

GLENN- COLUSA IRRIGATION DISTRICT WATER MANAGEMENT AND CONSERVATION POLICY

I. INTRODUCTION

This *Water Management and Conservation Policy* establishes practices and procedures to promote efficient water management and maximize water conservation. The District's Board of Directors requests that all water users review and adhere to the provisions of this Program, with the recognition that its success requires cooperation and close communication between water users and District personnel.

II. GENERAL WATER MANAGEMENT AND CONSERVATION PROVISIONS

- 1) Incorporation into the District's Rules and Regulations: This *Water Management and Conservation Policy* is referenced and incorporated within the District's *Rules and Regulations*.
- 2) Identification of "designated irrigator" and "responsible party": In order to promote effective and direct communication between water users and District staff, the water user is required to identify a "designated irrigator," and a "responsible party" on the water application form at the time the application for water is submitted to the District.
 - a) The "designated irrigator" is the person responsible for irrigating the land applied for on the water application, including placing water orders, and coordinating water use with the District.
 - b) The "responsible party" is the person who accepts responsibility for the actions of the "designated irrigator," for all application fees, charges, and for water management and conservation violations and penalties. The "responsible party" could include the landowner, tenant, designated irrigator, or other agent associated with the water applicant. The District considers the "responsible party" to be the designated point-of-contact for all problems associated with water management and water conservation issues.
 - c) The landowner is required to sign all water applications, and has ultimate responsibility for all application fees, charges, and water management and conservation violations and penalties.

- 3) Acreage measurements: All acreage measurements are based upon District maps and figures.
- 4) Water quality: The District will monitor electrical conductivity (EC) as a measure of water quality at key points in the water distribution system, and will blend water supplies, as is feasible, to maintain EC at 1.00 deciSiemens per meter (ds/m) or less throughout the water distribution system.
- 5) Waste of water: If, in the opinion of the General Manager, a landowner or water user is wasting water, either willfully, carelessly, negligently, or due to defective private conduits, the District may refuse, discontinue, or limit the delivery of water until the wasteful conditions are remedied in accordance with the District's *Rules and Regulations*. Wasteful water use practices include, but are not limited to the following:
 - a) Allowing water to flow onto roads, vacant land, or land previously irrigated.
 - b) Flooding land to an unreasonable depth or using an unreasonable amount of water in order to cover other high elevation portions of such land.
 - c) Using water on land that has been improperly prepared for the efficient use of water.
 - d) Allowing an unnecessary amount of water to drain or spill from any irrigated field.

The District reserves the right to refuse delivery of water when, in the opinion of the General Manager, the proposed use, or method of use, will require excessive quantities of water that constitute waste of water.

- 6) Water delivery: All water orders for changes in flow must be ordered with the District as follows:
 - a) Water orders including turn-ons, changes-in-flow, or turn-offs will be placed with the local water operator. If the local water operator is unavailable, water orders may be placed with the water supervisor or receptionist at the District's main office.
 - b) Water orders will be accepted only between 7:00 a.m. and 1:00 p.m., for delivery no earlier than the following day. During certain times of the year, or under certain water flow

conditions in the water conveyance system, water orders may require up to three days for delivery.

- c) Water orders for delivery periods shorter than 24-hours must be accompanied by a turn-off order.
- d) Water users will provide the following information when placing water orders:
 - Field delivery number (gate number)*
 - Parcel and field number*
 - Crop*
 - Flow change (cfs or other commonly understood description of flow)
 - Delivery date and time
 - Name of the person making the water order

*This information is included on all “acknowledgment maps” provided to all landowners and water users with their Water Application.

7) Water Management:

- a) Water users will structure irrigation patterns and water management to allow for continuous day and night (24-hour) water delivery for water applications requiring more than a partial day to complete.
- b) The District makes no guarantee as to when water can be delivered, particularly during the rice flooding periods, or following shut-down periods; however, every effort will be made to schedule deliveries as equitably and rapidly as possible.
- c) The General Manager and designated staff have sole responsibility for the operation of the District’s water conveyance system and associated facilities, including point-of-delivery field turnouts.
- d) Water users must make every effort to manage their irrigation timing to allow flow adjustments including turn-ons, changes-in-flow, or turn-offs to occur as early in the day as possible to allow the water conveyance system to be balanced prior to the end of the water operator work shift.

- e) Under certain circumstances, and at the sole discretion of the District, ordered flow adjustments in District facilities including turn-ons, changes-in-flow, or turn-offs may be delegated to the water user or “designated irrigator” on a case-by-case basis, as determined by the water operator and water supervisor.
- f) Flow adjustments in District facilities, including changes-in-flow, turn-offs, and moving water from one field delivery gate to another, that are scheduled to occur after the normal water operator work shift ends, will be performed by the water user in coordination with the water operator or water supervisor. If the water user elects not to accept this responsibility or to adequately perform these duties causing the water operator to be called out after normal work hours, the water user will be charged a fee for services to cover the cost of the District making such adjustments, as defined in the District’s annual publication of water rates and charges.
- g) Water delivery will be made on a rotation basis, where it is deemed necessary by the District.
Water delivery for service to portable sprinkler booster pumps will be delivered through the field delivery turnout that normally serves the field to be irrigated. The water user is responsible for the construction of a “sump” on the field side of the field turnout delivery to accept the pump suction.

III. RICE IRRIGATION – WATER MANAGEMENT AND CONSERVATION RULES (Under Normal Year Water Supply Conditions)

- 1) Rice field spillage: Water may be reasonably spilled from rice fields using the following method, provided that it is implemented, enforced, and monitored by the “responsible party”: Each field must be fitted with a standard approved measured weir board* containing a notch as specified on the attached Exhibit “A.” In addition, a 3-1/2” board must be placed on top of the notched weir board to allow for greater operational flexibility and day-to-day fluctuations (a standard, finished 2”x 4” or 1”x 4” will be accepted). Any flow over the top of these boards will be deemed to be a violation of the Policy. Due to the potential for smaller fields with smaller notches to experience “notch plugging” causing a higher incidence of flow fluctuations, rice fields of 50 acres or less may substitute a 50 acre notched board with a board on top, or a notched board without a board on top with equal flow potential (contact your water operator for notch sizes required without a board on top). When using the notched board without a board on

top, any flow above the notch will be deemed a waste of water and a violation of the Policy.

***The notched weir board provided for under this section must be in place throughout the irrigation season.**

- 2) Drainage and re-flooding of water during the rice growing season: Drainage and re-flooding of water, in addition to the spillage allowed under Section III, 1) of this Policy, requires 24-hour notice and coordination with the District, and is allowed under the following conditions:
- a) Drainage and re-flooding prior to July 1: Drainage and re-flooding of water during the rice stand establishment period is allowed prior to July 1.
 - b) Crop Stress: Drainage and reflooding of water to address water quality and associated crop stress may be approved by the District at any time during the growing season, contingent upon a verifiable written recommendation from a pest control advisor (PCA) or other expert crop advisor.
 - c) Drainage of water during the rice crop maturation period after July 1: Drainage of water after July 1, but prior to termination of irrigation, must be requested at least 24-hours in advance, and may be allowed on a limited case-by-case basis depending on the circumstances and upon approval by the District.
 - d) Maintenance of rice field drainage facilities: Prior to commencement of irrigation water deliveries, the rice field drainage facilities to be fitted with a notched board with a board on top, in accordance with Section III, 1) of this Policy must be identified to the District water operator.
 - e) Drainage of rice fields at the end of the irrigation season: At the end of the irrigation season, the water user must terminate water deliveries at least 7 days prior to requesting the drainage of water prior to harvest. The District must be notified at least 24-hours before a field is drained. The water operator will coordinate all drainage to ensure the capacity of the drains is not exceeded, to avoid flooding of adjacent fields.

IV. PERMANENT AND OTHER CROPS – WATER MANAGEMENT AND CONSERVATION RULES (Under Normal Year Water Supply Conditions)

Permanent and other crops are all non-rice crops including, pasture, field crops, row crops, and orchard generally irrigated by flood, row, sprinkler, micro-sprinkler, or drip irrigation.

- 1) Release of tailwater: Water users are expected to efficiently manage irrigation water applications and minimize tailwater releases.

Delivery of water: Water must be used on a continuous (24-hour) basis unless the irrigation can be completed in less than a 24-hour period, including irrigations applied by sprinkler, drip, and micro-jet techniques.

V. WATER MANAGEMENT AND CONSERVATION RULES IN WATER SHORTAGE YEARS (25% REDUCTION IN WATER SUPPLY)

In the event of a “Shasta Critical” water supply designation or in years in which the Board concludes that the District’s water supply will be inadequate to provide water in a quantity furnished in years of average precipitation, the District will implement the following alternatives and actions to supplement and maximize water supplies available to the landowners and water users of the District in accordance with the District’s *Rules and Regulations*.

The following critical water year conservation measures will be strictly adhered to from April 1 to October 31:

- 1) Rice:
 - a) Field spillage:
 - Field spillage will be allowed through a notched weir board with a board on top from April 1 to July 1.
 - No field spillage will be allowed from July 1 to the end of the irrigation season.
 - b) Field drainage:
 - 1 field drainage and re-flood will be allowed between April 1 and July 1.
 - Delivery of water must be terminated at least 7 days prior to end of season draining.
 - c) Upon receiving a verifiable Pest Control Advisor (PCA) recommendation, field drainage and re-flooding will be

allowed to alleviate crop stress. If deemed necessary, GCID will conduct water sample tests to confirm sample readings.

- d) Water depth in flooded rice fields must not exceed 6 inches at the high point of a field.
 - e) Water orders:
 - Water delivery orders for all changes in field delivery flow must be placed with the water operator by 1 p.m. the day prior to water delivery.
 - Water orders for field drainage must be placed with the water operator 24 hours in advance of draining a field.
 - f) Water must be effectively managed to maintain water elevation, minimize water depth fluctuations, and prevent waste of water.
- 2) Other Crops and Water Uses:
- a) Provided that all crop water needs have been satisfied and there is remaining supply, some water may be available for non-crop water uses including rice straw decomposition and duck ponds prior to October 31, but there is no guarantee. Water users wishing to guarantee a supply of water for fall non-crop use, should purchase a sufficient quantity of apportioned water for those uses prior to the primary apportionment deadline.
 - b) Water must be effectively managed to prevent excessive field runoff and waste of water. This includes flood irrigated orchards, alfalfa, pastures and row crops.
 - c) The number of irrigations to alfalfa and irrigated pastures may be limited during the months of April through October. The District will establish the number of irrigations available based upon the water supply allocation the District receives pursuant to its contract with Reclamation.

VI. WATER MANAGEMENT AND CONSERVATION RULES IN EXTREME WATER SHORTAGE YEARS (GREATER THAN 25% REDUCTION IN WATER SUPPLY)

In the event of a “Shasta Critical” water supply designation that results in an allocation of less than 75%, the District will implement the following alternatives and actions to supplement and maximize water supplies

available to the landowners and water users of the District in accordance with the District's *Rules and Regulations*.

The following extreme critical water year conservation measures will be strictly adhered to from April 1 to October 31:

- 1) Rice:
 - a) Field spillage:
 - No field spillage will be allowed from the date the rice is flooded until the end of the irrigation season. Tail boxes are required to be sealed with either plastic or a soil berm.
 - b) Field drainage:
 - Delivery of water must be terminated at least 7 to 14 days prior to end of season draining.
 - c) Additional drainage:
 - Upon receiving a verifiable Pest Control Advisor (PCA) recommendation, field drainage and re-flooding will only be allowed in order to alleviate crop stress due to poor water quality. If deemed necessary, GCID will conduct water sample tests to confirm sample readings.
 - d) Water depth in flooded rice fields must not exceed 6 inches at the high point of a field for the entire season.
 - e) Water orders:
 - Water delivery orders for all changes in field delivery flow must be placed with the water operator by 1 p.m. the day prior to water delivery.
 - Water orders for field drainage under Section VI 1) b) above must be placed with the water operator 24 hours in advance of draining a field.
 - f) Water must be effectively manage to maintain water elevation, minimize water depth fluctuations, and prevent waste of water.
- 2) Other Crops and Water Uses:
 - a) Provided that all crop water needs have been satisfied and there is remaining supply, some water may be available for non-crop water uses including rice straw decomposition and duck ponds prior to October 31, but there is no guarantee.

Water users wishing to guarantee a supply of water for non-crop use, should purchase a sufficient quantity of apportioned water for those uses prior to the primary apportionment deadline.

- b) Water must be effectively managed to prevent excessive field runoff and waste of water. This includes flood irrigated orchards, alfalfa, pastures and row crops.
- c) The number of irrigations to alfalfa and irrigated pastures may be limited during the months of April through October. The District will establish the number of irrigations available based upon the water supply allocation the District receives pursuant to its contract with Reclamation.

VII. VIOLATIONS OF THE WATER MANAGEMENT AND CONSERVATION POLICY

The District staff will attempt to resolve violations of the *Water Management and Conservation Policy* using the provisions of Section II, 5) Waste of Water, of this Policy; and in accordance with the District's *Rules and Regulations*. If a violation cannot be resolved in a cooperative manner, the following violation provisions will be employed:

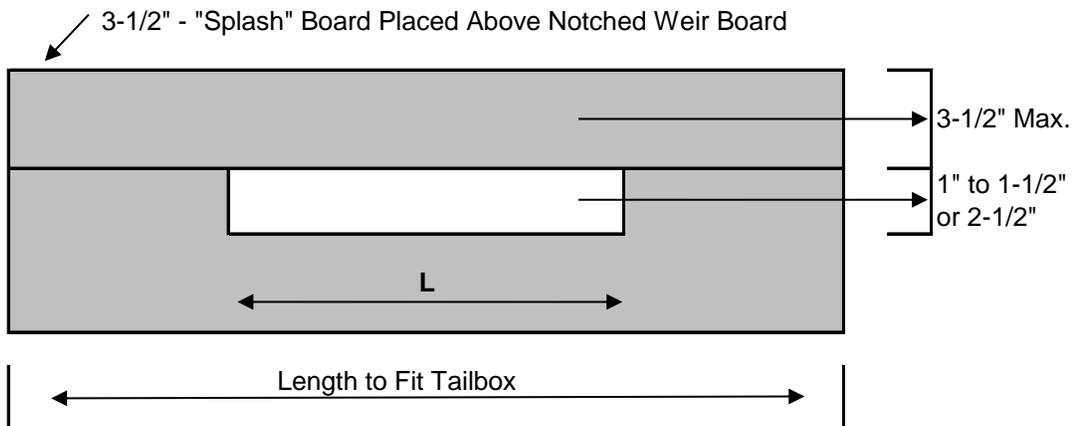
- 1) Uniform enforcement: The District will, to the degree practicable, employ uniform practices regarding monitoring and enforcing its *Water Management and Conservation Policy*. The General Manager and Board will have final responsibility for enforcing the *Water Management and Conservation Policy*.
- 2) Water loss due to rodents, crayfish, or other unanticipated causes: If an interior or exterior field berm, levee, pipe, or ditch is breached due to rodents, crayfish or other unanticipated causes, and water is lost, no violation will be pursued so long as the "designated irrigator" provides for immediate repair of the breach within 12-hours of its discovery by the "designated irrigator," District staff, or any other source. Notice of the breach must be provided to the District immediately.
- 3) Determination of violation: Without excluding other violations previously mentioned, any form of violation such as a failure to notify the water operator of drainage, a breach or loss of water not caused by rodents, crayfish or other causes that cannot be anticipated, or any other violations of these special water management and conservation rules, shall be deemed a violation and notice shall be promptly provided to the person accepting

financial responsibility on the water application. Once the first violation has been issued, District staff will attempt to contact the “responsible party” by telephone to help avoid subsequent violation(s) and allow the situation to be corrected as quickly as possible. A failure by the District to notify the “responsible party” shall not invalidate a violation notice.

- 4) Monetary penalties: A violation upon a field will give rise to monetary penalties as defined in the District’s annual publication of Water Rates and Charges.
- 5) Written notice of violation: Written notice of a violation will be delivered by mail to the person accepting financial responsibility on the water application and will be payable within 10-days of the billing date. Failure to pay the violation within 10-days of the billing date on the notice of violation will result in an additional charge of ten percent (10%) of the total water charge for all of the acres within the field. If the “responsible party” chooses to appeal the violation to the General Manager, fines will not be collected until after the appeal hearing. Any protests must be received promptly, in writing, no later than 10-days after receipt of the violation and include the water user’s detailed account of the alleged violation.

"EXHIBIT A"

GLENN-COLUSA IRRIGATION DISTRICT Weir for Rice-Field Tailbox



1", 1-1/2" & 2-1/2" NOTCH DEPTH vs. LENGTH

