



IN THE FLOW

KLAMATH IRRIGATION DISTRICT

Fall 2020 Newsletter

15 October marked the end of a very difficult irrigation season for Klamath Irrigation District. **The total amount of water made available by Reclamation was not enough to fulfill all water rights within the Klamath Irrigation Project.**

Klamath Irrigation District is under contract to deliver irrigation water to eight other Districts, 224 individual Warren Act contractors, and several annual water contracts covering 59,850 acres within our District boundary and over 122,000 acres in total.

This year six of our supported Districts and all individual Warren Act contractors were limited by Reclamation to 0.25 acre feet of water per acre under contract. This supply was exhausted on 8 May resulting in numerous requests to transfer water within and external to the District or rely upon supplemental well permits to augment limited irrigation water supply.

The District was forced to shut off deliveries to Warren Act contractors without a Reclamation approved transfer, an Oregon Water Resources Department issued supplemental well permit, or water otherwise made available through a ground water exchange from Tulelake Irrigation District.

Klamath Irrigation District was also forced to change from a demand based system to a supply based system for the first time in our history and modify our delivery policy for 2020. This change, in addition to inter-District coordination, allowed the District to extend the available supply to 15 October.

Water Year 2020: Too little water, too much uncertainty, and hardship

DISTRICT MANAGER'S NOTE: District policies are grounded Oregon State Law, the Code of Federal Regulations, in addition to County and City codes. Violations of our policies result in damages to your neighbors, damages to our infrastructure, a violation of law, or otherwise result in unnecessary chaos for your ditch rider and neighbors.

In 2019, the primary violations reported involved unacceptable gate practices. These violations are still being tracked and undergoing resolution with various property owners.

In 2020, the primary violations involved unauthorized taking of irrigation water without calling the water on and off. This resulted in significant damage to numerous canals, inadequate deliveries to authorized water orders, and unnecessary spill.

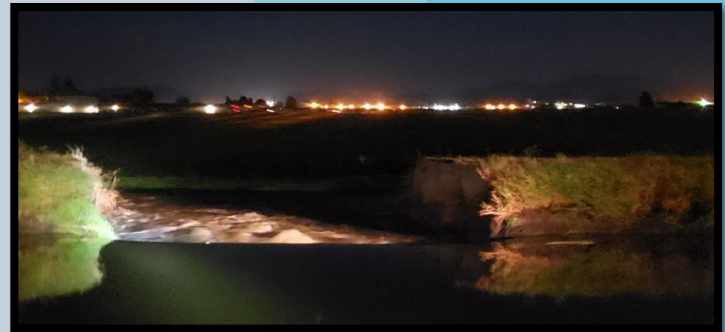
In this year, with our low-flows, this violation exasperated conditions. In many places, on a normal year in the District, it takes over 48 hours to add or remove water diverted from Upper Klamath Lake to the canal; this year this process was observed to take in excess of 144 hours for the end of the D canal and laterals.

The District must enforce our policies to maintain good order and discipline, to eliminate waste, and to reduce operations and maintenance costs for the Patrons. For 2020 we increased violation fees to \$100.00 for the first offense, \$1,000 and season curtailment for the second offense, and reserved the right to deny deliveries in 2021 for continued violations.

ALL water orders **MUST** be called on **AND** off as per our Patron Water Management and Delivery Policy. This is unchanged in the history of the District. **This year, several Patrons at the end of ditches ran out of water due to negligent neighbors not adhering to the policy.**

Furthermore, similar to 2019, these events result in damage to the canals as chaotic water levels and flows result in blow-outs, allowed for burrowing animals to dig below the water line, and create excess spill which results in costly pumping of the drains.

Patrons O&M assessments paid for a number of locks and chains which had to be placed on structures in 2020. Patron's found cutting these locks were fined.



2021 KLAMATH IRRIGATION DISTRICT BOARD OF DIRECTORS UPDATE:

Director positions for Zone 3 and 4 were up for election in 2020. All nominations were due to the K.I.D. HQ no later than the close of business on 6 October. Both incumbent's submitted qualified nomination packets without opposition.

As per ORS 545.137(4) both incumbents were unanimously declared as Directors for an additional 3 year term without the necessity to incur costs for an election.

**Your 2021 Board of
Directors are:**

Ty Kliewer – Zone 1

Jerry Enman – Zone 2

Grant Knoll – Zone 3

Dave Hamel – Zone 4

Ryan Hartman – Zone 5

BOARD OF DIRECTOR ELECTIONS

K.I.D. patrons who wish to vote in future elections must be registered with the District. This registration is different from being registered for County, State, and Federal elections. The process can be more complicated as well. For this reason, the District encourages early registration.



The mission of Klamath Irrigation District is to acquire, maintain, assure, and deliver an adequate water supply for beneficial use on qualified land with the Klamath Project. We represent our Patrons before government agencies, the legislature, Congress, and in such forms as appropriate for the perfection and protection of their water rights. We defend the District from actions which would diminish our effectiveness and function. We further promote the conservation of water, soil, and other natural resources.

KLAMATH IRRIGATION DISTRICT LEGAL UPDATE

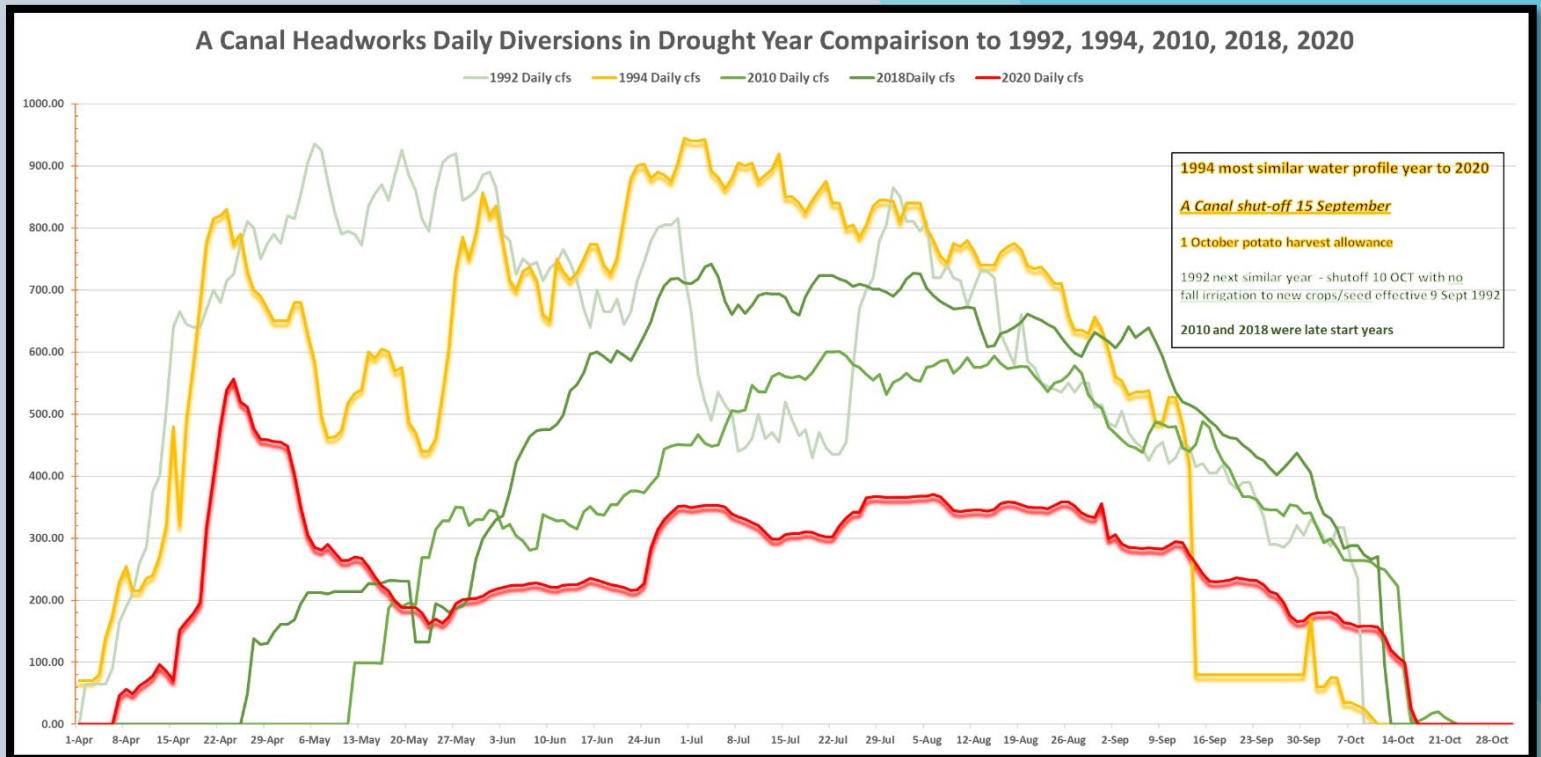
On 25 September 2020, Magistrate Judge Mark D. Clarke filed his findings on the Hoopa Valley Tribe and Klamath Tribes motion to intervene and dismiss K.I.D.'s and other water users lawsuits against Reclamation to protect the vested water rights of families, farmers, and Ranchers of the Klamath Basin. The Reclamation Act requires Federal compliance with state water law; however, the tribes motion to intervene for the purpose of dismissal was granted. This tactic has essentially provided water users with little to no ability to have grievances heard in Federal Court.

In April 2020, it became abundantly clear Reclamation planned to illegally release stored water from Upper Klamath Lake for in-stream purposes. Klamath Irrigation District immediately requested Reclamation to stop this planned violation of water rights and further requested the Oregon State Water Resources Department (OWRD) to prevent the release; this resulted in emergency litigation against OWRD as no action was taken to prevent the unlawful release of stored water. Following the emergency, K.I.D. was forced to take further litigation action against OWRD for their failure to prevent and control the release of stored irrigation water from Upper Klamath Lake.

On 13 October 2020, Judge Bennett issued an order directing OWRD to "immediately stop the distribution, use and/or release of Stored Water from Upper Klamath Lake without determining that the distribution, use and/or release is for a permitted purpose by users with existing water rights of record or determined claims." At the time of this newsletter, OWRD has submitted an appeal and request to stay the order. Furthermore, the Yurok Tribe has petitioned to intervene in the case with the intent to dismiss.

WATER MASTER REPORT

This year Klamath Irrigation District diverted 110,881 acre feet of water from Upper Klamath Lake through the A Canal, an additional 16,900 acre feet was pumped into the system from our Miller Hill Pumping Station, we were able to recapture 19,887 acre feet of water from our primary pumps. We also added water to the system from the Klamath Basin Improvement District well and other private wells across the District. We estimate our uncaptured spill to TID was 17,405 acre feet.



MAINTENANCE REPORT

April 2020 began our irrigation season with over 4" short of precipitation. The canals were very dry resulting in a significant amount of water being absorbed (lost) during water-up. With dry canal banks, and the rapid rate (2 weeks) of getting the system operational, some of the sandier soils created maintenance problems we don't normally see during water up. Above normal canal breaks occurred during water up.

The A Canal Headworks is automated through a computer algorithm which is not calibrated below 300 cubic feet per second (cfs). When we were forced to bring diversions from the A Canal under the programming, the computer's programmed logic struggled to compensate. This was extremely problematic after 8 May as

we had to begin experimenting with the nearly 20-year-old SCADA system to ensure we did not lose the hydraulic head pressure from the A Canal. This problem became worse after 1 October when we had to switch to manual mode and make educated estimates as to how the adjustments could meet our demand.

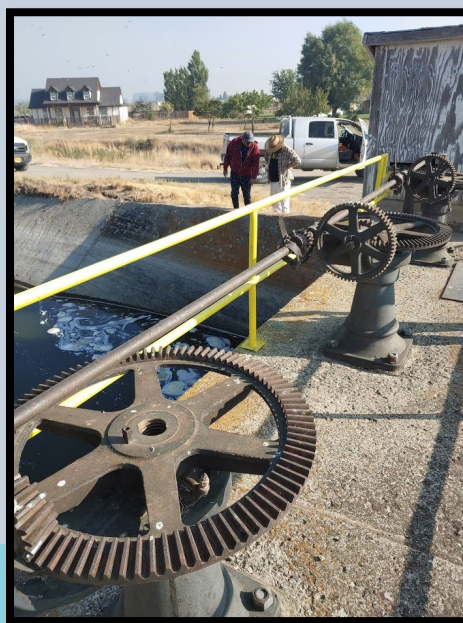
Of course there was not enough water to turn the C-Hydropower turbine for most of the year; this infrastructure regulates the A Canal level, the flow to the B canal, and the flow to the C canal. When it was running, we were worried about damage created by capitation and other vibrations.

Therefore, we ran the A Canal lower than normal as the C-Hydropower plant was not operational for most of the year. This lowering of the A Canal level caused issues for pumpers not able to access the water level...and also the need to adjust B Canal operations to push water uphill through the Olene Gap. The lack of head pressure resulted in higher reliance on pumps from the Lost River (one of which we lost early in the season).

The low flows in the canals also resulted in lower than normal operational levels. When farmers failed to call on or off water, the canals fluctuated wildly resulting in more breaks or sluffing of the canal banks.

Throughout the season, attempting to regulate canal levels and flow rates was significantly problematic. Adjusting under or over deliveries across the D system from Upper Klamath Lake took over 96 hours to see the modifications.

At the end of the season, sluffing of the banks was observed across the district as we attempted to be as efficient as possible and ditch water levels were rapidly lowered to move water to others areas of the District.



OPERATIONS REPORT

Suburban areas were limited to a week on and a week off resulting in significant angst with suburban patrons believing they were receiving less water than other "A" contract holders...this was not the case, but a misperception. Suburb lands served by K.I.D. were authorized and delivered the same allocation as all other K.I.D. Patrons; over 2.2 acre feet per acre was delivered to turnouts and pumps in the suburbs.

Transferring water between properties, contracts, and groundwater required 3 different mechanisms with various stakeholders involved. Water transfers from "A" to "A" within the District was performed by the District with local approval. Ground water transfers, with an approved OWRD emergency permit, were also approved by the District with some additional agreements and accounting requirements for both the District and the landowners. Transferring surface water to other Districts or "B" contracts required Reclamation approval...a process which took several weeks to work the bugs out of and resulted in some contracts going through the process 4 times before they were approved.

DRA enrolled lands...a process yet to be experienced by this management team to validate claims. An initial review indicates a difficult process before us as the overlays submitted are not always entire tax lots, and of course some tax lots in the District have 3-4 different contracts or water rights associated with them.

K.I.D. has historically utilized a demand-based delivery system; meaning a farmer orders water and could anticipate the delivery of the water within 12 hours. To make the supply last, K.I.D. had to shift to a supply-based delivery system with monthly limits to acre feet per acre, daily ride limits to cfs, total canal cfs limits, and an increased cost to pumping and reuse of the water. This resulted in waiting lists across the District. This method of delivery is not conducive to row crops which need water on a more predictable and regular schedule. Effectively, this policy could have destroyed some crops and adjustments had to be made.

Inter-District coordination was critical to the ability to run as long as K.I.D. did. Had other Districts demanded water be divided between Districts based upon acres within the District vs the design of the infrastructure, K.I.D. would have exhausted its portion of the supply much earlier as K.I.D.'s system is about 64-68% efficient. Our spill and other losses are typically captured by other Districts, resulting in their advantage in drought years if an acre/acre allocation were made.

Another challenge we had to overcome was demands to deliver water per water right in the ACFFOD vs Contracts. As water is flowing or stored in Upper Klamath Lake, K.I.D. holds the water rights for its Patron's to divert the water for beneficial use without waste. Growers on waiting lists were demanding more water to be pulled from the reservoir to meet their demands, which would have ultimately resulted in early shut off for K.I.D. and other Districts. While this is legal and within the water right, putting the District into a position where crops could not be finished, or negatively impacting other Districts was high on K.I.D.'s management team and Directors list of concerns and balance we had to maintain.

URBAN / SUBURBAN IRRIGATION SYSTEM MAINTENANCE

The minimal amount of water available this year required implementing a monthly limit and maximum duty available to senior water right holders. As many of you note, Enterprise Irrigation District was only able to deliver a miniscule amount of water provided to them through Tulelake Irrigation District from a ground water exchange.

On 14 May 2020, the Board of Directors approved a policy change for 2020 limiting ALL water users to 0.5 acre feet of water per acer per month in an effort to spread supply to critical periods of the growing season. As the suburbs do not have individual turnouts and the suburbs were already on a week on-week off schedule, further reductions to the suburb deliveries were not implemented.

The full allotment was delivered in, June, July, and August with partial deliveries in May and September resulting in over 2.2 acre-feet per acre delivered to the suburban system as limited by supply for ALL acres across the district.

MAINTENANCE SEASON BEGINS

Priorities of work this maintenance season are:

- Infrastructure Inspections
- Rebuild canal banks damaged by low flows
- Reclamation Punch List
- Check Structure Repairs
- Turnout Structure Repairs
- Pumping Plant Maintenance
- Piping Project Preparation
- SCADA Modernization
- Modern Water Ordering System