

**CENTRAL OREGON**



**IRRIGATION DISTRICT**

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**PATRON'S  
HANDBOOK**

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INFORMATION AND ANSWERS

# CENTRAL OREGON IRRIGATION DISTRICT

A MUNICIPAL CORPORATION OF THE STATE OF OREGON

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**Welcome** to the Central Oregon Irrigation District (COID). This handbook is designed to provide you with some information and answers to commonly asked questions regarding your water rights and the obligations, as a member of an irrigation district.

Should you have any questions, please be sure to call and ask a member of our staff. You may also email with your questions at **info@coid.org**. We are here to serve your irrigation water needs. In addition, be sure to visit our website **www.coid.org** for updated information about your district, and a staff directory for contact information.

Sincerely,

Steven C. Johnson  
District Manager

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## *OVERVIEW*

Incorporated in 1918, the Central Oregon Irrigation District is a Quasi Municipal Corporation of the State of Oregon.

The irrigation system consists of two main canals: the Pilot Butte Canal, which runs north through Bend, Redmond and Terrebonne; and the Central Oregon Canal, which runs east through Bend, Alfalfa and Powell Butte. Both canals divert water from the Deschutes River.

The District provides water for about 45,000 acres within an 180,000-acre area in Central Oregon. More than 700 miles of canals provide agricultural and industrial water to the Bend, Redmond, Terrebonne, Alfalfa and Powell Butte areas. In addition, COID provides water to subdivisions in the areas the canals pass through, for landscapes and lawns, parks, cemeteries, and golf courses.

## HISTORY

A.M. Drake initiated the first water diversion company, the Pilot Butte Development Company, which also platted and mapped the cities of Bend and Redmond. Prior to any water being delivered to a patron, the company was sold to the Deschutes Irrigation & Power Company, the precursor of COID. 1904 marked the flow of irrigation water to the first 40 acres of land. By 1924, the population had spiraled to 2,000 people with an impressive 28,500 acres under irrigation. Irrigation helped create the cities of Bend and Redmond and helped drive growth and industrialization to its present day levels.

Before any water was diverted from the Deschutes River, appropriations to divert the water had to be filed with the State of Oregon. The filing had to identify where the diversion would occur and how much water would be diverted. Today those very same appropriations are still in force. Water rights were assigned on a first come, first serve basis also known as the “Doctrine of Prior Appropriations”. But the ranch at the start of the canal must conserve and husband the use if there is to be any water for a ranch at the end of the canal. That same philosophy still holds true today. Clean water is a resource to share and respect.

By 1907 the Central Oregon and the Pilot Butte Canals had been constructed. 1910 marked the creation of the Central Oregon Irrigation Company as a result of foreclosure and ensuing reorganization of the Deschutes Irrigation & Power Company. On December 17, 1917 the Central Oregon Irrigation Company was turned over to its users who organized the Central Oregon Irrigation District. The transition was not without rancor and was finally resolved by the courts on July 9, 1921. The construction of canals and dams continued. 1912 saw the completion of the North Canal Dam and connection to the Pilot Butte Canal. It is located immediately south of The Riverhouse in Bend. The Central Oregon Canal diversion is at the southern city limits of Bend.

The Carey Act of August 18, 1894 initiated many irrigation projects, such as COID, by authorizing the federal government to contract with 17 western states for land reclamation. The Carey Act structured the relationships between the federal and state governments along with the irrigation projects that established the water rights to reclaim the high desert land. A settler, referred to as an “Entry Man”, signed a contract with an irrigation project to pay a certain amount for water per acre of land desired to be reclaimed. The irrigation project used these proceeds to construct the canals and laterals for the transport of water. Once an Entry Man beneficially used the water to cultivate a crop and reclaim the desert land for three consecutive years, the Entry Man received title to the land (usually 160 acres) from the State and the water right was perfected. There were a number of successful and non-successful irrigation projects attempted in Oregon. This led to many numerous claims to water right that were eventually adjudicated in 1958.

Throughout this time various upgrades to the irrigation system were necessary. Wooden flumes were replaced by steel pipes and mechanical cleaners were added to intake screens. In 1938 COID, Crook County Improvement District #1 (Lone Pine) and the Arnold Irrigation District formed a cooperative effort with the federal government to construct a dam at Crane Prairie.

In 1989, after nearly ten years of work, COID completed the Siphon Power Project along the Deschutes River in southern Bend. This hydroelectric power plant can produce 5.5 megawatts of electricity, which is being sold to Pacific Power. This enables the District to further develop capital improvements to “conserve water” and make the distribution system more efficient and upgrade the canal system to benefit the water users. No new amounts of water are available. Surface water in Central Oregon is a finite resource. The only way additional water will become available to COID’s subscribers is through conservation.

The District is very much the product and tool of its patrons. It provides municipal, industrial and irrigation water to over 4,000

deliveries. Like any municipal corporation, COID exists to serve its constituents and relies on them for its well-being. COID is proud of its partnership in the development of Central Oregon. We all look forward to continued involvement in our future and, as a part of that, actively support the conservation of all our natural resources.

## *ADMINISTRATION*

COID is an incorporated municipal entity chartered under Oregon Revised Statute Chapter 545. Most of COID's authorities and responsibilities are presented in this section of State law.

The Central Oregon Irrigation District is divided into five divisions - Terrebonne, Redmond, Bend, Alfalfa and Powell Butte. There are five board members elected to represent each of these five divisions. Qualified water users elect these directors for a term of three years. To have voting rights in COID a voter must be 18 years of age or older and must own land situated within the District that is subject to the charges or assessments of the District. However, the voter need not reside in the District or in the State of Oregon.

The Board's regular meetings are held on the second Tuesday of each month at 9:00 a.m. in the District office and are always open to the public. The annual meeting and the Board of Equalization are held on the first Tuesday in January of each year. The Board represents the water users in establishing rules, regulations and policies for an efficient and equitable operation consistent with the law. The Board hires a general manager who is responsible for carrying out the Board directives and the day-to-day operation of the District.

There are a variety of staff members available to assist patrons with their issues.

# ASSESSMENTS

Assessments are in two basic parts and are set each January by the Board of Directors. The assessment is not based on a quantity of water delivered, but on the costs to operate and maintain the delivery system and the District.

1. Base Charges: covers the cost of record-keeping, scheduling, insurance, office facilities, general administration and overhead.
2. Operations & Maintenance: covers repairs and cleaning of the delivery system and the distribution of water.

The annual assessment is mailed out to each patron account in February. Payment terms for assessments are as follows:

1. First one-half of the current year assessment is due and payable on April 1st. Interest will be charged, as prescribed by law, on the past due portion as of April 1st.
2. Second one-half of the current year assessment is due and payable on July 1st. Interest will be charged, as prescribed by law, on the past due portion as of July 1st.
3. The District may withhold delivery of water on any past-due accounts.
4. Accounts not paid in full by October 1st are considered delinquent. At this time there is a fee of \$50, and an additional fee of \$100 if not paid by November 1. In addition the District will file a notice of claim of lien, which may lead to foreclosure.

Please contact the office to arrange a monthly payment plan if the above terms present a challenge. There is still interest charged on unpaid balances after May 1. Unfortunately, credit or debit cards cannot be accepted.

## *WATER RIGHTS*

A water right gives you permission and an obligation to beneficially irrigate a very specific area (generally measured in acres). The District and the State keep very detailed records of what lands can be irrigated. COID water rights have priority dates of 1900 and 1907. In addition, there is a supplemental right to a portion of the stored water from Crane Prairie Reservoir. Your water right also has a “duty of water” which is the maximum volume of water you can receive during the irrigation season. The duty is measured in “acre feet” and is stipulated by Oregon court decree. The duty is not guaranteed and the actual amount of water received during the irrigation season may vary from year to year depending on snow pack and natural stream flow. This water can only be applied to lands with a water right.

Your water right also has a “rate” which is the amount of water that flows to your land, measured in gallons per minute, during the irrigation season. The water right stipulates this rate and varies during the irrigation season between four to six gallons per minute per acre of water right. All COID water rights have the same rate and duty. To receive a higher duty or rate of water is a violation of the water right, and can lead to forfeiture.

A water right remains valid as long as an irrigator beneficially uses the water at least one year out of every five years. Failure to beneficially use may force the District to confiscate the water right or it will be forfeited to the State and lost from the District. Converting land to another use (road, parking lot, building, etc.) can also result in the forfeiture of a water right. Prior to converting land to another use, please see the water transfer section.

## *TRANSFER OF WATER RIGHTS*

If you wish to sell a water right, a portion of a water right, or if you wish to purchase a water right, please contact the COID office. A transfer requires an application to the State of Oregon's Water Resource Department (OWRD), and must be filed in conjunction with the District. A fee is required to process the transfer.

If your land mass is five acres or more, you will be required to "map" the water right "on" or "off" of your property. If you are purchasing a water right, you will also be required to have your land prepared to receive the water at the time the transfer is processed. Oregon State law requires that lands with a new water right be irrigated in the specific areas mapped within the first year of the transfer, and at least one year out of every five years thereafter. If your water right is mapped, you can only use the water on the specified areas.

If you want to modify the location of the water, you will be required to file a transfer with OWRD, through COID. Failure to beneficially use the water right may result in forfeiture of the water right. A water right remains valid as long as an irrigator beneficially uses the full water right at least one year out of every five years, regardless of changes in ownership.

## *CHANGE OF OWNERSHIP*

The District is required by law to keep detailed records of water rights and landowners. To keep our records current, if a water user wishes to sell all or a portion of their property, please notify our office. Having your escrow agent provide COID with a copy of the recorded document helps to keep expenses down.

## *DEFINITION OF BENEFICIAL USE*

“Beneficial use” is the use of irrigation water to produce a crop, grass or landscape areas. This means that the irrigation water will be used on land that has been designated for this purpose — irrigable land, not rock piles, driveways, roadways or under structures.

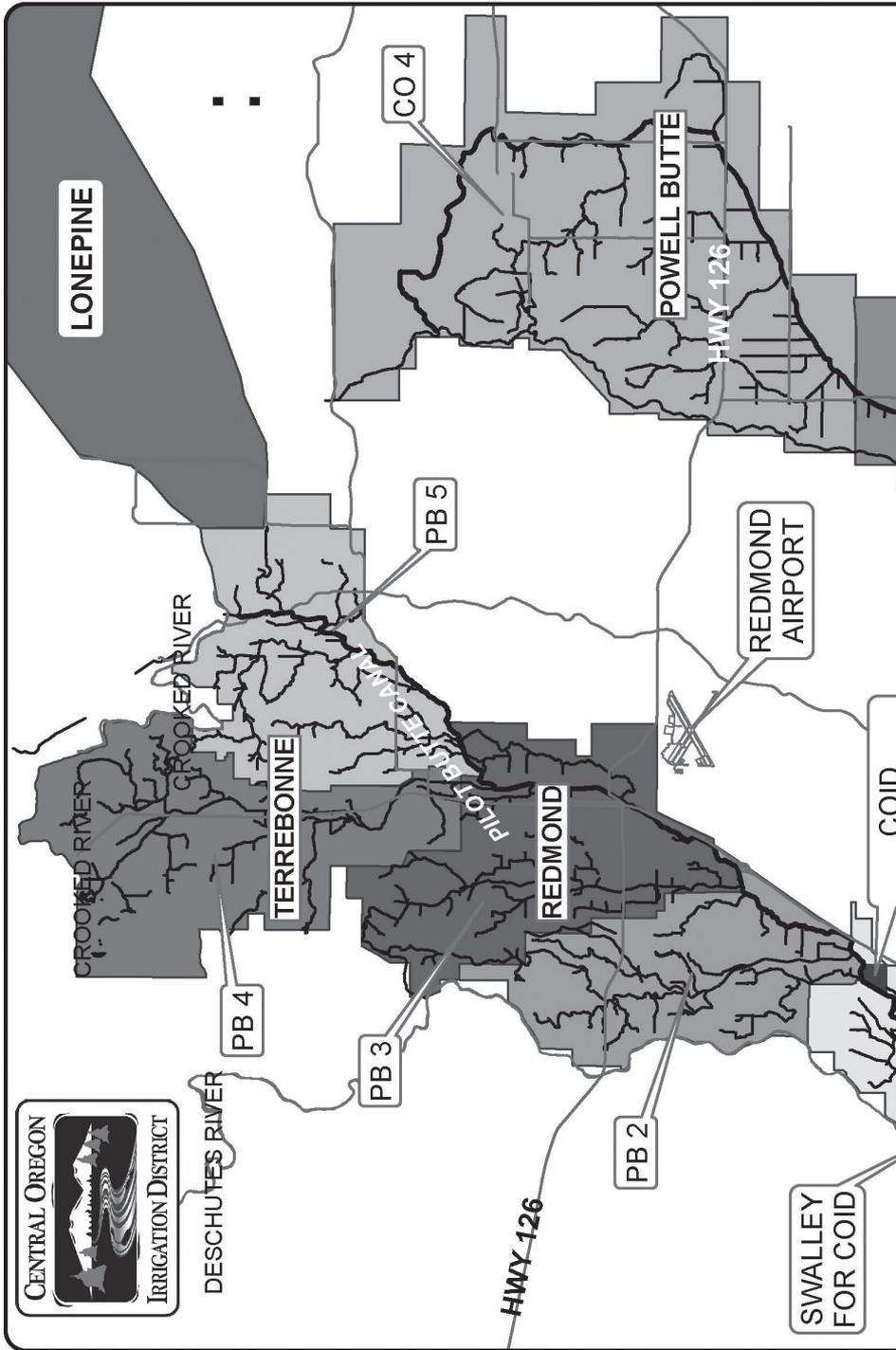
Landscape areas such as lawn or shrub beds, or a commercial crop such as shrubs, trees or growing of plants for resale is allowed. The land must be under production or cultivation to qualify as beneficial use. The placement of water on land that is not cleared, seeded or under some type of cultivation is not beneficial use. The use of irrigation water on anything that would grow naturally without the benefit of irrigation water is not beneficial use.

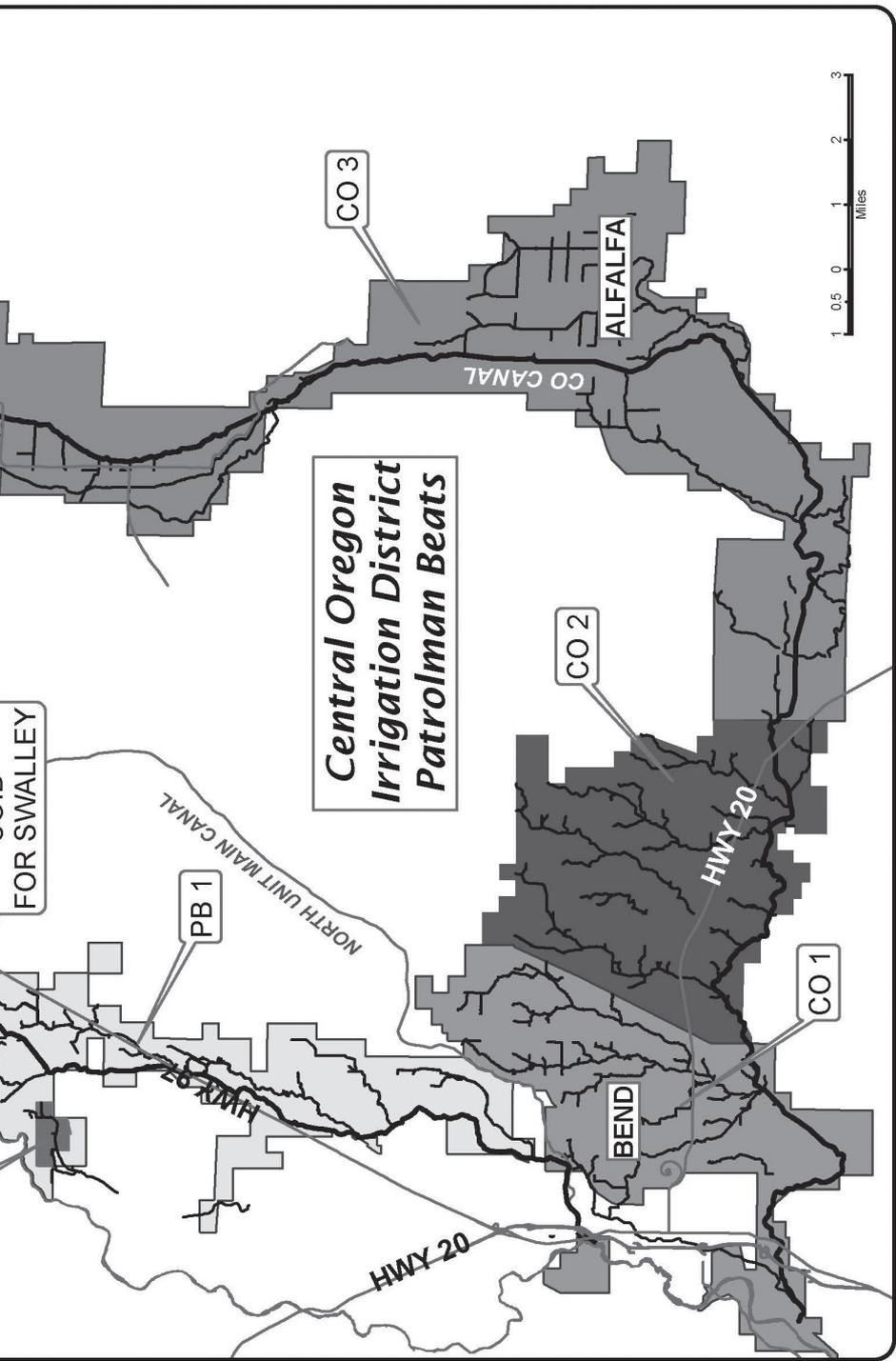
**NOTE: If you have any questions regarding your water rights, please contact the office.**

## *TAIL WATER AND WASTE*

You should only use the water that you need. If you irrigate to the point that water “runs off” of your land onto a neighbor’s parcel, that is called tail water. By Oregon statute, tail water is the responsibility of the person whose land it runs off, and is not necessarily welcomed by the receiving parcel owner. Tail water may also be considered a waste of water and subject your water right to examination by the District, or by OWRD.

The District is becoming more developed and the parcel sizes are becoming smaller. This creates situations where a neighbor may not desire tail water as in years past. Please be conscious of your responsibilities with managing your water rights properly.





## *IRRIGATION SEASON*

The irrigation season begins in April and ends in October. The length of the season and the amount of water delivered will depend on weather conditions and snow pack in the mountains. In addition, Oregon court decree provides for the following deliveries of water:

- ◆ April 1st to May 1st, about 1/2 of summer irrigation flows
- ◆ May 1st to May 15th, about 3/4 of summer irrigation flows
- ◆ May 16th to September 15th, full summer irrigation flows
- ◆ September 16th to 30th, 3/4 of summer irrigation flows
- ◆ October 1st to 31st, 1/2 of summer irrigation flows

**NOTE: Start and end dates for summer irrigation can start at any time during those months, depending on weather and maintenance. Also, in extreme dry conditions, additional water to supplement normal flows may be released from Crane Prairie Reservoir.**

## PATROLMEN

The patrolmen or as they are sometimes called, “ditchriders”, are normally your best contact with the District. You can contact your patrolman through the District office but often you will see him on the ditch banks during normal routine patrolling of the water.

The patrolman cannot always fix your problems. If they cannot provide assistance, they can contact a supervisor who will help you. Sometimes this must wait until the next day if it is after hours. We ask that, if possible, you do not contact the patrolman directly. Instead call the office number and tell the staff of your needs. You should, in most cases, get a return call from the supervisor or patrolman within 30 minutes. When you call in, you should have your patrolman’s name. If you do not have this information, call the office and they will tell you who he/she is so you will have the information when you need it. Remember, if water is not in the system and we have to move it, this can take up to 48 hours. It is very difficult to order and move water from the river to COID on weekends. You need to order your water during the week.

**NOTE: The patrolman is not a police officer; do not ask him to be one. They cannot arrest, threaten or in some cases even go on another person’s property. If another user is taking water out of turn or using your water without your permission, call the office during normal business hours. In most cases, it will require a supervisor to take care of this situation.**

Ordering water through the office is the most expedient way to do so. It is important to plan ahead. It can take as long as 48 hours to get water for an increase in the system, depending on water availability. The patrolmen can be reached 24 hrs a day by office personnel. During office hours, a call will do it. After office hours there is an answering service that will relay your message to the on-call supervisor. Please do not call 911 unless a life is in jeopardy.

## *MAINTENANCE SEASON*

We do work on our system year round. In the summer months, when irrigation water is in the system, the full time maintenance crew performs routine maintenance work. In the winter months when the canals are dry, both the patrolmen and full time maintenance personnel work on the delivery system. At some time when workload demands or if a project takes special knowledge, the District will use outside help to do the job. For the most part however, District personnel do the work.

As time permits, we will do work for our patrons. **The Operations Manager initiates all activities that are done by the maintenance crew. These are then scheduled by the Maintenance Foreman.**

The lining of ponds and piping of private ditches can cut losses and waste substantially. It is also important that every water user help in preventing any form of pollution from entering the distribution system. Any activity that degrades water quality is strictly prohibited. The use of aquatic pesticides is also prohibited.

## *STOCK WATER RUNS*

COID water rights carry a specific right to receive water from the Deschutes River during the maintenance season for livestock only. There is a fixed quantity of water, per the COID water right certificate, allowed to be diverted during this season and no more. The quantity allowed will provide for certain four (4) full five day runs per maintenance season per canal. Depending on the stock run durations, quantity diverted, and weather conditions there may be water available for a late season run, but this situation will change every year and cannot be relied upon to actually take place.

Winter season water runs are not to be used for irrigating land or any other use except livestock. Because the distribution system is so large and open, we are severely impacted by weather conditions. It is common for a water run to be postponed or cancelled due to severe cold. This is due to the increased safety risk that comes with the potential for ice to develop in the canals and block water from flowing freely through the system and cause flooding of homes and barns. In the event a stock run is aborted, the district staff will attempt to reschedule as soon as weather permits.

In addition, maintenance work schedules will cause winter stock runs to change schedule. As a result of this, our winter water runs may not always be on a set time and are subject to change. Contractors should always check with the office for the latest schedule when they plan on working within the District canals and rights-of-way. The schedule is always available and updated on the District's website ([www.coid.org](http://www.coid.org)).

## *DOMESTIC USE OF WATER*

The use of irrigation water for domestic use is **prohibited**. Federal and State requirements mandate that all households must have alternate sources for domestic water or install an approved filtration system. Domestic use of water covers all aspects of water within your home, (cooking, oral hygiene, bathing, washing dishes) not just drinking water.

If your household has not yet complied with the Safe Drinking Water Act requirements, please contact the office. We have information on filtration systems and inspectors. The District is concerned about issues dealing with point of entry filtration systems meeting the national standards. The use of filtration systems may only be an interim solution if the Federal government re-visits this issue in the future. We are also working with Avion Water and other domestic water suppliers to help facilitate our patron's transition to new water sources.

**NOTE: COID irrigation water does not meet Safe Drinking Water Act standards for domestic use.**

## *ROTATION SCHEDULES*

At best, a rotation schedule is a nuisance. However, it is necessary because without it you would not have enough water to effectively irrigate your land. It is important that on your scheduled time, unless an arrangement has been made with another person in your rotation, you pick up your water on time. This means that you go and get your water physically at its source, which should normally be at the person before you in the rotation. If that is not the case, a patron on a rotation has the right, as an extension of the District's authority, to follow the ditch and get their water for their time only. It is the patron's responsibility to only take their water during their scheduled time. To not do so causes confusion and will upset the working of the rotation.

If you are not going to use the water at your time, please contact someone and make arrangements to have them pick up the water and use it or leave your system open so the water will pass through your property to the next user. In any case, your patrolman should be notified if you are making a change in your use of the water. It is not possible to shut the ditch down during your rotation due to transmission time and to make all the adjustments to the system. By following this procedure, the rotation will work. Your neighbors appreciate your help in this cooperative effort.

**NOTE: Changes can be made to the rotation schedule with 100% agreement of the involved patrons.**

## *MAPPING DEPARTMENT*

The mapping department for COID creates and maintains maps of all water rights served by the District using a Geographic Information System (GIS). The GIS uses a computer-mapping program, which associates customer and water right information with the features on a map to provide quick access and analysis of the information. The mapping department also creates and updates mapped information for other District facilities, including District boundaries, canals, laterals, easements and rights-of-way, points of diversion, points of delivery, head gates, weirs and other features.

The mapping department also produces State required “on” and “off” maps for processing the sale and transfer of water rights from one property owner to another. Water right maps for new property owners are also created by the mapping department, as well as maps for realtors, city and county personnel, and others that request them. The mapping department works closely with the data processing department to assure that all maps and parcel information are as current as possible, and that any changes are processed in a timely manner. This includes notification of parcel partitions, lot line adjustments and property sales.

## *DISTRICT EASEMENTS*

The District’s easements are federal easements conveyed by the U.S. Government under the terms of several acts of Congress at the time of the District’s formation. The easements are private and exclusive for the operations and maintenance of the District’s distribution system. Joint use by the landowner is by agreement of the Board of Directors only. Easements may not be blocked and no encroachments, crossings or other uses will be allowed that will interfere with the District’s operation and use. This includes fences, gates, trees, or bridges. If you have a specific need, please contact the District office.

## *POINTS OF DELIVERY*

In general, the District's Point of Delivery (POD) for irrigation water will be at the high point on each 40-acre tract. Measurement devices are required at these points and are now in place or in the process of being placed. Conveyances beyond these points are private and it is the responsibility for the patrons past the POD to satisfactorily maintain them. If this is not possible, arrangements must be made with the District to have maintenance performed on them. The District makes its equipment and personnel available, as time allows. If you would like a quote for a project, please contact our office.

District head gates are required to be locked. This is for the protection of all water users. Any person tampering with the District's distribution system is subject to prosecution under the laws of Oregon.

## *FEES*

The District charges fees for such items as transfers, changes made to the canal and road system, pumping of water from District canals for industrial use, in-stream leases, crossings, etc. Any time a patron contemplates any of these situations, they should contact our office.

## *LAND USE AND DEVELOPMENTS*

There has been considerable development in the past few years throughout the District. If you are contemplating construction on your property, there are many items potentially involving the District, your water rights, and/or adjacent water users that may need to be addressed.

Developing properties with water rights or water deliveries requires District approval. Below you will find many of the items that will require coordination with our office and staff involving development on such properties:

### Water Rights:

Are there water rights on the subject property? If so, they must either be transferred off or a complete delivery system must be shown on plans for each parcel. Included within the delivery system there must be easements to each parcel retaining water rights and an irrigation contract to be recorded within the county that clearly describes the delivery system to each parcel.

### District Deliveries and Easements:

The District was granted and has maintained exclusive federally authorized easements within the Deschutes Basin for over a hundred years. It is in the District's best interest to maintain these easements clear and unobstructed. These easements may include, but are not limited to, water ditches, piped water, and access roads that vary in width throughout the District.

Facilities that meander through proposed land divisions may need to be piped or fenced on the outskirts of the easement with an indemnification agreement signed and recorded. When piping through development, the District has standard easement reduction specifications.

## Crossings:

A crossing permit is required for any underground, surface, or overhead crossing of a COID facility. Contact with the District shall be made to acquire a crossing permit prior to any work being done. Information required for crossings may be obtained by contacting the District office.

## Review Process and Fees:

The District is notified of all land use applications submitted to the county or city that is within its boundaries. Therefore, the District will comment on all land use applications and have signature lines on subject plats. Fees for review and signature, piping agreements, etc. are charged prior to signing related plans or plats.

## GLOSSARY

**ACRE:** A measurement of land about 43,560 sq. feet or 208'x208'.

**ACRE FOOT:** Volume of water. Amount of water to cover an acre of land one foot deep. This equals 0.504 cfs for 24 hours.

**APPURTENANT:** Belonging to. Water rights can be appurtenant to a specific piece of land. The District is required to keep records of appurtenant water rights.

**WATER RIGHTS:** The requirement of a water user to have an area of irrigation equivalent to the size of his/her water rights. For example, 1.5 acres of water right = 1.5 acres of area being irrigated.

**HEADGATE:** A valve comprised of a plate, which slides over an opening and controls the amount of water being diverted. Head gates can be adjusted and locked. Head gates come in several different styles.

**SUMMER IRRIGATION FLOWS:** This is the average irrigation flow between May 16th and September 16th. At the present, the District is delivering six gallons per minute per acre of water right. This may change more or less in the future.

**WEIR:** There are many types of weirs. They may be a blade across a canal or river or a slot through which water flows but they all measure water.

**STOCK WATER RUN:** The District will run the canals every five or six weeks in the winter to fill stock ponds. This is contingent on weather and maintenance schedules.

# CONVERSION CHART

1 cubic foot (cu.ft.).....	7.48 gallons
1 acre foot (a.f.).....	325,850 gallons
1 acre foot/day.....	0.504 c.f.s. for 24 hrs
.....	226 g.p.m.
1 cubic foot per second (c.f.s.).....	1.9835 a.f. in 24 hrs
1 c.f.s. ....	448.8 g.p.m.
1 gallon per minute (g.p.m.).....	1,440 gallons per day(g.p.d.)
1 gallon water.....	8.34 lbs.
1 cubic foot (cu.ft.) water.....	62.4 lbs.
1 pound per square inch (p.s.i.).....	2.31 feet of head
1 foot of head .....	0.433 p.s.i.
1 acre.....	43,560 sq. feet
1 square mile.....	640 acres



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