Irrigation Leader

Third Edition

KENNEWICK IRRIGATION DISTRICT

HOMEOWNER'S EDITION

Making the Desert Bloom . . . Since 1917

Kennewick Irrigation District Mission Statement: The Kennewick Irrigation District will deliver irrigation water, protect water rights, and enhance supply, as authorized by Washington State statutes and federal laws, for the maximum benefit of our community.

KID Priorities: Service to Community and Care of the Environment | Stewardship of District Assets, Water Rights, and Supply | Risk Management and Fiscal Responsibility | Infrastructure Maintenance and Development

Leadership:
Shane Leonard, *District Manager*
Jason McShane, *Assistant District Manager*
Stuart Dezember, *District Treasurer/Comptroller*
Ben Woodard, *Operations & Engineering Manager*
Daniel Tissell, *Engineering Manager*

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Water Off Hours:
Monday–Thursday (closed on Fridays)
8:00 a.m.–5:30 p.m.

Customer Service:
509-586-9111

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Address:
2015 S. Ely Street
Kennewick, WA 99337

/KennewickIrrigationDistrict

Kennewick Irrigation District

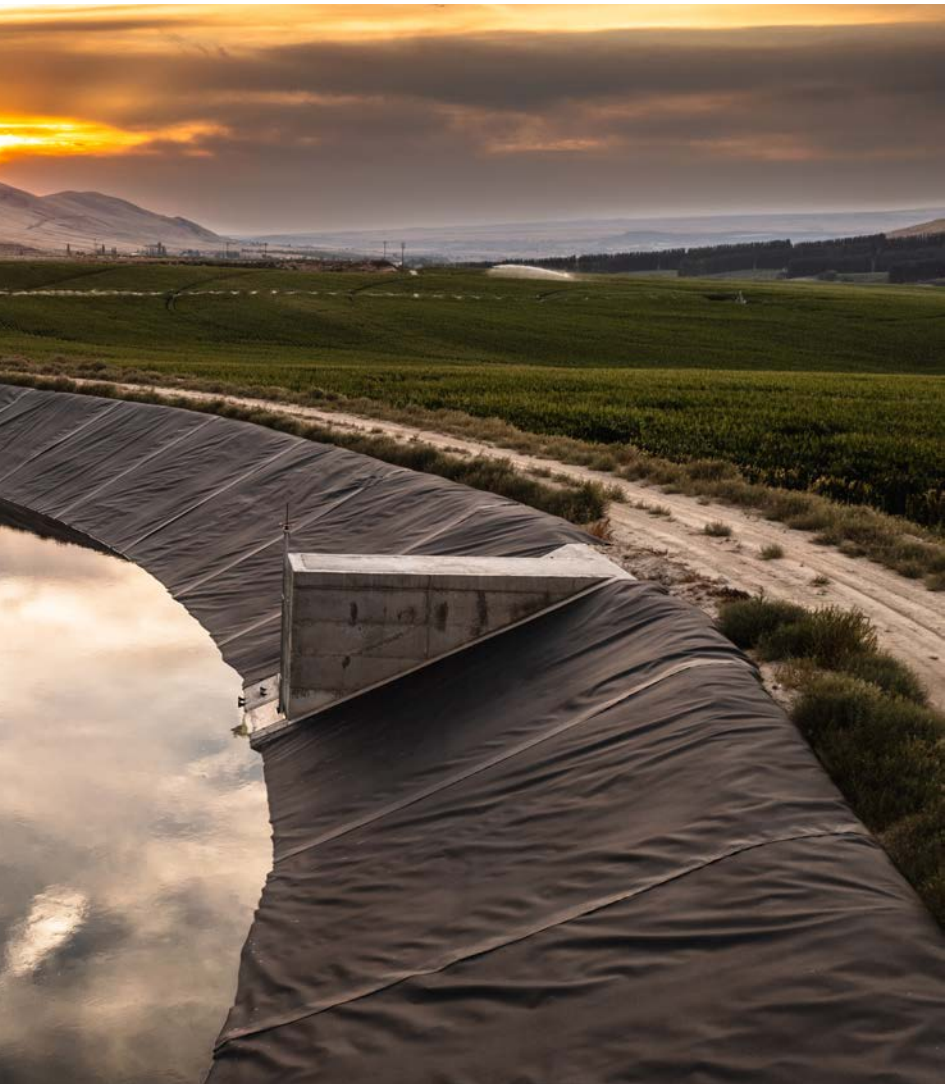
kennewick.irrigation.district

kid.org

CONTENTS

YOUR DISTRICT

Third Edition



COVER PHOTO:
Kennewick Irrigation District Highland Feeder Canal.
Photo by Matthew Berglund.

KID PROJECTS

Irrigation Leader

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Letter From District Manager Shane Leonard

As the district manager, I would like to welcome you to the Kennewick Irrigation District (KID). KID was originally formed as a special purpose district in the state of Washington in 1917, but it originated much earlier, dating back to the late 1800s. The KID of today began in the early 1950s, when the Bureau of Reclamation, in partnership with the district and water users, built the canal system used today.

KID is one of six Reclamation Yakima River Basin Projects. The others are Kittitas Reclamation District, Sunnyside Valley Irrigation District, Roza Irrigation District, Yakima Tieton Irrigation District, and Wapato Irrigation District, which is operated and maintained by the Bureau of Indian Affairs. Our water right sets the irrigation season for us to deliver 102,674 acre-feet of water from April 1 to October 31 in any given year. KID is a proratable district, meaning that in times of drought, the water available to KID decreases. Numerous factors, such as snowpack, snowmelt, reservoir levels, and return flows are used to determine the degree of proration.

Why You Are in the District

Your property lies within the KID boundaries established decades ago by community leaders in agreement with Reclamation. The size of the district is 20,201 currently irrigated irrigable acres, which are inside a larger project boundary of over 55,000 acres. Our water right limits the total amount of acres we can irrigate at any given time.

KID was initially built to serve the agricultural community in the Tri-Cities area. Today, the majority of our customers live in residential developments, and the shift from farmland to urbanization is expected to continue into the future. This presents challenges because the canal system was designed for farmers who had to order their water. KID balanced the system with an agricultural demand curve, not an urbanized, on-demand system.

Having over 25,200 active accounts that represent over 60,000 diverse individuals, 12,000 acres of agriculture and 9,000 acres of urban, rural, and residential customer acres is challenging, and we staff accordingly. During the water season from April 1 to around mid-October, KID has staff on a 24/7 schedule. We have 62 dedicated employees who deliver water and make repairs on a system that has 74 miles of open channel canals, 300+ miles of piping, and over 120 pump stations. We have a Customer Service Department that is structured like a call center. You can call it to report a leak; poor water pressure; or, in times of emergency, a flood. Customer Service will dispatch maintenance crews to address your issue. After hours, we have an answering service that will provide your information to the staff working the after-hours shifts.

The KID board of directors and staff are community members and your neighbors. We are stewards of a precious resource and an integral part of the economic vibrancy of our community. I welcome you to our district. ■

Customer Service

KID headquarters in Kennewick, Washington.

The Customer Service Department is a vital part of the Kennewick Irrigation District (KID). We are here to support you in a variety of ways, including answering your questions about water delivery, taking notifications about system breaks or lack of water pressure, account payments, and answering a variety of billing related issues.

After the mid-March mailing of our annual assessment, each year our customer service team receives an average of 6,000 customer calls by the end of March. Callers generally pose questions about their irrigation assessment, including when it's due and when the irrigation water will be turned on.

Once the first of April comes around, KID's customer service team goes into overdrive, averaging more than 17,000 calls in 25 working days, including Saturdays. April is the team's most demanding month, because the canals are filled and all irrigation systems are coming online. The return of water to our district triggers many calls regarding breaks, leaks, and floods. While unfortunate, these problems are inevitable, as they develop during the cold winter months and cannot be detected until water infiltrates back into the system (commonly referred to as *start-up*). At the same time, our team is processing thousands of customer payments.

Education is a big part of what customer service does for KID. Many customers do not understand why breaks cannot be addressed during the water-off (fall and winter) months or what they can do to minimize problems within their own systems. Customer service uses these opportunities to share the effects of very cold weather on the system, how breaks can occur and how they can best protect their own system by properly maintaining filters and pipes.

KID's Customer Service Department is also an important communication link between irrigation users and our Operations and Engineering Departments. When customer service receives a report about issues that need to be addressed, we communicate those problems to our operations and engineering staff in a concise and efficient manner so that they can be addressed as quickly as possible. In emergency situations, when safety or property damage is possible, customer service knows who to call for immediate help.

In the heat of the summer, warmer temperatures cause an abundance of algae growth in KID's canals, creating plugs and blockages that affect water delivery to our customers. We encourage our irrigation users to call and report low water pressure or outages. This helps guide our operations team to areas needing attention and prevents damage that could occur if blockages go unreported. These calls are also an opportunity to advise customers to clean and check their filters often to avoid a delay in water delivery and possible damage to their own system.

The Operations and Customer Service Departments work together to update the water status map on the KID website (kid.org) with current outages and repairs. The map is designed to keep customers informed about the status of irrigation water without having to call.

When temperatures begin to drop in the fall, incoming calls about irrigation begin to slow down. Less water is used, sprinkler lines are blown out, and the KID irrigation water is turned off. During this time, the Customer Service Department's attention is focused inward, helping our administration to recoup from the spring and summer activities and to prepare for the next water-on. No matter the time of year, KID's Customer Service Department is always happy to hear from you. ■

How to Report a Problem

Our Customer Service Department can be reached during business hours for issues that may occur during the water season and after water has been turned off.

1. You can call our office during business hours at 509-586-9111.
   Summer hours (March–October): Monday–Friday 8:00 a.m.–5:00 p.m.
   Winter hours (November–February): Monday–Thursday, 8:00 a.m.–5:30 p.m.

2. If you have an emergency after business hours, call our after-hours number at 509-586-8000 to reach our answering service.

3. You can e-mail customer service anytime at customerservice@kid.org. However, please be aware that e-mails are read during business hours. Please call our after-hours number at 509-586-8000 to report a problem.

4. If you see a burrowing animal hole or activity near our canal, we have a button on the homepage of our website at kid.org to report such matters. This button will direct you to a form you can fill out to report the activity; you can also attach a photo. Once submitted, this form will be sent to our customer service team. Operations personnel will be dispatched to investigate and take action if necessary. ■

Elections

Kennewick Irrigation District (KID) welcomes community members who want to get involved with the district. We encourage the public to visit our website to discover ways to become engaged.

Your Board of Directors

KID is directed by a five-member board of directors. Directors attend board meetings and serve on committees, including the Operations and Engineering Committee, the Finance Committee, and the Realty Committee. The board sets policies to guide staff in fulfilling the mission of the district.

Open Public Meetings

Board meetings are scheduled for the first and third Tuesdays of each month at 9:00 a.m. and are open to the public, either in person or by Zoom. Zoom information is posted before meetings on kid.org. Minutes from the board meetings are available on kid.org.

Director and Elector Eligibility

Irrigation district elections differ from general elections. They are governed by Washington State law under RCW 87.03. Information about how to be a candidate for a direct seat can be found on kid.org in October each year. Candidate petitions are due by 5:00 p.m. on the first Monday of November.

The eligibility requirements for being an elector (voting) or a candidate are: being 18 years of age, a U.S. citizen, and a Washington State resident and holding title or evidence of title to land in the district.

Your Vote Matters

Voting in person is held at the KID Administration Building on the second Tuesday of December from 1:00 p.m. to 8:00 p.m. Absentee ballots can also be issued to any elector who signs and returns an absentee ballot request form before election day, certifying they cannot conveniently be present to vote in person. Information and forms for absentee voting are available in November on kid.org.

If you have any questions regarding the election process, please call us at 509-586-9111. ■

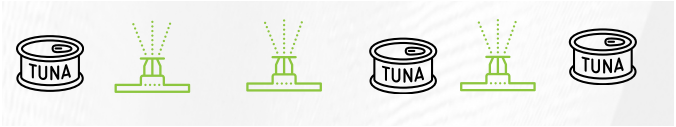
Training Your Lawn

Tips for training your lawn to need less water in times of drought

How Much Should You Water Your Lawn?

To promote drought resilient lawns

We recommend watering less frequently but for longer durations to cultivate a deeper root system.



The Tuna Can Test

How to measure the water your lawn is receiving

Directions

1. Empty and rinse out 4-6 tuna cans (you will need one for each sprinkler zone).
2. Use a permanent marker to mark the inside of each can ½ inch from the bottom.
3. Place empty cans in various spots on your lawn (one in each sprinkler zone).
4. Turn on the sprinkler system for 15 minutes.
5. Check that each can is filled to the ½ inch mark. If it is below the line, turn on sprinklers until the line is reached.

Now you know how long your sprinklers need to run in order to give your lawn ½ inch of water. Lawns need about 1-1½ inches of water per week depending how hot it is, including rainfall. Schedule your sprinklers accordingly.

THE GOAL

Apply enough water to penetrate the root zone.

You can do this by WATERING DEEPLY. Timing your watering schedule for when it is needed encourages roots to grow deeper.

Don't forget, we live in a DRY, ARID CLIMATE. Our area averages only around 7" of precipitation annually.

Common Grass Types in Our Area

Kentucky bluegrass | fescue | ryegrass | bentgrass

Generally, a bluegrass lawn should be watered to moisten the soil 6-8 inches down. For most other grasses, the water should penetrate 8-12 inches.

Common Soil Types in our Area

sandy | loamy | clay

For sandy soils, 1 inch of water will penetrate 12 inchs of soil. In general, sandy soils may require watering three times per week for approximately 20 minutes each time. For loamy soils, 1 inch of water will penetrate 6-8 inches. In general, loamy soils may require watering two times per week for 30 minutes. For clay soils, 1 inch of water will penetrate 4 inches of soil.

Prevent Water Waste

- Regularly check that sprinklers are aimed properly to make sure they aren't watering streets and sidewalks.
- Use a bucket, sponge, and hose with a sprayer on the end when washing the car.
- Make sure faucets and hoses are turned off completely when not in use.
- Reuse "gray" water from tubs, basins, and laundry to apply to vegetation.
- Sweep driveway instead of spraying it with clean water.
- Check to verify sprinkler system is operating properly, specifically looking for broken sprinkler heads or leaky valves.
- Turn off sprinklers in rainy or windy conditions.

KID's Responsibility Within Your System

Helping you understand what your responsibilities are within the system and the role of the Kennewick Irrigation District (KID).

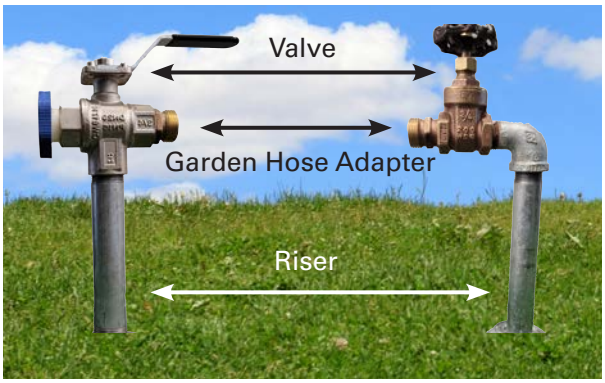
Lids

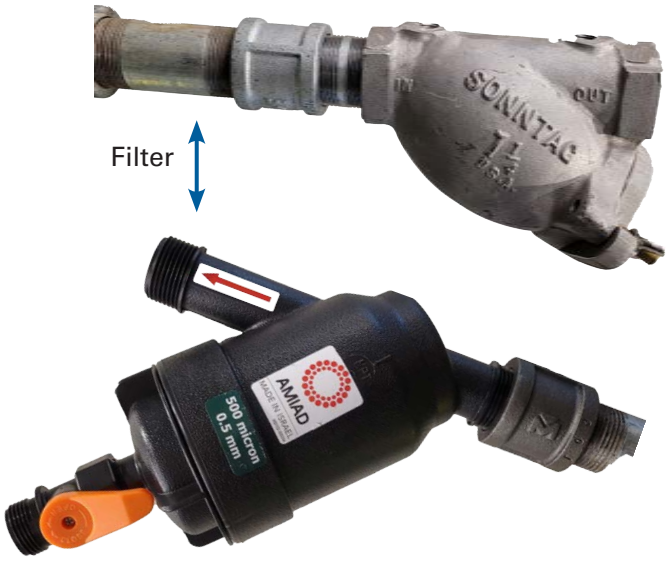
Your irrigation system may be located under one of these lids. If the purple lid is damaged or locked, please call us for a replacement or if you need to gain access to your system. We recommend installing a secondary shut-off valve outside this box in case of emergencies.

Green lids are your responsibility and can be replaced at most irrigation supply stores.

Valves and Risers

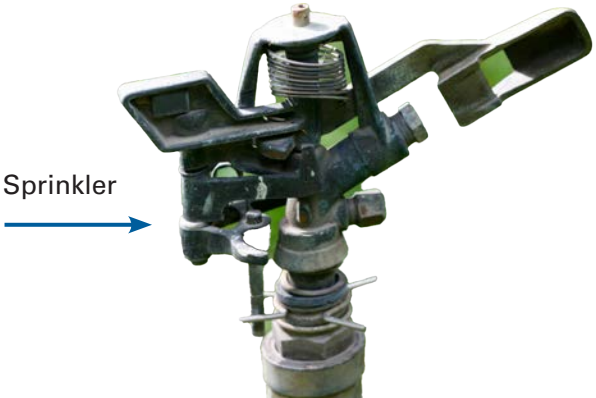
KID is responsible for repairing or replacing the riser and valve that provides irrigation water to your system.





Filters and Sprinklers

You are responsible for your sprinkler maintenance, garden hose adapter, and the filter within your system.



Assessments: How Billing Works

The Knnewick Irrigation District (KID) delivers irrigation water to 20,201 acres of land and to more than 62,000 people. In accordance with state law, customers receive assessment statements each year by April 1. Customers can pay the assessment in full or divide the assessment into two payments; in that case, then the first half is due April 30, and the second half is due October 31.

The assessment pays for the irrigation services provided by KID to deliver water to the irrigable parcels. The assessment is determined by the customer's parcel size and the infrastructure used to deliver water to the parcel. For the base rate and charges breakdown, visit kid.org/rates.

Assessments are a direct lien against the property, and failure to pay results in foreclosure. Foreclosure is Washington State law; it is not an option that KID chooses. KID charges a delinquency fee on May 1 and November 1 for past-due amounts and an interest rate of 1 percent per month, pursuant to state law. KID has a policy through which a customer may request forgiveness of up to $40 in penalties and interest. This request is only valid once during a customer's ownership of a property.

Assessments can be paid by a customer's mortgage company; however, KID only has a legal relationship with the customer/landowner and does not have a legal relationship with mortgage companies. If the mortgage company fails to pay or pays an assessment late, it is the customer's responsibility to pay the assessment and any account fees, late fees, penalties, or interest charged to the account. To find out if your mortgage company is paying the assessment, contact them and ask to speak with the escrow or tax department.

Government fees are set and collected to pay for daily operating costs, maintenance for aging infrastructure, and capital improvement projects that extend the life of our infrastructure and improve the system and to pay our staff. We assess our customers the proportionate share of all costs to maintain and upgrade the system.

If you have questions about your assessment, our Customer Service Department is always happy to help. You can contact customer service by calling 509-586-9111 or by emailing customerservice@kid.org. ■

The Helping Hands Program

Sooner or later, we all need a helping hand. That's why the Kennewick Irrigation District (KID) participates in a program that makes it easy to help others who may be in danger of losing their property because they can't pay their KID assessments. There are many reasons someone might find themselves in need of help: medical emergency, family problems, or unemployment. No one expects those kinds of problems, and few people can handle them alone.

The Helping Hands program is funded by a portion of the revenues collected from delinquency fees as well as donations from customers and concerned neighbors. In 2011, KID started charging a delinquency fee on all past-due accounts. Thirty percent of the delinquency fee KID collects goes toward funding the Helping Hands program.

Customers interested in donating to the Helping Hands program may do so by using the option available on their payment coupon or by coming into the office located at 2015 S. Ely St., in Kennewick.

All donations are tax deductible, and every dollar donated goes to a customer in need.

For more information, or to apply for the Helping Hands program, please contact our Customer Service Department at 509-586-9111. ■

CANAL SAFETY

Canals Are Not for Play—Stay Away!

When the Kennewick Irrigation District (KID) was first established back in 1917, its primary function was to provide irrigation water to local farms and orchards. Flash forward 100 years, and the Tri-Cities has seen exponential residential growth. Canals are now a common feature in many neighborhoods, providing a valuable source of irrigation for yards, parks, and schools in addition to agriculture. As the influx of new residents to the area continues to grow, many may not realize that canals can also be incredibly dangerous. It is crucial to understand the risks associated with canals and how to stay safe when near them.

A washer and dryer is removed from the canal system

The Risks

Current | The surface of the water may look calm, but the speed of the current can vary depending on the location, sometimes reaching up to 3 miles per hour, or 4.5 feet per second. As a public safety example, in 2012 a child's shoe was dropped into the canal to provide a visual of how fast the water travels. In 2 minutes, the shoe traveled 540 feet and within 5 minutes, it was about a quarter mile away from where it was dropped.

Debris | Not only can mother nature send all sorts of tumbleweeds and trampolines via the wind into the canals, but we find that people unfortunately dump a variety of objects into them as well. From tires and appliances to grills and scrap metal, these dangerous objects could be lurking under the water.

Chemicals | During the hot summer months, algae forms along the surface of the water, causing an abundance of clogged filters and pipes. To combat this, KID treats its canal water with chemicals. These chemicals, along with the raw, untreated water of the Yakima River, could be harmful to you or your pets if swallowed.

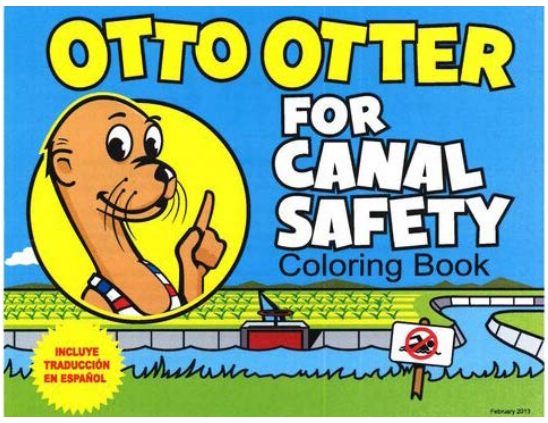
How to Stay Safe

Float | Should you fall into a canal, try to keep your head above water and float. Slowly work your way over to the side while calling for help. Do not try and fight the current or stand up, because you may not see dangers below the water.

Call 911 | Should someone you're with fall into the canal, do not jump into the water to rescue them; you will only put both the victim and yourself in danger. Instead, call 911 and stay alongside them on the road. The person in the canal will likely travel quite a long distance before help can arrive.

Safety Measures | If possible, throw them a flotation device to help them stay afloat. The canal system has several ropes and weed screens that could be used to climb out safely.

A KID maintenance crew removes a trampoline from the canal



Otto the Otter

Otto Otter is the Bureau of Reclamation's canal safety mascot. KID offers canal safety presentations to educate elementary-aged children on the dangers of canals. If you would like this message brought to your school or after-school program, contact Matthew Berglund, Public Relations Coordinator, at 509-586-6012 ext. 128 or visit kid.org/contact. Coloring books are also available with school presentations and accessible online at usbr.gov/pn/about/otto/graphics/coloringbook.pdf.

Please remember that canals are specifically designed to move water to homes, farms, and businesses for irrigation, and although they look like an inviting place to swim or play, the water can be quite hazardous.

Together, we can help prevent a tragedy.

The best way to be safe when it comes to canals is to stay away. They are not only dangerous for children; they are hazardous for everyone, including your pets. Stay out.

Your District in the Community

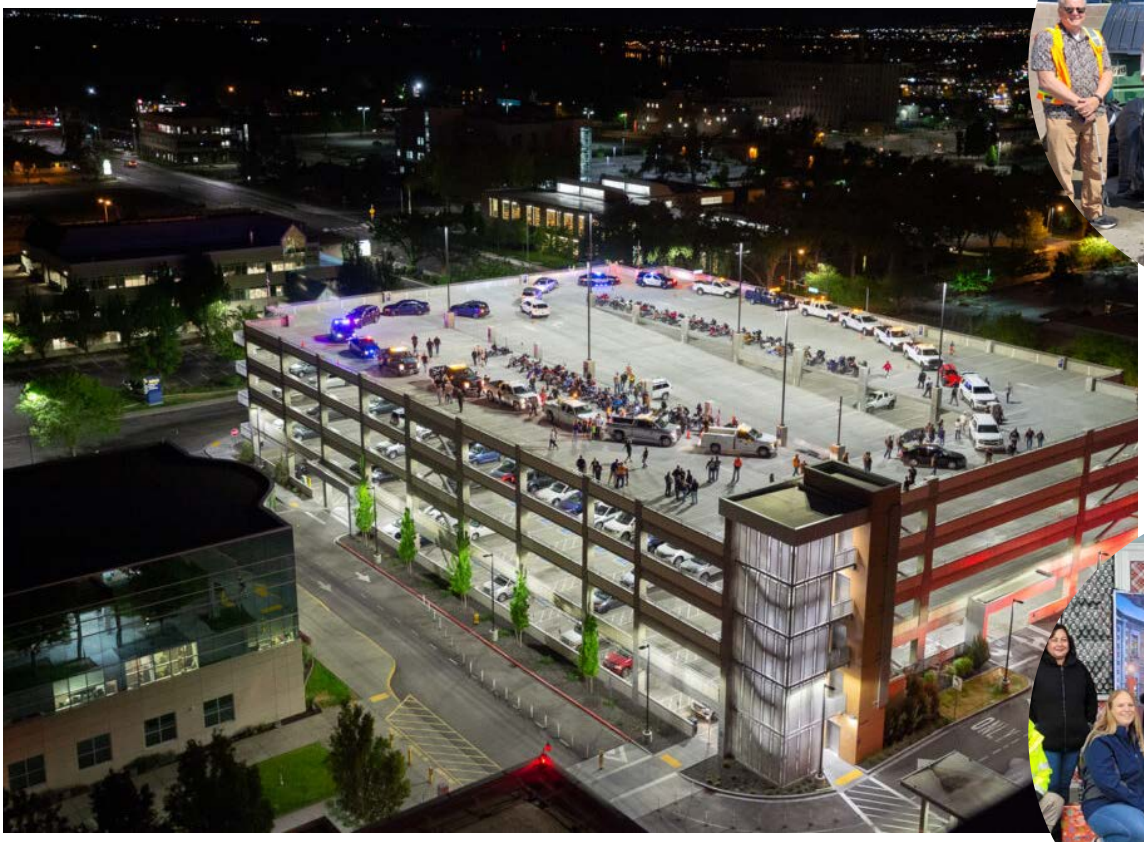


Photo courtesy of Kim Fetrow Photography.

The Kennewick Irrigation District (KID) is proud to be an active member of the community it serves by hosting, sponsoring, or participating in several events throughout the year.

'Light Up the Night' Appreciation
In honor of our local healthcare heroes, KID hosted a community-wide event that brought out hundreds of people, including all local fire/police departments and city staff, who lit up their vehicle lights to show appreciation during COVID-19.

Here Comes Santa Claus
Each year, KID is excited to host St. Nicholas himself, who hands out presents to families that come and visit! During this event, we also host a Toys for Tots toy drive.

Polar Plunge
Every January, KID staff bear the cold and jump into either the river or another body of water to support and raise money for the Special Olympics.

Red Cross Blood Drives
Twice a year, KID partners with the Red Cross to host a blood drive, helping those who desperately need it!

And More!
Additional events include clean-up days, Riverfest, Salmon Summit, farmers market, and food drives.

So, You Live in a Private Line Area

What Is a Private Line Area?

A private line area (PLA) consists of irrigation systems that were developed by the property owners or by the original land developer and is not owned, operated, or maintained by the Kennewick Irrigation District (KID). KID does provide irrigation water up to a KID-owned delivery point, but the operation and maintenance of the system is typically the responsibility of the current property owners. Sometimes, those in a PLA are part of a homeowners association or some other group through which it is determined who will perform and pay for repairs and how to manage the system.

How Did a PLA Begin?

When KID was created, it was predominately agricultural in nature. Over the decades, agricultural farms were sold and subdivided by developers. For instance, a 40-acre orchard served by a single canal turnout became 160 single-family homes. Imagine this process repeating hundreds of times, resulting in over 26,000 unique parcels of land!

Today, when an area of undeveloped land (often a farm) subdivides, KID requires the developer to install an irrigation system that meets KID standards. Thirty-plus years ago, a developer who subdivided an area of land was not required to meet any standards or dedicate the irrigation system to KID. This developer often opted to reuse the existing farm system or installed a system to a different set of standards that would not meet the standards of today. For more than 7,000 parcels, this resulted in the creation of PLAs that are served by irrigation infrastructure that the public (KID) does not own.

What Can KID Do?

In 2017, the KID board of directors approved policy 2.43, the Private Line Area Conversion Fund, for those neighborhoods who are interested in the possibility of installing a new system operated by KID. If the neighborhood is supportive, meaning the majority, or over 50 percent of the residents are interested, and the board approves of the project, KID offers a variety of ways to finance it. Once an agreement is reached, KID's engineering and operations team will design and construct the new system, or KID will elect to bid the project out and hire a contractor to execute construction. Simply call our Engineering Department at 509-586-6012 for more information. ■

Planning for Drought

Central Storage Project concept.

The Kennewick Irrigation District (KID) serves up to 20,201 acres of agricultural and residential customers in a region of Washington State that receives less than 10 inches of precipitation per year on average. These challenging conditions make irrigation necessary to grow economically valuable agricultural products such as cherries and grapes and to grow shade trees that help to cool residential areas and increase the quality of life in the urbanized parts of the district during the hot summer months.

KID depends on water from the Yakima River, which receives its water from the eastern slopes of the Cascade Range. Approximately 140 inches of precipitation falls in the Cascade Range per year, feeding the Yakima River through numerous tributaries and providing flows for fish, farms, and residences all the way to the Tri-Cities.

During years of average precipitation and temperatures, there is enough water to supply the needs of farms and residences in the Yakima basin. However, during drought conditions, when insufficient precipitation fails to fill the storage reservoirs or the snowpack fails to materialize or melts too quickly, water shortages threaten agriculture and our quality of life.

In 2015, a severe drought occurred in the Yakima basin, reducing water supplies for prorated water right holders by over half. The drought was due to a snowpack drought—a normal amount of precipitation fell in the mountains, but it fell as rain instead of snow. The reservoirs in the Yakima basin can only hold enough water to store up to 30 percent of the total annual runoff. Snowpack plays a critical role in complementing water storage by providing water during the spring and early summer parts of the irrigation season.

Although KID holds a mostly proratable water right, it is not held to the strict prorated annual quantity that other proratable districts receive, due to a unique clause in our contract with the Bureau of Reclamation. A proratable water right means KID receives a reduced amount of water in drought years. This clause allows KID to not only divert water from the proratable bucket, but to also divert return flows that are not a part of the proratable bucket. Return flow is water that returns to the river after being diverted by other users and becomes available for diversion by KID and other users downstream of Sunnyside Dam.

This ability to divert return flows has historically allowed KID to receive a more reliable water supply than the other proratable districts, but large-scale water conservation projects implemented over the past 20 years have greatly reduced available return flows. Currently, during drought conditions, KID is not receiving water when it is needed most by our customers, during the hot summer months of July and August, which are critical to plant growth.

Current conditions and future potential climate change effects have created a great challenge to protecting and enhancing the KID water supply. To guide the district through the difficulties of drought conditions, KID adopted a drought plan policy that was updated in 2019 to better support goals and actions that will give KID staff the tools needed to lessen the effect of the next drought. These tools include the lining of our smaller canals and the lining and widening of our main canal.

In addition, KID is in talks with our partners at Reclamation, the Washington State Department of Ecology, and the Yakama Nation to discuss options to protect KID's water supply and to enhance fish habitat in the lower river.

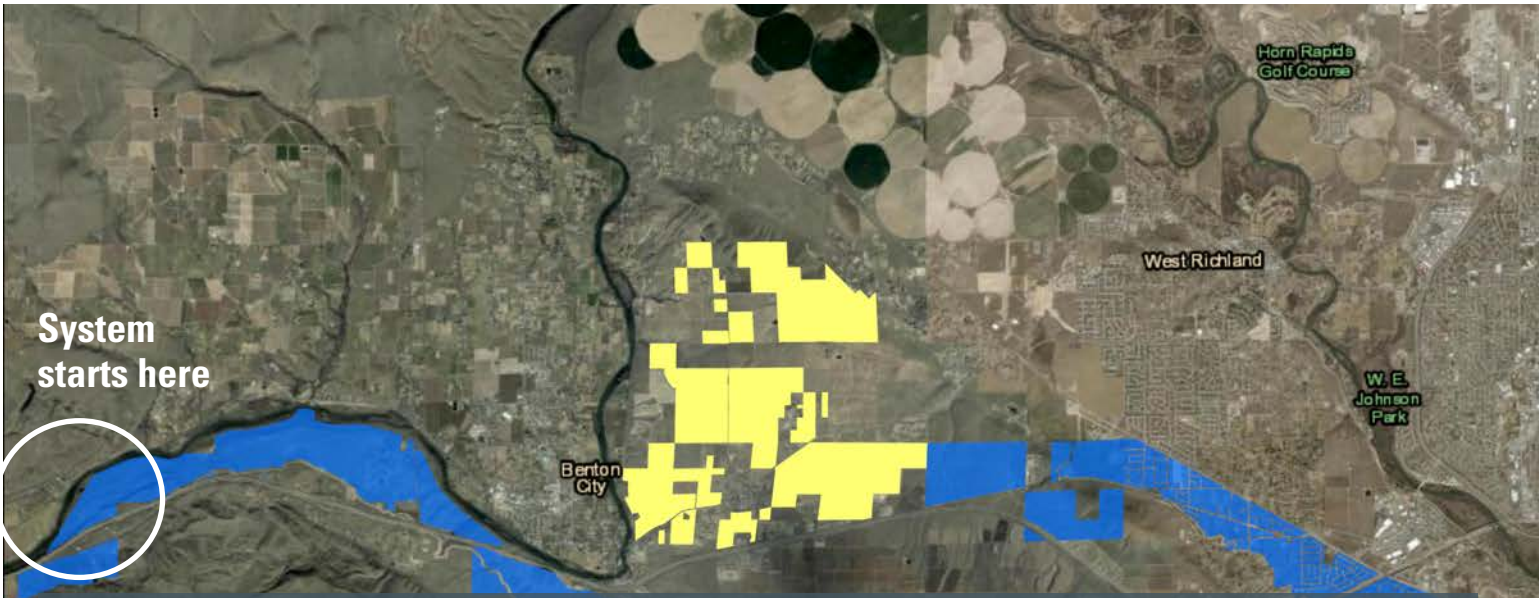
IN 2015, A SEVERE DROUGHT OCCURRED IN THE YAKIMA BASIN, REDUCING WATER SUPPLIES FOR PRORATED WATER RIGHTHOLDERS BY OVER HALF.

These options include the construction of a central storage reservoir in the district, which would replace water taken from KID by federally funded up-basin conservation projects and greatly enhance the reliability of KID water supplies during the next drought.

Central Storage Project | The goals of KID's Central Storage Reservoir Project are to enhance the environment of the lower Yakima River and stabilize KID's water supply. KID has its diversion structure at the Prosser Dam, where project water travels 11.3 miles down the Chandler Canal to the Chandler Power and Pumping Plant, leaving only federally mandated target flows in the Yakima River between Prosser and Chandler, a distance of approximately 12 miles. This bypass reach of the river could benefit from KID using the Central Storage Project to reduce its diversion below the Prosser Dam, enhancing the ecology of the river. KID will also use the reservoir to ensure adequate water supplies for farms and homes, especially during drought conditions, such as those the district experienced in 2015.

HDPE Liner | This durable material acts as a waterproof barrier, dramatically reducing seepage by up to 90 percent. This translates to more water reaching its intended destination, maximizing efficiency, and minimizing waste. Canal lining also decreases the chance of a canal breach, provides a barrier against weeds and rodents, reduces maintenance costs, and improves water delivery. Since 2010, KID has lined over 25 miles of canal.

Widening of the Main Canal | By expanding the main canal's capacity, the canal acts as a temporary reservoir, storing additional water during times of drought. This precious reserve becomes a lifeline during droughts, ensuring a more stable water supply even when Mother Nature throws her worst punches. ■



The Kennewick Irrigation District's (KID) water season officially begins on April 1. The entire system can take several weeks to turn on, because irrigation water flows from the head end of our system, which is located in the far west of this map. As it makes its way through parts of Benton City, West Richland, Richland, Kennewick, and finally back into the Columbia River on the far east side of the map, water will have traveled over 70 miles of open canal and 400 miles of pipe, and over 120 pump stations will have been turned on. Due to the complexity of the system, KID created a map that provides its customers a unique opportunity to follow along with KID staff in near real time as they work to get our entire 22,000-acre district online. Customers can also get an estimated date of when irrigation water may be available for their home, business, or farm.

As the season begins, issues can arise. Damage from the preceding winter can wreak havoc on risers and valves and pipes can break from unsuspecting people digging in the wrong area; additionally, aging infrastructure, wear and tear, and a host of other factors can all play a role in irrigation services being unavailable for certain areas. However, when these problems occur, our operations team will report this to customer service, who then will change the colors on the water status map to provide customers with basic information as to why water is unavailable.

The color that gets the most attention, and rightfully so, is red. Red means an outage has been reported. An outage most likely refers to a break that required KID staff to turn off the system. Typically KID staff does this for four main reasons:

Mainline Repair | A *mainline* is the primary or main distribution pipe in KID's system. It is the pipe that goes from our pump station to the KID irrigation service on your property. Mainline breaks are our highest priority as they tend to affect large areas.

Valve Repair | Branching off a KID mainline or distribution pipe are smaller pipes we refer to as *service lines*. Service lines typically end with a KID valve on the customer's property, either above ground or below grade in an irrigation box. These valves indicate the division point between what is owned by KID and what is the customer's private sprinkler system. These valves are often susceptible to freeze damage if not properly winterized. If water becomes trapped inside the valves, it will freeze and expand, causing the valves to crack or split.

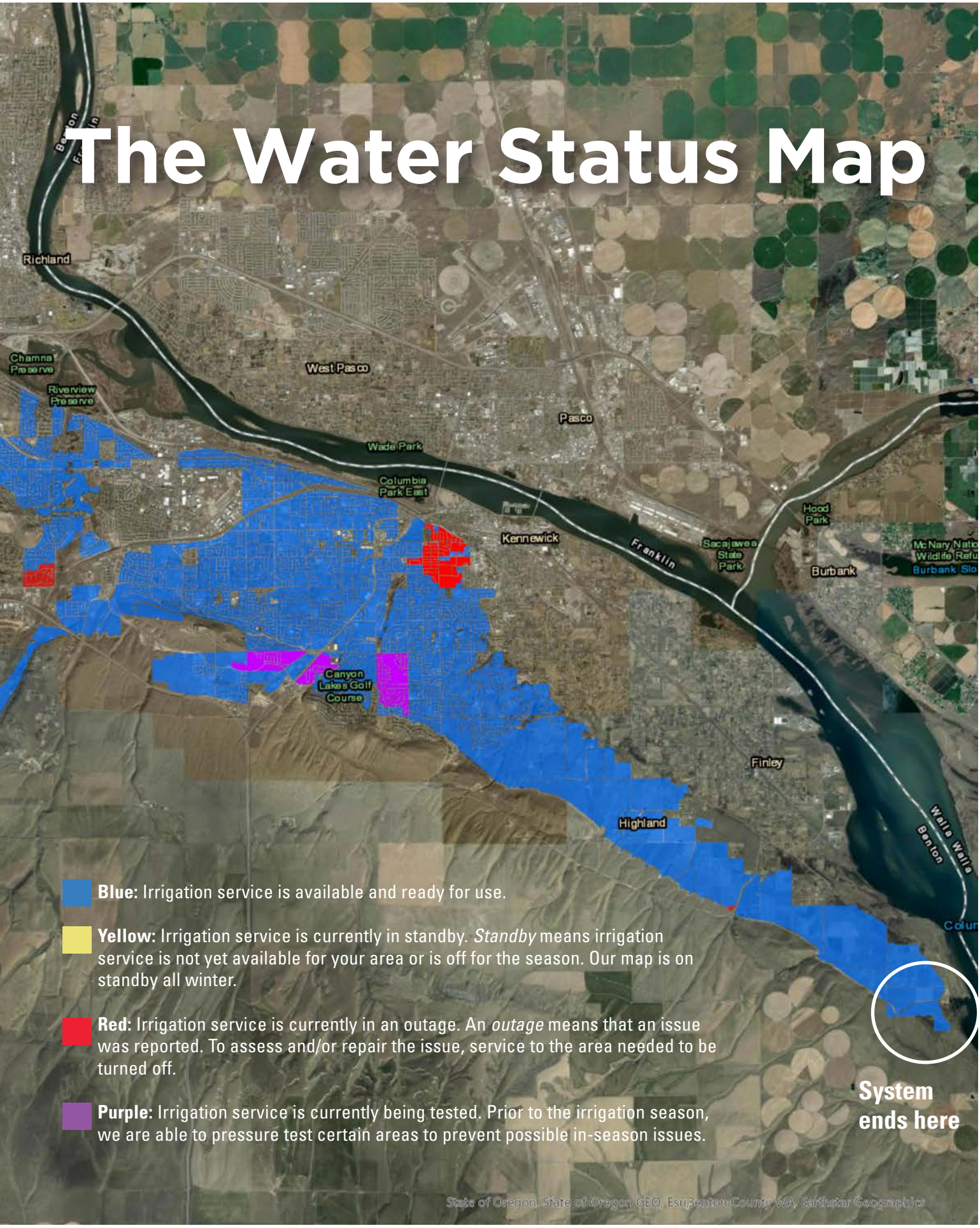
Pump Repair | Irrigation pumps are used to pressurize the irrigation water to your sprinklers and are the heart of most irrigation systems. Typically, maintenance or pump repair may include lubricating or changing bearings, unplugging the pump suction, or replacing seals to ensure water tightness.

Private Repair | An irrigation system in a private line area (PLA) is not owned or operated by KID; instead, it is maintained by the homeowner(s) themselves. KID simply delivers the water to its access point. If an issue is reported in a PLA, it is the homeowner's responsibility to resolve it, either through an outside contractor or themselves. For more information on PLA's, please see page 13, "So, You Live in a Private Line Area."

KID encourages its customers to immediately report any types of issues associated with their irrigation system. Anything from low or no pressure, leaky valves, or broken risers, our staff is available for you nearly 24/hours a day, 7 days a week.

Please visit kid.org/your-kid/news-center/water-user-info for helpful information on how to winterize your irrigation system. ■

The Water Status Map



Blue: Irrigation service is available and ready for use.

Yellow: Irrigation service is currently in standby. *Standby* means irrigation service is not yet available for your area or is off for the season. Our map is on standby all winter.

Red: Irrigation service is currently in an outage. An *outage* means that an issue was reported. To assess and/or repair the issue, service to the area needed to be turned off.

Purple: Irrigation service is currently being tested. Prior to the irrigation season, we are able to pressure test certain areas to prevent possible in-season issues.

KENNEWICK IRRIGATION DISTRICT

A glimpse into the past, present, and future and how we've been making our desert bloom for over 100 years!

Canal ditch digger. Without this machine, there'd be no Kennewick!

1891 | First water rights for diversion out of the Yakima River were established out of the Horn Rapids Dam, also known as the Wanawish Dam.

1906 | The Highland Water Users Association was formed. It constructed a pumping plant on Edison Street around 1908. This was the first time Kennewick received irrigation water.

1909 -1910 | The Low Lift and High Lift Canals were completed and placed into service, serving lands north of 4th Avenue and between 10th and 14th Streets to the south in Kennewick, WA.

1917

The Kennewick Irrigation District (KID) was officially recognized.

Irrigation vital to first settlers

From the day the first settler located on the vast and semi arid stretches of what are now Franklin and Benton counties, irrigation was recognized as the most urgent and vital need.

It was quickly discovered that on the land and water brought to the rich volcanic soil anything adaptable to local climatic conditions could be grown abundantly.

As far back as 1888 the Dell Haven Irrigation district was formed in the Yakima Valley and within four years work had been started on what eventually was to become the great Kennewick Canal.

By 1906, five irrigation projects were in operation — the Kiona, Kennewick, Richland, Columbia and Two Rivers although the latter was a pumping proposition, power being furnished by the fall of Snake River at Five-Mile rapids. The Two River interlocked with the Columbia canal.

Oldest ditches in the valley were in Kiona, taken out of the Yakima two miles above the village of Kiona, and the sources seven miles below Kiona. Both were started by the same company in 1892.

First water delivery ceremony.

The Kennewick Courier-Reporter

HIGHLANDS BILL APPROVED

Mayor Dismisses Police Chief

Holmes Tells of Action; Local People Jubilant

The Sidewalk REPORTER

Rupp Takes Over Chief's Office, New Cop Hired

FIGHT STUBBORN BLAZE

Man Who Came to Dinner Ready for Appearance Here

Jungle Parade, Crafts to Mark Cub, Scout Circus

Cancer Donations

1970s | Farms and orchards, once a mainstay in the Tri-Cities landscape, slowly make way for residential development.

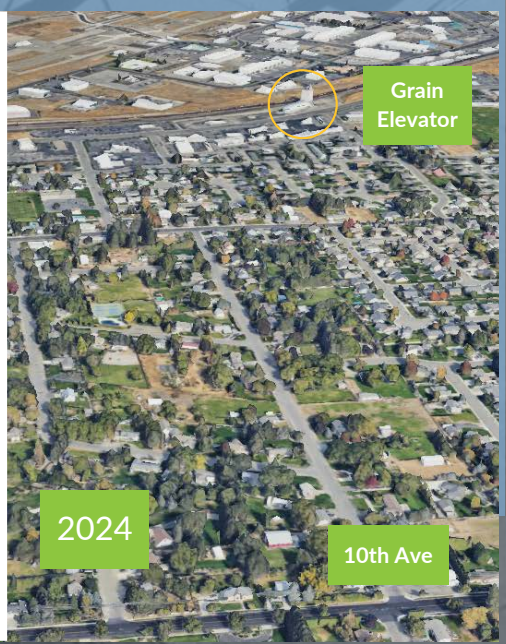
1957

The Kennewick New Lands Main Canal and Lateral System delivers water for the first time.

1948 | A second attempt to appropriate funds to construct the New Lands Project passed Congress, which appropriated funds for the construction of facilities to irrigate an additional 14,534 acres.

1930 | Due to financial trouble, the Highland Water Users Association was unable to continue the irrigation system and dissolved. KID took over the entire system. In the same year, a contract between KID and the Bureau of Reclamation transferred the Prosser Dam, KID water rights, and Chandler Power Canal right-of-way to Reclamation for the rehabilitation of the Kennewick Highlands irrigation system.

Photo courtesy of Vintage Tri-Cities



YOUR DISTRICT

Red Mountain ribbon cutting.

Lining and widening of the main canal.

1977 | Washington State's longest-running water rights adjudication begins: *Ecology v. James Acquvella.*

Drought hits the Yakima basin.

1980

Lateral 1.8 rehab was completed.

1985 | Bill requiring developers to include irrigation facilities was passed.

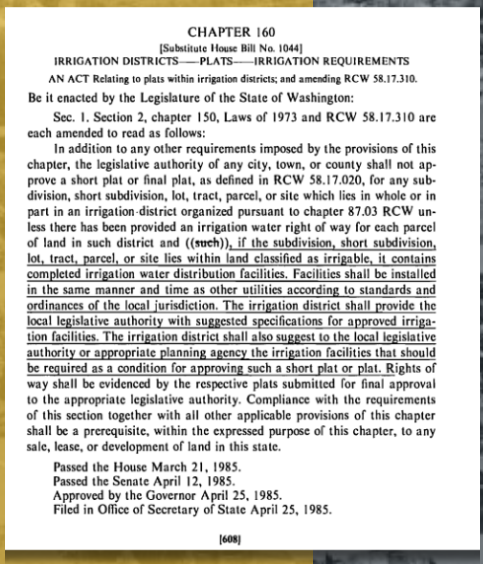
1989 | The first computer was used at KID. Lateral 1.8 booster pump was added.

1993, - 1995 | Three years of consecutive droughts hit the Yakima basin. The Yakima River Basin Water Enhancement Project (YRBWEP) is formed in response.

2001 | Drought year.

2005 | Drought year.

2006 | Canal lining begins. This durable material acts as a waterproof barrier, dramatically reducing seepage by over 90%. This translates to more water reaching its intended destination, maximizing efficiency and minimizing waste.



CHAPTER 160
[Substitute House Bill No. 1044]
IRRIGATION DISTRICTS—PLATS—IRRIGATION REQUIREMENTS
AN ACT Relating to plats within irrigation districts; and amending RCW 58.17.310.

Be it enacted by the Legislature of the State of Washington:

Sec. 1. Section 2, chapter 150, Laws of 1973 and RCW 58.17.310 are each amended to read as follows:

In addition to any other requirements imposed by the provisions of this chapter, the legislative authority of any city, town, or county shall not approve a short plat or final plat, as defined in RCW 58.17.020, for any subdivision, short subdivision, lot, tract, parcel, or site which lies in whole or in part in an irrigation district organized pursuant to chapter 87.03 RCW unless there has been provided an irrigation water right of way for each parcel of land in such district and ((such)), if the subdivision, short subdivision, lot, tract, parcel, or site lies within land classified as irrigable, it contains completed irrigation water distribution facilities. Facilities shall be installed in the same manner and time as other utilities according to standards and ordinances of the local jurisdiction. The irrigation district shall provide the local legislative authority with suggested specifications for approved irrigation facilities. The irrigation district shall also suggest to the local legislative authority or appropriate planning agency the irrigation facilities that should be required as a condition for approving such a short plat or plat. Rights of way shall be evidenced by the respective plats submitted for final approval to the appropriate legislative authority. Compliance with the requirements of this section together with all other applicable provisions of this chapter shall be a prerequisite, within the expressed purpose of this chapter, to any sale, lease, or development of land in this state.

Passed the House March 21, 1985.
Passed the Senate April 12, 1985.
Approved by the Governor April 25, 1985.
Filed in Office of Secretary of State April 25, 1985.

[608]

View of south Richland and Kennewick from little Badger Mountain.

2015 | KID begins irrigation service to Red Mountain, providing water to one of the world's most desirable wine regions.

Another drought hits the Yakima Basin. By April 1, not a single basin in the West was above 86% of median snow water equivalent — and most basins were below 40%.

NOTICE TO CONGRESS

This is written notice of a proposed conveyance to the Kennewick Irrigation District (District) of all right, title, and interest of the United States to certain irrigation water supply project works associated with the Kennewick Division (Division) of the Yakima Project (Project). The Secretary of the Interior, acting through the Commissioner of the Bureau of Reclamation (Reclamation), is authorized to make this conveyance under the John D. Dingell, Jr. Conservation, Management, and Recreation Act of March 12, 2019, Title VIII, Subtitle A, Section 8003(a)(1) (Pub. L. 116-9, 43 U.S.C. 2901 et seq.).

Summary of Title Transfer Agreement

The Title Transfer Agreement and associated legal instruments will convey title to the Project's works, consisting of approximately 80 miles of canals and appurtenant works. The transfer will also include 46 fee title acres and interests in nearly 1000 acres of land. Mineral interests will not be retained by the United States.

Upon conveyance of title, the District will take ownership and manage these assets to meet current needs in compliance with all applicable Federal, state, and local laws, and in conformance with the terms of the Title Transfer Agreement. There are no foreseeable changes to current operations. Reclamation has determined that conveyance of these facilities is in the financial interest of the United States and will provide the District with more autonomy to operate the project.

2024 & Beyond

KID administration building.

KID encompasses 20,201 irrigable acres, and it is composed of more than 70 miles of open canals and laterals along with more than 300 miles of buried pipelines. The district services a host of varied pumps, weed screens, canal crossings, and associated facilities, all designed for the delivery of irrigation water.

Looking ahead to the future, KID is committed to improving and replacing the infrastructure that provides irrigation to the Tri-Cities community, including improvements that will provide increased drought resiliency to the farms and families the district serves.

2016 | The new administration building is completed at 2015 S. Ely Street, joining the KID operations department under one roof for the first time.

2022

42 years and 2,500 claimants and interested parties later, *Ecology v. James Acquvella* comes to a close.

Title transfer was completed, transferring ownership of federally owned irrigation facilities over to the local communities.

KID main canal flowing through Badger Canyon.

Making the Desert Bloom

The arid landscape of Eastern Washington transforms dramatically as you enter the Tri-Cities. Vibrant green spaces replace the typical shrub-steppe, a testament to the power of irrigation.

Historically, the Tri-Cities received only 7–10 inches of rain annually, with scorching summers and frigid winters. Native trees were scarce, as documented by the Lewis and Clark Expedition in 1805. William Clark noted the absence of "timber of any sort" on Bateman Island.

The arrival of irrigation for agricultural purposes, drawing water in part from the Yakima River, revolutionized the region. Once-barren land flourished, and today, the Tri-Cities boasts a thriving urban forest.

The urban forest offers a multitude of benefits. Trees act as natural filters, improving air quality by trapping pollutants and removing carbon. They also mitigate the harsh desert climate, cooling city temperatures through shade and reducing storm water runoff. This is especially crucial in arid regions prone to sudden downpours that can overwhelm drainage systems.

The economic and social benefits of irrigation are undeniable. Planting and placement of appropriate landscaping and green areas enhances property values and attracts visitors, boosting local businesses. Urban forests also provide recreational opportunities and contribute to residents' well-being. Likewise, agricultural lands continue to play a key role in helping maintain food safety and security for the region and the nation as a whole.

However, this desert oasis requires responsible stewardship. Residents play a vital role in ensuring its survival. Choosing drought-tolerant plants and practicing water conservation are key. Local resources, like nurseries and extension offices, can provide guidance on selecting the right plants for our arid climate.

The Tri-Cities urban forest stands as a testament to human ingenuity and a reminder of the importance of green spaces, even in the driest climates. By working together, we can ensure this vibrant oasis continues to flourish for generations to come. ■

Investing in Kennewick's Future: The Capital Improvement Program

The Kennewick Irrigation District's (KID) board of directors has been investing in the district's future for decades. During the 1950s and 1960s, the district worked with the Bureau of Reclamation to rebuild the main canal while also completing major pipeline replacements throughout Kennewick. Throughout the 1980s and early 1990s, as the Tri-Cities began to grow rapidly, KID made the decision to pipe its Highland Feeder 1.8 system and its Lowlift system to increase public safety throughout the area.

Over the last decade, KID's Capital Improvement Program evolved with the establishment of the capital improvement surcharge, which charges each account a flat rate that generates approximately $1.6 million annually. These dollars are used as the local match to leverage funds received from our successful grant applications to Reclamation's WaterSMART program. In 2010, the board of directors set public safety as its number 1 goal, and KID focused on lining its earthen canals for its densely urbanized district. KID received these grant funds for water conservation and savings but chose to line canals to increase safety. Throughout this process, KID has been making the canals stronger, safer, and less prone to breaches.

KID has lined or piped over 50 miles of canals since the early 1980s, with the majority of funding coming from district resources. Since 2007, KID has been lining canals using a combination of WaterSMART grant funding and district resources, from which more than $20 million dollars has been used, resulting in water savings of over 5,000 acre-feet annually.

In addition to canal lining, the board of directors challenged KID employees to develop and execute a plan to address its aging pipeline network. KID has over 400 miles of buried pipe throughout the cities of Kennewick, South Richland, West Richland, and unincorporated Benton County. KID employees rose to this challenge and have replaced several pipelines that had a history of causing serious property damage. KID has funded this program without drawing on the existing capital program funding or raising rates for its customers.

Looking ahead to the future, KID is committed to improving and replacing the infrastructure that provides irrigation to the Tri-Cities community, including improvements that will provide increased drought resiliency to the farms and families the district serves. One principal project that is beginning the environmental review process is a large (12,000 acre-foot) storage reservoir. Storage reservoirs reduce the effects of drought conditions by providing a more consistent water supply. You can follow along with this project as it progresses by visiting kid.org/kid-capital-projects. ■

Life at the End of the Project

Supplying irrigation water to more than 65,000 urban and agricultural customers at the end of the Yakima Project in a highly regulated and drought-prone river system is a challenge that Kennewick Irrigation District (KID) faces year in and year out.

The Kennewick Division was the last Bureau of Reclamation Yakima Project division to be completed. Authorized by Congress in 1948, construction of the division was completed in 1958, when KID also took over operation of the irrigation delivery component of the division. The Yakima River is an overappropriated basin; in dry years, supply is not adequate to meet demand. The Yakima Project's five completed storage reservoirs can hold just over 1 million acre-feet of water, or 30 percent of the average total natural runoff in the basin. Total irrigation entitlements and instream flow needs in the basin above Parker Dam are approximately 3 million acre-feet. The difference is made up in snowpack. Known as the *sixth reservoir,* snowpack supplies basin water needs into late spring and early summer, before demands require that the storage reservoirs be used to meet demands.

Water shortages have been a periodic occurrence in the Yakima basin since the creation of the Yakima Project, which was authorized by Congress on December 12, 1905. To develop the five storage reservoirs that would serve the project, the State of Washington granted the United States

the right to use eminent domain to acquire land, water, and property; this action directly led to the withdrawal of the unappropriated waters of the Yakima basin. These withdrawn waters hold a priority date of May 10, 1905, and are subject to prorationing in water-short years. In those years, water users with senior water rights (prior to May 10, 1905) will receive 100 percent of their entitlement. Water users with proratable water rights (May 10, 1905) will receive reduced proportions of their usual entitlement, depending on the amount of water available after senior entitlements are fulfilled. Water rights obtained after May 10, 1905, are subject to complete curtailment in dry years. KID holds a small amount of senior water rights; however, the majority of KID's entitlement (84 percent) is proratable.

Water shortages have caused the curtailment of prorated water rights on average once every 4 years over the past 20 years. Early disputes over water shortages in the basin led to the District Court of Eastern Washington issuing the 1945 Consent Decree, which determined water delivery entitlements in the Yakima basin above Parker gage and defined the prioritization of water rights to be in place during drought years, including prorationing. The consent decree applied a unit of measurement known as *total water supply available* (TWSA). TWSA is the total amount of water expected to be available for all uses in the basin above the Parker gage from April 1 to September 30 of any given year. The amount of water that makes up TWSA includes reservoir storage contents, usable return flows above Parker gage, and runoff forecasts.

Outside TWSA, water supply for KID is, and was intended to be, return flows in the lower Yakima River. The 1945 Consent Decree illustrated that the existing system was not adequate to meet all needs in water-short years and that prorationing would occur in those situations. Despite being an irrigation district with mostly proratable water rights, KID has typically fared better overall than other Yakima Project irrigation districts that hold water rights that are entirely proratable. This is why return flows that supply KID are important to water supplies in the entire Yakima basin.

KID's position in the lower Yakima River below Parker gage positions it to take advantage of return flows that enter the river above the district's diversion at Prosser Dam. Even with inadequate storage within the basin and the 1945 Consent Decree in place, Reclamation recognized that sufficient return flows were available in the lower Yakima River to supply KID. Five major Yakima Project irrigation entities divert water above Parker gage and provide irrigation return flows to the river: Roza Irrigation District, Kittitas Reclamation District, Yakima-Tieton Irrigation District, Wapato Irrigation Project, and Sunnyside Valley Irrigation District. Three of these districts provide return flows that also enter the river below Parker Gage: Roza, Sunnyside, and Wapato. Water entering the river below Parker gage is outside the TWSA definition but is crucial in providing water supplies for KID and for providing flows for fish. Reclamation manages the Parker gage to pass flows required to meet federal instream flow targets at the gage, as well as identical flow targets located downstream at Prosser Dam. KID depends on the water that returns to the river between the two points for the district's supply, especially in water-short years.

Although return flow supplies have been essential for KID water users and other proratable water users in the Yakima River basin, the amount and timing of the return flows that have sustained KID for over 60 years have changed. Concerns about declining salmon and steelhead populations and greatly reduced instream flows led to landmark legislation passed by Congress in 1994. The legislation, title XII, authorizes an aggressive, federally funded water conservation program designed to increase instream flows in the Yakima River and to provide security to participating irrigation districts during drought conditions. Title XII has been successful in modernizing irrigation canal infrastructure and providing water for biologically beneficial flows.

Although the title XII conservation program has certainly been beneficial to both program participants and instream flows, it has directly reduced the amount of return flows that are available for diversion in the Yakima River. Fortunately, KID and others anticipated this, and as a result, a special section was added to the title XII legislation: Chandler Electrification. Chandler Electrification authorizes the installation of electric pumps to replace the hydro pumps that supply KID's irrigation water. Electrified pumps would be used during drought conditions when limited flows are available to drive the hydro pumps, which require at least 1.25 buckets of water for every bucket pumped into the head of the KID main canal. An added benefit would be that the electrified pumps could also be used to provide additional instream flow over Prosser Dam and in the river reach between the dam and the power plant, which could improve survivability for salmonid smolts headed down river and to the ocean in the spring months. KID is actively pursuing the installation of electric pumps at Chandler to realize the benefits envisioned in title XII. Recent modeling completed by Reclamation shows that up-basin water conservation projects will continue to reduce the return flows that supply KID, yet a switch to electric pumps in water-short years could provide KID with an adequate water supply in all but the worst years. Additional modeling is in progress to consider varying climate change scenarios and the potential effect on KID's water supply.

Life at the end of the ditch has not always been easy, especially in recent years. Upstream conservation projects have reduced water supplies, and droughts have exacerbated swings in river levels that, at times, made meeting irrigation demands an impossible task. The KID board and staff are dedicated to making the right decisions that will allow KID to flourish for the next 100 years and beyond. ■

The Integrated Plan: The Yakima River Basin Water Enhancement Program

The Yakima Basin Integrated Water Resource Management Plan is a comprehensive plan to address water supply and fishery problems in the Yakima River watershed. Participants in the process include federal and state agencies, the Yakama Nation, irrigation districts, cities, counties, and environmental advocacy groups. The Integrated Plan consists of seven elements: fish passage, fish habitat enhancement, existing structures and operations modification, surface storage, market-based reallocation, groundwater storage, and enhanced water conservation. When complete, the multibillion-dollar project will improve stream and habitat conditions for salmon and other fish and wildlife species and provide farmers and communities in the basin with greater water supply reliability. The Integrated Plan is intended to be implemented over a 30-year period. A landmark year for the Integrated Plan was 2019, when Congress passed the John D. Dingell, Jr. Conservation, Management, and Recreation Act, which authorized a number of early action projects in the plan.

The Kennewick Irrigation District (KID) continues to work closely with the Bureau of Reclamation to perform detailed modeling of the lower Yakima River so that the effects of Integrated Plan actions (including water conservation) on KID water supplies can be evaluated. Preliminary modeling results suggest that KID's water supply will be harmed by upstream water conservation projects, both under the Integrated Plan and under other federal programs, such as the Yakima River Basin Water Enhancement Program. Results of the modeling will guide decisionmakers in the protection of KID's water supply.

KID is also a key stakeholder in a group known as the Lower River Leadership Group, made up of KID, Reclamation, the Yakama Nation, and the Washington Department of Ecology. The purpose of this group is to lead the way on finding and implementing solutions to lower Yakima River issues that need a focused effort and cannot be resolved through the Integrated Plan, including improving fish habitat conditions and water supply enhancements. The group is currently in the process of formulating an action plan to improve habitat conditions and water supplies in the lower Yakima River, which will include specific projects to be carried out in the coming years including the following:

- exploring on-district storage options and recapturing return flows to bolster district water supplies during droughts
- assessing opportunities to enhance cold water refugia for fish in the lower river through aquifer recharge
- adding more water quality monitoring stations in the lower river
- supporting the breach of the causeway at Bateman Island to improve flows and temperature conditions for fish in the Yakima River delta

KID strongly supports these projects and greatly appreciates its relationships with the Yakama Nation, Ecology, Reclamation, and other stakeholders. ■

The Next 100 Years

A Message From Shane Leonard, District Manager

A lifetime of experience in water resource management paints a clear picture: predicting the next century's water landscape for the Tri-Cities basin is an uphill battle. Climate change, urbanization, and growing competition for a limited resource pose significant challenges. While infrastructure upgrades and increased storage offer partial solutions, true success hinges on stronger communication and collaboration among all water users.

At Kennewick Irrigation District, fostering robust working relationships with fellow districts, municipalities, regulatory bodies, and Native American partners remains a core focus. This collaborative approach ensures a reliable water source and supply for the Tri-Cities.

Innovation and adaptability will be crucial for navigating future challenges. Embracing cutting-edge technology and adopting flexible processes will become cornerstones of our business model.

Ultimately, the success of Kennewick Irrigation District rests on the shoulders of the community we serve. Our commitment mirrors that of our predecessors in 1917—to ensure that the Tri-Cities, a flourishing desert oasis, continues to bloom for generations to come. ■

KENNEWICK IRRIGATION DISTRICT
EST. 1917

Kennewick Irrigation District

2015 S. Ely Street
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