

# the Grower

Vol. 24 • No. 3 | October 2012

## Season to end Oct. 10 following dry year

With this irrigation season to conclude Oct. 10, now is an appropriate time to provide an update on the water year, as well as a look ahead to 2013.

**The final day to place an order for irrigation this season is Sunday, Oct. 7.** Growers can call the Irrigation Call Center at 883-8456 to place orders.

Additionally, growers are also encouraged to make preparations for 2013 to be dry, so they can effectively manage their farms and operations.

We all know that 2012 was clearly not as wet as 2011, which will have an effect on current and future water storage levels at Don Pedro Reservoir, as well as future water planning decisions made by Turlock Irrigation District and irrigation customers.

Right now, water within Don Pedro is at an elevation near 750 feet, a level not experienced since 2008, which was the tail end of a multi-year dry period. Nevertheless, the District is ending the year with reservoir levels lower than it would like, and is hopeful for a wet winter.

To put the water year in perspective, the full natural flow of the Tuolumne River this water year was a little south of 900,000 AF, compared to the state's Department of Water Resources 50-year average around 2 million AF.

While 2011 was among the 10 wettest in 115 years of record keeping and the wettest since 1995, 2012 will likely go down among the 15 most dry years and the driest on record since 2007.

When a year is dry, such as 2012, TID always plans as if the region is experiencing the first year of a drought; it's prudent planning that has benefitted growers multiple times when Mother Nature has been fickle. Regardless, it is important to note that Don Pedro levels are lower than normal, and growers are reminded to make plans for 2013 to be dry. Stay tuned for additional updates and information as the 2013 irrigation season nears.



*Tuolumne River Watershed precipitation levels are near 63 percent of average this year.*

## IMPORTANT DATES

### October 7

Final day to place water orders

### October 10

Final day of irrigation season

### Throughout November

Water Use Statements mailed

### December 20

Water transfers must be completed

### January 1, 2013

Volumetric pricing, 2013 rates in effect

## BY THE NUMBERS

### 1,300,000 acre feet (AF)

The approximate volume of water expected to be stored in Don Pedro Reservoir once irrigation season concludes.

### 900,000 AF

The anticipated full natural flow of the Tuolumne River this water year, aka the 2011-12 water year (10/1/11 to 9/31/12).

### 1,913,072 AF

The full natural flow of the Tuolumne River as an annual average, based upon 50 years of the state's data.

### 3,520,000 AF

The full natural flow of the Tuolumne River during the 2010-11 water year (10/1/10 to 9/31/11).

# Irrigation pricing to change in 2013

The TID Board of Directors voted at its June 12, 2012 meeting to modify irrigation water rates, effective in 2013. Below are comparisons between the 2012 rates and the rates that will be charged in 2013.

**More information on 2013 rates will be presented in upcoming issues of *The Grower*.**

2012 Irrigation Rates	Topic/Question	2013 Irrigation Rates
TID Board of Directors establishes allotment and amount of water available each year	Who determines how much water is available for irrigation?	TID Board of Directors establishes amount of water available each year and selects a 'normal' or 'dry' rate schedule
Allotment available for fixed price, tiered pricing above allotment	Type of rate structure	Fixed charge per acre, water charged based on amount used; tiered pricing
Allotment: typically 48 inches (\$26 per acre) Tier 2: \$15 per acre-foot, up to 1 acre-foot Tier 3: \$20 per acre-foot, additional available	Normal Year Water Rates	Fixed charge: \$23 per acre Water Charges: Tier 1: \$2 per acre-foot, up to 2 acre-feet Tier 2: \$3 per acre-foot, up to 2 acre-feet Tier 3: \$15 per acre-foot, up to 1 acre-foot Tier 4: \$20 per acre-foot, additional available
Allotment: typically less than 48 inches Tier 2: \$15 per acre-foot, up to 1 acre-foot Tier 3: \$20 per acre-foot, additional available <i>(In a typical dry year, the Board reduces the amount of water available, due to limited supplies.)</i>	Dry Year Water Rates	Fixed charge: \$26 per acre Water Charges: Tier 1: \$2 per acre-foot, up to 1 acre-feet Tier 2: \$3 per acre-foot, up to 1.5 acre-feet Tier 3: \$15 per acre-foot, up to 1 acre-foot Tier 4: \$20 per acre-foot, additional available <i>(In a typical dry year, the Board reduces the amount of water available, due to limited supplies.)</i>

## As of 2013 irrigation...

### Normal Year Water Rates

This example assumes:

- 48 inch allotment, with additional water available above the allotment

Water Use per Acre (inches)	2012 Cost per Acre	2013 Cost per Acre	Cost per Acre Increase
24	\$26.00	\$27.00	\$1.00
30	\$26.00	\$28.50	\$2.50
33*	\$26.00	\$29.25	\$3.25
36	\$26.00	\$30.00	\$4.00
42	\$26.00	\$31.50	\$5.50
48	\$26.00	\$33.00	\$7.00
60	\$41.00	\$48.00	\$7.00
72	\$61.00	\$68.00	\$7.00

\* Average acreage uses 33" of water - for an increase of \$3.25/acre.

### Dry Year Water Rates

This example assumes:

- 30 inch allotment, with 42 inches available for current rates
- 42 inches available for proposed rates
- Up to 48 inches for rented pumps (per pump rental agreement)

Water Use per Acre (inches)	2012 Cost per Acre	2013 Cost per Acre	Cost per Acre Increase
24	\$26.00	\$31.00	\$5.00
30	\$26.00	\$32.50	\$6.50
33*	\$29.75	\$36.25	\$6.50
36	\$33.50	\$40.00	\$6.50
42	\$41.00	\$47.50	\$6.50
48	\$51.00	\$57.50	\$6.50
60	n/a	n/a	-
72	n/a	n/a	-

\* Average acreage uses 33" of water - for an increase of \$6.50/acre.

## District moves forward on ag water plan

Turlock Irrigation District is in the process of finalizing a draft Agricultural Water Management Plan (AWMP) for the TID Board to consider for adoption this November. The plan evaluates water use within the District and applicable management practices to make the best use of available resources.

TID's existing plan was developed under a voluntary process established in the 1990s. California legislation, passed in 2009, commonly referred to as SBx7-7 made the once voluntary program mandatory. Under the new requirements, TID must adopt a revised plan by the end of this year and update that plan in 2015, and then every five years thereafter.

The updated AWMP describes TID's water supplies and irrigation demand, local conditions, facilities and operations, rules and policies, and a variety of water management activities, including a series of efficient water management practices (EWMPs) designed to improve water use efficiency.

The updated AWMP documents how TID is complying with the new law, and proposes improvements, if needed, to meet new requirements.

A draft of the proposed plan will be posted online at [tid.com/awmp](http://tid.com/awmp) in October, along with other information about the plan.

More on the web: [tid.com/water/water-rates](http://tid.com/water/water-rates)



WATER & POWER

## Tunnel 2 work highlights offseason improvement projects

With the onset of fall and winter and the draining of the canal system comes various infrastructure improvement projects.

The most notable offseason project Turlock Irrigation District will undertake this year involves the 'daylighting' of Tunnel 2, a section of the Upper Main Canal that is downstream of La Grange Dam and upstream of Turlock Lake.

After 100-plus years of service to the District, Tunnel 2 has been identified as safety and water reliability concern that the District wants to address proactively.

Each year, the three tunnels that exist along this stretch of the Upper Main Canal are inspected by engineers. Because of its history and composition, Tunnel 2 was structurally analyzed in more detail in 2011, when it was determined that it posed a significant risk of collapse.

Citing the costs of a potential water outage during a future irrigation season if Tunnel 2 were to collapse, including customer crop loss, the TID Board of Directors acted in August to approve the project for construction this offseason.



*Tunnel 2 along the Upper Main Canal, seen here, will undergo construction starting this month that involves 'daylighting' the tunnel by transforming it into an open canal.*

Construction on the project, which involves 'daylighting' the tunnel by transforming it from a tunnel to an open canal, begins this month and is expected to be completed before the end of 2012.

In addition to the Tunnel 2 Project, there are many other offseason infrastructure

improvement projects that will benefit customers. These planned improvements to various canal drops and side gates, in addition to a gunite spraying program that reinforces various sections of canal lining, will help further ensure a reliable water delivery system that can be efficiently utilized.



*Dr. Charles Burt, above, talks alongside the Turlock Main Canal during a tour of Turlock Irrigation District's facilities on Aug.30. Burt is a renowned professor and authority on water and irrigation systems from Cal Poly San Luis Obispo.*



### Irrigation expert visits TID, talks infrastructure and measurement

It's not often that a legend in irrigation decides to host a field trip in your backyard.

But that's exactly what happened on Aug. 30 when Dr. Charles Burt led a group of 13 people from the state's Department of Water Resources and the U.S. Bureau of Reclamation on a two-day field trip through Central Valley water districts, including stops at several Turlock Irrigation District facilities.

Burt, a renowned professor and authority on water from Cal Poly San Luis Obispo's Irrigation Training and Research Center, discussed many topics, including the equipment and infrastructure utilized by TID to measure and deliver water to farmers.

Among other stops for Burt and his crew were Modesto Irrigation District, Patterson Irrigation District, Chowchilla Water District and Fresno Irrigation District.

TURLOCK IRRIGATION DISTRICT  
**125** YEARS

333 East Canal Drive  
P.O. Box 949  
Turlock, CA 95381  
(209) 883-8300

PRESORTED  
FIRST CLASS  
U.S. POSTAGE  
**PAID**  
PERMIT # 415  
STOCKTON, CA



## Water Statistics

**Don Pedro Reservoir as of Sept. 23**

Elevation this week:	757 feet
Elevation last year:	797 feet
Average inflow:	162 cfs
Average outflow:	923 cfs
Average to TID canal:	463 cfs

visit [tid.com/water/hydrological-data](http://tid.com/water/hydrological-data) for up-to-the-hour data  
visit [tid.com/weather](http://tid.com/weather) for up-to-the-minute forecasts