



KENNEWICK IRRIGATION DISTRICT

Policy 8.3

Drought Plan

Policy 8.3 Drought Plan is intended to rescind and replace Policy and Procedure #61 Water Rationing. It is in the interest of the District to engage in long term planning to minimize the effects of future droughts, and to engage in near term planning to minimize the impacts of a drought in future water years. Planning for flexibility is essential, as each drought is different, and there are several variables to consider such as the amount and duration of the snowpack, the amount of carryover storage in the five United States Bureau of Reclamation (USBR) reservoirs, the weather patterns during the irrigation season, Endangered Species Act-related river target flow minimums, and the availability of return flows.

1. Policy Goals:

- 1.1. KID's planning should emphasize an adaptive approach to managing water in future droughts in order to maximize the District's flexibility;
- 1.2. KID should budget annually to build emergency drought mitigation funds in full water supply years in order to be prepared for the costs associated with drought (Reference Policy 2.37 Drought Mitigation Fund);
- 1.3. Within the constraints of the District's water rights, KID should limit the issuance of new water allotments to agricultural uses, infill residential uses, and uses which further implementation of the determined plan of future development embodied in Resolution 2010-34;
- 1.4. KID management is authorized to pursue purchase of supplemental water or access to supplemental water at the 70% supply level and above;
- 1.5. KID should encourage on-farm drought relief wells and on-farm storage ponds for growers to self-insure against future drought and offer technical assistance;
- 1.6. Relegated and recalibrated Yakima River water allotments and conserved water savings should be banked for use in future drought years;
- 1.7. KID should be prepared to pay agricultural landowners (e.g. those larger than ten (10) acres) to fallow their land during a drought to the extent that wise fiscal management of District resources allows, and may adopt an enabling provision in the applicable District policy;
- 1.8. KID recognizes that water users who have a water allotment and who have beneficially used water on their property have protected property rights that are shared in common with all other similar KID water users. In years of adequate water supply, KID does not attempt to regulate or prioritize the nature of irrigation performed by KID water users beyond limiting use to the amount of the annual allotment. In drought conditions, KID will generally attempt to deliver to water users the most equal share of water possible given physical system limitations, instantaneous demand, and available water. However, in severe drought conditions, the district water supply may be reduced to the point that no water users would be able to generate significant benefit if the water is shared as equally as possible. In such circumstances, KID will prioritize water deliveries based on the ability to beneficially use the water, i.e. KID will prioritize the uses to allow the available water to be beneficially used by at least some landowners.

This is supported by traditional beneficial use principles which deplores waste of water, and a use of water that creates no significant benefit would be waste. Further, RCW Ch. 90.54 which directs water managers to allocate water among potential uses and users “based generally on securing maximum net benefits for the people of the state.” See RCW 90.54.020(2). The order of prioritization^{1,2,3} by which types of water uses get more or less of their allotment than the projected pro-ration percentage when there is insufficient water for all users to obtain significant benefit from the most equal share possible shall be:

1.8.1. Perennial crops and plants, including, residential and commercial landscape trees, shrubs and other perennial vegetation, residential fruit and vegetable gardens, and public space trees, shrubs, and perennials, including street trees. Perennial crops do not include hay, alfalfa, lawns, or grasses.

1.8.2. Annual crops

1.8.3. Public space lawns (parks, cemeteries, schools,)

1.8.4. Golf courses

1.8.5. Residential lawns and annual ornamental gardens

1.9. KID management is authorized to direct staff to prepare plans to be ready to drill emergency drought relief wells quickly if authorized by the Governor, and should also be prepared to assist farmers with existing wells to supplement with groundwater during a drought, if such actions are determined to have a beneficial impact on water supply (Reference WAC 173-166-070).

1.10. Projects in the capital program should be prioritized to minimize the effects of drought, such as re-regulation reservoirs, control gates, automation, etc.

2. Monthly supply percentages will vary in each drought depending on the adopted Total Water Supply Available (TWSA) forecast, but the following supply scenarios shall be considered for initial planning purposes:

2.1. Supply Scenario of 85%

- 89,409 total acre-feet (amount delivered to head of Main Canal)
- Pro-rationing occurs, but no drought proclamation is issued by Ecology.

2.2. Supply Scenario of 70%

- 73,631 total acre-feet (amount delivered to head of Main Canal)
- Yakima River Basin Water Enhancement Project (YRBWEP) drought planning level.

3. In responding to a near term drought forecast, the District will consider the following actions to optimize the available water supply:

3.1. Maximize the available USBR water supply by:

- 3.1.1.** Minimizing operational spills through canal management and automation;
- 3.1.2.** Encouraging temporary water allotment transfers under Policy 4.21;
- 3.1.3.** Maximizing fallowed land within the KID through incentives;
- 3.1.4.** Capturing return flows (e.g. Amon Wasteway to the CID Main Canal);
- 3.1.5.** Precluding the delivery of excess water;
- 3.1.6.** Utilizing USBR storage water if available (up to 18,000 acre-feet as pro-rated).

3.2. Utilize the following flexible water supply measures, as needed:

- 3.2.1.** Remove all available water out of short term trust, including the associated drive water (requires a written notice to Ecology thirty (30) days before intended diversion date);


- 3.2.2. Supply Pressurized Service Area (PSA) 120 directly from the East Badger Drain (West Fork Amon) with a temporary pump;
 - 3.2.3. Prepare to run changes/transfers through the Water Transfer Working Group (WTWG) quickly (Reference WAC 173-166-080);
 - 3.2.4. Maximize the available supply in order to minimize the need to purchase water;
 - 3.2.5. Activate supplementation measures;
 - 3.2.6. Supplement with non-USBR water in canals (e.g. ground water sources, municipal sources, other irrigation district sources, etc.);
 - 3.2.7. Water should be available to some urban users at each individual home from the cities. Communication and coordination with the cities is important to ensure optimum water availability for users;
 - 3.2.8. Seek to obtain additional supply through the following of land in upstream districts (Sunnyside Valley Irrigation District, Kittitas Reclamation District, Yakima-Tieton Irrigation District, Naches-Selah Irrigation District, etc.);
 - 3.2.9. Obtain contracts/Memorandum of Understandings for supplemental water sources before the crisis hits;
 - 3.2.10. Pursue other sources of supplemental water.
 - 3.3. Water User Education Measures and Communications:**
 - 3.3.1. Get the message out to water users and water masters early to reduce water usage through radio/TV/direct mail/print media/website;
 - 3.3.2. Emphasize efficient watering practices before a drought, and even more so during a drought;
 - 3.3.3. Explain the water supply supplementation options;
 - 3.3.4. Explain what steps the District is taking to maximize and enhance water supply;
 - 3.3.5. Be consistent in the messages;
 - 3.3.6. Get the message out that there will be water supply limitations before there is a drought;
 - 3.3.7. Anticipate the need to reactivate the duties performed by the Water Coordinator during prior drought years;
 - 3.3.8. Clarify the District's enforcement policy for water delivery in drought years.
 - 3.4. Treat all USBR supplied water users equitably:**
 - 3.4.1. Reduce Columbia Irrigation District supplied customers to the same level as USBR project supplied residential customers from the canal system, unless they are supplied in another manner;
 - 3.4.2. Those served from the wasteways and drains can be given a more full supply from on-project return flows that would otherwise go unused.
 - 3.5. Be prepared to respond quickly to advocate for appropriate state funding from the Legislature, and for drought relief funds from Ecology.**
4. The District will plan for long term drought mitigation measures by considering the following actions to optimize the available water supply:
- 4.1. Protect the current water rights that KID holds;
 - 4.2. Prepare for the impacts of climate change on water supplies;
 - 4.3. Continue to explore use of Columbia River water from the 1990 and 1992 permits;
 - 4.4. Build a portfolio of diversified water rights as availability of additional water rights and wise fiscal management of District resources allow;
 - 4.5. Explore implementation of the YRBWEP Integrated Plan;

- 4.6. Explore the electrification of pumps in the Chandler Pumping Plant;
- 4.7. Encourage change of urban and residential water user practices to improve on water use efficiency;
- 4.8. Invest in capital improvements which maximize efficiency;
- 4.9. Bank water allotments from relegated properties and from recalibrated properties;
- 4.10. Incentivize the elimination of the remaining rill irrigation practices in the District;
- 4.11. Ensure that no water is being applied to land lacking a water allotment;
- 4.12. Install system-wide automated check gates at key locations to better operate the canals in low flow conditions and to minimize operational spills;
- 4.13. Improve measurement capabilities at the turnouts to prevent the over-delivery of water;
- 4.14. Pursue residential water efficiency grants;
- 4.15. Continue aggressive water user education efforts to promote a culture of residential water use efficiency;
- 4.16. Explore possible District actions which would encourage xeriscape of all types.

¹American Water Works Association (2011). *Drought preparedness and response*. Denver, CO: Author

²Pacific Northwest Project (2012). *The economic importance of western irrigated agriculture: water values, analysis methods, and resource management decisions*. Kennewick, WA: Author

³American Planning Association (2013). *Planning and Drought*. Chicago, IL: Author

Date	Rev. #	Action	Signature
Sept. 20, 1994	0	Policy #61 Water Rationing	John C. Pringle Board President
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Mar. 18, 2014	0	Initial Approval	Kirk Rathbun Board President
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