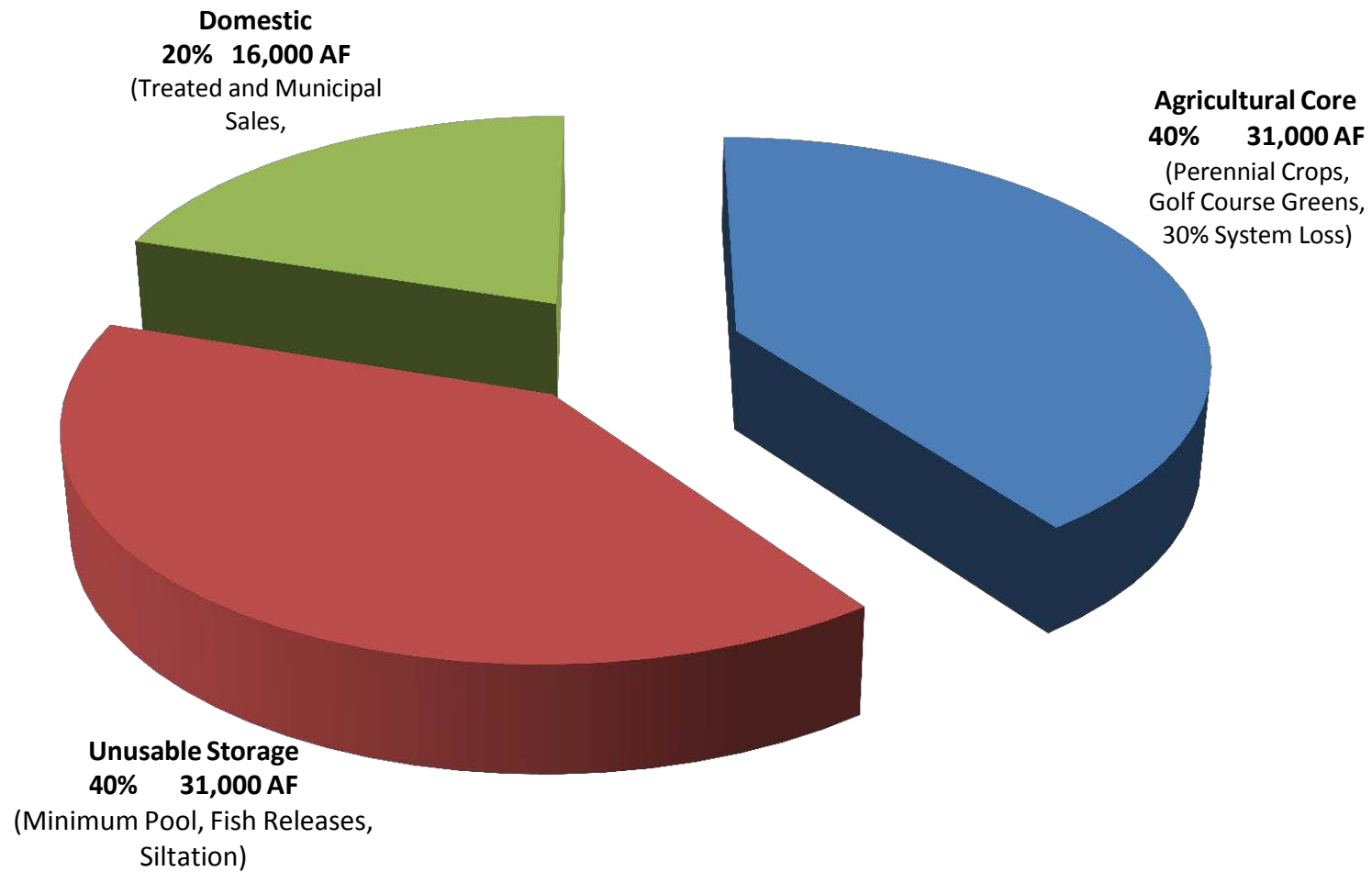
Ag Water Reduction Actions

- Impose Irrigation season delivery alternatives with a target reduction of >40%

District Actions

- Purchase available Contract water to achieve a minimum target a carryover storage of 78,000 acre feet for the end of October

NID MINIMUM CARRY OVER STORAGE 78,000 ACRE FEET



DROUGHT HARDSHIP COMMITTEE AND VARIANCES

During implementation of a mandatory reduction stage of the Drought Contingency Plan, the Board of Directors of the Nevada Irrigation District may appoint a Drought Hardship Committee. The Drought Hardship Committee is an advisory body and shall consist of one appointee from each director's division and the Water and Hydroelectric Operations (WHO) Board Committee. District Operation's staff will work closely with the committee.

The Drought Hardship Committee's purpose is to review the applications and determine whether additional water can be provided to the applicant. Before any appeal for a variance can be heard by the Drought Hardship Committee, the customer must submit a Drought Hardship Application and provide proof the water is being used for commercial agricultural purposes.

For the purposes of this Plan, the definition of commercial agriculture is an agricultural producer engaged in a for profit operation with a minimum gross annual sales of \$3,000 and a minimum capital investment of \$15,000. Commercial agricultural producers file a Schedule F with the Internal Revenue Service for their farming or ranching operation.

Preference will be given to applicants with an economic hardship and/ or those utilizing best management practices and with efficient irrigation practices in place. Variances may be approved for increases in water deliveries, seasonal variances or other protocols as determined by the Drought Hardship Committee. No such variance or appeal, however, shall be granted if the Board of Directors finds that the variance or appeal will adversely affect the public health or safety of others and is not in the public's best interest.

Under the California Water Code, in critical water supply situations, there is a priority that shall be allocated as follows:

1. Human Consumption
2. Livestock and Animals
3. Perennial Crops
4. Annual Crops

Upon granting a Drought Hardship Variance or appeal, the Board may impose any other conditions it deems to be just and proper.

APPLICATION FOR DROUGHT HARDSHIP

Name:		Canal:		
Address				
Parcel No.:		Phone No.:		
Land Utilization:		Map Attached	Yes	No
Livestock (number of)		Stock water needs: Yes or No		
Cattle	Horses			
Sheep	Other			
Hogs				
Crop	Acres Planted	Amount Water Applied	Period of critical water need	Method of Irrigation
Pasture				
Orchard				
Rice				
Other				
Total acres of land irrigated at location:				
			Year	Miners Inches
Water Purchase				
Allocated				
Is property within Nevada Irrigation District boundaries?			Yes	No
Do you have proof the water is being used for commercial agricultural purposes			Yes	No
Statement by landowner of hardship				
Intended use of additional water by landowner				
Describe efficient irrigation practices in use				
Do you file a Schedule F with the Internal Revenue Service? Yes or No				

Please attach separate sheet for any additional information. Fraudulent statements will result in loss of water purchase.

I certify the above statements to be true and factual to the best of my knowledge.

Signed _____ Date _____