### TFCC Ditch Writer

Twin Falls Canal Company • PO Box 326 • Twin Falls, ID 83303-0326 Twin Falls — 733-6731 • Buhl/Castleford — 543-4264

Spring 2017

# 24-Hour EMERGENCY NUMBER 733-6731

BUSINESS NUMBERS
Twin Falls Office—733-6731
Buhl/Castleford Office/Yard —
543-4264
Twin Falls Yard—733-6436

### Aquatic Herbicide Notice

TFCC must control aquatic weed growth within its canals and laterals to ensure water delivery and canal safety. As part of its control procedures TFCC applies aquatic herbicides such as Aquatic Weed Killer/Teton/Cascade/copper sulfate, on a limited basis to certain canals and laterals throughout the irrigation season.

If you have questions about an aquatic herbicide application, including the time and location of applications, you may contact Linda Shetler, TFCC dispatcher, at 733-6731.

Applications to canals and laterals vary depending upon conditions, including air temperature and weather, and the presence of weed growth in the canal system.

### Water, water everywhere!



TFCC crews dipped thousands of tons of ice from canals and laterals between February 6th and 10th to minimize flooding as an unusually large snowpack melted quickly.



About 400 cfs of water was recharging at the Milepost 31 site in late March. About 3,000 cfs of water are being recharged this spring across southern Idaho.

### Manager's Byline

#### by Brian Olmstead TFCC General Manager

Quoting from the Rime of the Ancient Mariner - "The Ice was here, the ice was there. The ice was all around: It cracked and growled, and roared and howled, Like noises in a swound!" I think our TFCC crews felt exactly like the Ancient Mariner from February 6 – 10th as they dipped thousands of tons of ice from the Highline and Lowline canals to save the banks from breaching and preventing an even bigger disaster (see the pictures of ice on this page and also the front page). It was truly a historic event as up to 2000 cubic feet per second of floodwaters roared off the desert and fields into our canals, then to Deep Creek and onward to the Snake River.

On the bright side, the record precipitation we have received in the Magic Valley this winter has also resulted in near record snow-



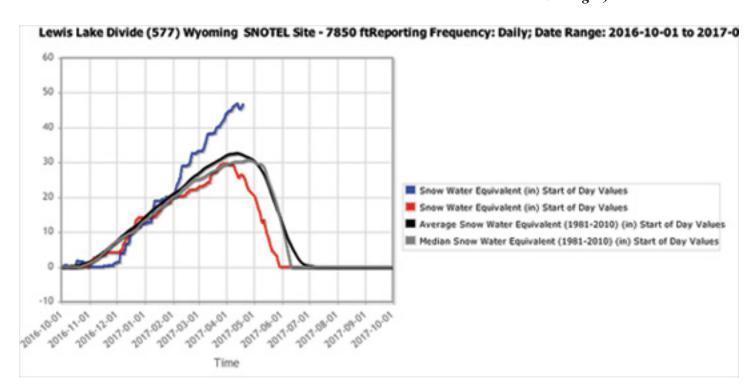
pack in the Upper Snake Basin. As of this writing, our watershed has 150 percent of normal snowpack. (see the Lewis Lake snotel graph below).

Shoshone Falls is putting on a spectacular show as the Bureau of Reclamation is releasing 20,000 cfs through the Snake River to make room in the Upper Snake Reservoirs for all that snow to melt over

the next couple of months. This is the biggest flow in the river since 2011, and there is a good chance that flows will go higher yet!

The other very important benefit to these flood control releases is that it makes water available for recharge throughout the Snake River Plain. The Idaho Water Resource Board recharge water

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Manager, continued from page 2 rights are on and 3,000 cfs of water is currently being diverted into the aquifer through numerous canal systems all along the river. We are hopeful that up to 200,000 acre feet of "managed recharge" will be accomplished this spring along with a much larger quantity of "incidental" recharge resulting from all the flooding across the lava plains from Shoshone all the way to Mud Lake area (see picture of the Milepost 31 recharge site on the front page).

All the storm water, snow-filled laterals, and mud have made all our O&M activities very challenging this winter. We are still backfilling numerous concrete measurement and delivery structures, but rest assured the entire system will be

ready to deliver your water by mid-April. Unfortunately the flooding canals forced us to postpone installation of our first Obermeyer Weir until this fall.

Many of the TFCC water quality ponds have also been full of water all winter, so we are just now cleaning as many as possible before water delivery begins. Repairing and regraveling numerous ditch and canal banks that were damaged in the flooding will also be a top priority for the next few weeks.

With the ample snow pack there will be a very good natural flow supply well into the early summer and with a full storage supply, we are planning for 3/4-inch delivery to you farmers this season.

Due to several retirements we are training six new ditch riders this spring, so many of you will see new faces at your headgate. As always we will ask you to manage your water wisely, communicate early and often with your ditch rider, and please let us know if you are shutting off so that we can prevent waste and operate as efficiently as possible.

Also we ask you to please dig sediment ponds to keep your precious soil on your farm and out of the flows going to your downstream neighbors. TFCC simply can't meet our return flow sediment and phosphorous goals without help from each of you. Happy Irrigating!

### Early season irrigation water key Even when starting with a full soil profile

In a wet spring like this one, when farmers have been hoping for three dry days in a row to get their crops planted, it's easy to forget how quickly soils can dry out. That's particularly true for growers with high-valued crops under center pivots.

Keeping the subsoil moisture profile full is critical to maximizing corn yields. Corn uses more water than any other crop in the Magic Valley with the exception of pastures.

Growers who don't keep the subsoil profile full will quickly find themselves behind once hot weather arrives and the corn plant is growing the fastest. Corn plants use four-tenths of an inch water each day during pollination.

"You can't run the pivot around fast enough to keep up," says Steve Hines, University of Idaho extension educator for Twin Falls County.

The University of Idaho ran an irrigation study in 2010 looking at five different irrigation scenarios and how those strategies impacted yield. The study was intended to help producers determine when to apply water in years when irrigation supplies are limited.

Plots received a range of water from 24 inches during the season when plants received the optimum amount of water to 18 inches in the plots that received 80 percent of crop water use (as measured by evapotranspiration or ET).

Watering according to ET and soil sensors through tasseling yielded 34 tons per acre of silage compared to around 30 tons per acre for the plots that stressed plants early to "let the roots grow into the moisture" and then irrigated according to crop water use. Both treatments received 21 ins. of water during the season.

The take home message, Hines says, is start irrigating corn early, irrigate often and don't stress the plants before tasseling.

### Business Hours — Phone Numbers

Twin Falls Office 733-6731 Buhl/Castleford Office/Yard 543-4264

Twin Falls Yard 733-6436

Twin Falls 24 HOUR EMERGENCY NUMBER — 733-6731
Buhl/Castleford 24 HOUR EMERGENCY NUMBER — 543-5264

www.tfcanal.com

### DITCH RIDER PHONE NUMBERS

All orders for water deliveries **MUST** be given to **YOUR DITCHRIDER** 48 hours in advance.

Ditchriders are available to receive calls at their listed telephone numbers between 7 & 7:30 a.m. Monday through Saturday.

If you are unable to reach your ditchrider, the Twin Falls and Buhl offices will take water orders until 11 a.m. Monday through Friday.

#### TWIN FALLS AREA

Office and Yard	733-6731
Manager — Brian Olmstead	420-3224
Field Supervisor — Jay Barlogi	326-4714
T.F. Watermaster — <b>Troy Jones</b>	490-2221
T.F. O & M Supervisor — Clay Robinson	308-6251
Engineering Technician— Louis Zamora	731-6851

#### MURTAUGH-MILNER

Milner Dam — <b>Doug Ping</b>	358-7942
Murtaugh Lake — <b>Doug Stanger</b>	280-0013

#### KIMBERLY-HANSEN AREA DITCHRIDERS

Hansen Area — <b>Jon Crane</b>	293-6824
Lowline So. of Hansen — Mike Quarve	221-7168
Highline So. of Kimberly — Scott Ross	308-4901
Kimberly/W. of Kimberly — Victor Chav	<b>ez</b> 320-8811
N & W of Kimberly — Raynay Shetler	358-5609

#### TWIN FALLS AREA DITCHRIDERS

NW of & Twin Falls City—Muamer Makas	410-3721
Airport Area — Kelley Collins	733-2657
SW of Twin Falls—Mark Makin	733-3375

#### **BUHL AREA**

Buhl/Castleford Office & Yard	543-4264
Watermaster — Quintin Cammack	543-8668
O & M Supervisor — <b>Doug Howard</b>	537-0907

#### FILER-BUHL AREA DITCHRIDERS

Lowline Curry Area — Walt Taylor	326-3126
North of Filer — Heather Goicochea	371-8510
Filer & Peavey — <b>Dennis Inchausti</b>	326-3816
West of Peavey — Janie Stiegemeier	543-6769
East of Buhl — Gerald Haye	219-3961
Buhl area — Bob Bowman	490-1039
Southwest of Buhl — Justin Clark	320-2311
Lucerne Area — Michael Graybeal	308-6825

#### **BUHL-CASTLEFORD DITCHRIDERS**

<ul> <li>Wayne Burgemeister</li> </ul>	539-1942
Clover — Mike Ihler	734-7930
West of Hwy 93 — Austin Puschel	539-0951
South of Buhl — Shawn Barrutia	969-1427
East of Castleford — <b>Jessica Robinson</b>	543-5815
SE of Castleford — Cheryl Sample	537-6728
S of Castleford — Tracy Vulgamore	308-0935
Castleford — Jerry Vaughn	537-6820

#### BOARD OF DIRECTORS

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Dan Shewmaker	423-4507
Twin Falls — Dave Patrick	734-7153
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Buhl — Rick Pearson	731-6233
Castleford — Phil Blick	537-6724

### Spring work clears way for water quality

by Jay Barlogi Field Supervisor

It's easy to be drawn to the natural beauty of springtime in the Magic Valley. It reminds us all of just how privileged we are to be stewards of the land and water.

Along with the beauty of springtime comes the hard work that for decades has followed southern Idaho winters. Time to stretch out all the kinks that have developed in the muscles and bones through the last few months and prepare the ground for planting. Burning ditches, cleaning ditches, working the ground, and sowing the seed are all steps in the spring time dance of a farmer.

Preparing our land to receive the water that crops need to grow is essential to the success of any crop, but preparing to waste our water off of the farm and retain the soil on the farm is essential to our future success. Just as cleaning the ditches, working the land, and sowing the seed are all important steps, cleaning water quality ponds, using PAM, and planting filter strips are necessary to reduce erosion, ensure that we retain the soil on our farms, and meet our water quality goals.







## HISTORY MOMENT 100 YEARS AGO AT TFCC

Between 1914 and 1917 drainage problems on the Twin Falls Tract had become very widespread and several thousand acres had saturated to the point they were no longer farmable. Local water tables were rising over 20 feet per



year, so a solution had to be found and quickly!

Digging trenches down to the lava rock had proven ineffective so in late 1917 TFCC bought a well drilling rig and found that wells drilled down to a depth of 60 feet would intercept the permeable rock layers where most of the water was moving.

Connecting these artesian wells with clay tiles in trenches proved very effective in draining large tracts of land. TFCC bought three more drills in 1918 and began operating them 24 hours a day seven days a week for several years to keep the water tables below farming depth. These tile systems together with drainage tunnels that were blasted from 1927 to 1951 saved the day for farmers on the Twin Falls Tract.

### An oldie but a goodie

Irrigators have been using polyacrylamide, or PAM, for years to control irrigation-induced erosion from fields. But some irrigators reported problems getting PAM to work well last year. Here are a few things to consider.

- 1) Shop around. Not all PAM products are the same. Formulations available this year range from 80 to 97 percent active ingredient. Experience has shown that using a product with a higher AI percentage is more effective.
- 2) Always add PAM to turbulent water, never add water to PAM. The exception to this rule is if you are using the patch application method, in which 0.5 to 1 ounce of PAM is sprinkled along the furrow-bottom just below the water source prior to turning in the water.
- 3) The first drop of water to reach the furrow should already contain the desired amount of dissolved PAM. PAM stabilizes soil to prevent erosion and surface sealing, which improves infiltration. To stabilize the soil in optimal condition, PAM must be delivered before the structure is destroyed by untreated flowing water.
- 4) When using PAM, increase furrow inflow rates to prevent longer advance time and excessive infiltration at the upper end of the field. Double or triple inflow rates during initial advance, then reduce to the least sustainable flow once runoff begins to improve infiltration uniformity.
- 5) If irrigation water is high in sediment, adding PAM to the flow can cause settling of

- sediment in the head ditch or in gated pipe. In that case, the patch application method may be the best approach to avoid siltation of ditches or pipes. If using gated pipe, turn the gates a little more downward to favor washing out sediments. Be sure that siphon tubes are not set so low in the head ditch that they clog if sediment begins collecting. Increasing siphon tube size will usually prevent tube clogging.
- 7) Do not over apply PAM.
  Research has confirmed that 10
  ppm of PAM in advancing water
  (the NRCS standard application
  method) provides erosion control in
  a wide range of circumstances on
  nearly all soils. The NRCS standard should be used whenever soil
  is disturbed such as first irrigation
  or following cultivation.