



# Tulare Irrigation District Operation & Maintenance Report



2012 Quarter 2

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## **District Safety Program**

The District conducted a Heat Exhaustion Prevention training to describe the symptoms of heat exhaustion and the preventative measures that can be taken to avoid a critical situation. The staff was also presented with a Heat Exhaustion Prevention Plan that has been implemented for staff to reference to prevent heat related issues in the field.

## **Maintenance Operations**

Under the direction of Gene Bessinger, District Superintendent, staff addressed maintenance concerns throughout the District. In preparation for the summer irrigation run District staff spent a great deal of time addressing maintenance issues throughout the District to ensure that the canal distribution system was ready to deliver irrigation supplies. District staff was also busy during the first several weeks of the irrigation run taking care of wash-in and wash-out issues.

The major maintenance projects included:

- District staff was sent to Crocker Cut ahead of the irrigation run to address maintenance issues. Staff worked on building up banks and cleaning the bottom of the channel.
- The District had several oak trees that were down or had large branches that broke in the recent wind storms. District staff moved quickly to remove the trees and the fallen branches so that canals would not be obstructed from flow.
- District staff has been busy addressing wash-ins and wash-outs during the initial delivery of irrigation supplies. Of notable mention were canal breaches at Main Intake Canal at Sheep Camp Bridge, Main Intake Canal from the Kaweah Delta Water Conservation District to the Cameron Box structure, Main Intake Canal at the Parigen Property and Road 148 at Summers Property.
- During the irrigation run the District also encountered a culvert failure on Harris Ditch at Avenue 208. The District worked with Tulare County to address this concern. The County assisted in saw-cutting the road, providing road closure signage and paving. The District utilized existing 30" reinforced concrete pipe to replace the corrugated metal pipe. The road was repaired by District staff within one working day.
- District staff also performed numerous gate repairs in preparation for the summer irrigation run. Staff concentrated on gates on 14 Run, 5 Run and limited repairs on 10 Run. Many of the canal gates within the District are aging at an alarming rate due to long water runs and the introduction of dairy waste water that is corrosive to metal.
- District staff repaired the gate and headworks of the Area 10 Pipeline.

## **Vehicle Maintenance Program**

The Vehicle Maintenance staff (VM Staff) have been busy maintaining and repairing construction equipment while currently in the construction and maintenance season. The maintenance issues that have been addressed include:

- Backhoe repair to replace the ram unit on the arm.
- Articulator repair on the grader.
- Icon tongue repair, which involved a major cross-sectional weld repair on the unit.
- Repair and replacement of tandem axles on the icon scraper.
- Completed fabrication and installation of equipment on the new service truck. Truck was put into service immediately after completion of the truck.

## **Herbicide Application Program**

The Herbicide Application Staff (Herbicide Staff) has been working on applying herbicide chemicals and spot treatment of vegetation.

The following chemicals were used at the specified rates:

Chemical	Rate	Units
Roundup	791	Gallons
Reward	553.75	Quarts
Finale	23.75	Gallons
Milestone	34	Ounces

Herbicide application has followed typical application rates and procedures. The only extraordinary weed encountered is the “pig weed”. District staff has been trying to address a recent increase in this weed and has had limited success in abating the isolated occurrences.

## **Construction Projects**

The District construction staff under the direction of Mr. Bessinger has been working on the following projects:

### **Swall Basin**

The District moved earthmoving equipment from Cell #2 to Cell #3 in March to begin construction of Cell #3. Construction efforts have included:

- Movement of excavated material to adjacent property (Kumar Property)
- Excavation of Cell #3
- Installation of compacted embankments around Cell #3
- Removal of well obstruction to allow for abandonment of well in the near future

### **Area 10 Pipeline**

The District began the installation of a 24” pipeline from the Area 10 Pipeline to the Martin Basin in early June. The pipeline was installed to replace an existing 16” concrete pipeline and increase the capacity to serve the Martin Basin. The cost of this pipeline and installation was covered through the USBR grant for Martin Basin. The installation included:

- 24” gasketed PVC pipeline installation
- 24” in-line gate installations
- Connection manhole at the junction with the Area 10 Pipeline
- Connection to existing turnouts
- Termination into the existing 24” pipeline that serves the Martin Basin

## **Pictures**



District staff repairing one of the many canal breaches that occurred within the system.



District staff repairing a failed canal turnout at the Bassett Ditch.



Fallen oak tree in canal.



Installation of connection manhole at Area 10 and the new 24" PVC pipeline.





24" PVC pipeline connection to Area 10 Pipeline.



24" PVC Pipeline trench.



24" PVC pipeline connections to existing turnouts.