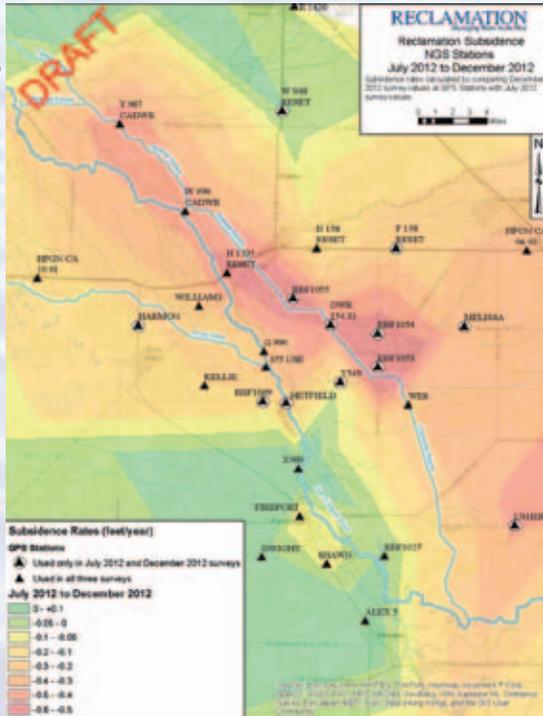




## LAND SUBSIDENCE

SLCC is working diligently on a land subsidence issue along the San Joaquin River (SJR) and the Eastside Bypass. This issue runs from Madera County north to Washington Avenue in Merced County. If left unchecked, it will be problematic for our shareholders at both its Sack Dam diversion downstream to the Company's Northeastern boundary along Washington

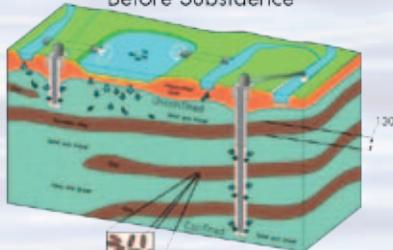
Figure 1



Avenue as depicted in the map. In reviewing **Figure 1**, please note the rapid rate of subsidence in the “red” areas. These two hotspots correspond to the two areas noted above.

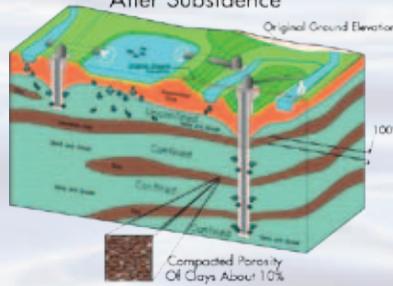
### What is subsidence?

#### Unconfined and Confined Aquifer Before Subsidence



Normal Porosity Of Clays About 40%

#### Unconfined and Confined Aquifer After Subsidence



Compacted Porosity Of Clays About 10%

It occurs when large amounts of groundwater are excessively withdrawn from within an aquifer. The clay layers with in the underground aquifer compact and settle as water is removed from the pores between the clay particles. At this point in time the clay layer will contract, therefore lowering the ground surface in the area.

### What issues can arise?

Subsidence can lead to many problems such as damage to existing canals, levee facilities and surrounding deep wells. It can also lead to potentially having to pump water from subsidence induced “valleys” where historically it has been

delivered via gravity.

### What exactly is at stake for SLCC?

- Water supply diversions at the Company's SJR point of diversion at the Sack Dam. The gravity diversion is at risk due to the regional subsidence at the head of the Arroyo Canal. The head

*Continued on inside...*

## SAN JOAQUIN RIVER RESTORATION PROGRAM (SJRRP)

The SJRRP is continuing to move forward at a snails pace due to a variety of factors. The program is currently in the interim flow period in which water is being released from Millerton Lake, down the San Joaquin River and into the Mendota Pool. The objectives of interim flow releases is to learn about the hydraulics, capacity, temperature and other in-stream attributes that will allow the Bureau of Reclamation to design and engineer facilities that will lead to the successful return of Spring Run Salmon as well as constructing facilities that will allow for the recirculation of water to landowners within the Friant service area.

As of today, the interim flows are not moving past the Company's Sack Dam due to the current level of the local groundwater. The Bureau is adhering to their standards within the agreed upon Seepage Management Plan. Therefore, the current interim flows are being consumed by the local demand in the Mendota Pool and the San Joaquin River and the various Friant districts are being credited for that water up in San Luis Reservoir.

The Bureau is currently studying Fall Run Salmon that have been trucked to the upper reaches of the river below Friant Dam. The hope is that these adult fish can teach the local fishery agencies how Spring Run Salmon would react, breed and move downstream from the hatchery located at the base of the dam.

The next step would be to reintroduce the Endangered Spring Run into the same river system for experimental purposes. Why would the agencies want to introduce the Spring Run Salmon when there has not been one project built that would not only ensure the viability of the fish to survive but more importantly protect the “Third Parties” interests as stated in the implementing Federal Legislation? SLCC and the other local

*Continued on inside...*

## What's Inside

Your Neighbors:  
Grassland Water District

On The Docket

At The Head Gate

In The Pipeline

## LAND SUBSIDENCE *CONTINUED...*

works along the river are subsiding, yet it looks as if the Arroyo Canal is fairly stabilized. Therefore, the current gravity diversion could quickly become a “hole” with the need to pump water at the head works. The estimated capital component to construct a 700 cfs pumping plant, plus the annual O&M power costs is very expensive.

- Potential flood control issues. The levees of the SJR and the Eastside Bypass have subsided and therefore will not hold their historical rated capacity when flood releases are made down the San Joaquin River and the Kings River.

### **What is the current rate of subsidence at the Sack Dam area?**

The current survey data shows that the land is subsiding approximately ½ foot per year. The sack dam does not have much “freeboard” left and therefore this rate is definitely an issue of the utmost importance.

### **What is the current rate of subsidence at the Eastside Bypass east of Sack Dam?**

The current survey data shows that the land along the Eastside Bypass has subsided 4.5’ over the last five years. The levee system has effectively lost all its freeboard in this location.

### **How is SLCC proceeding in rectifying the issue?**

The Company, in conjunction with Central California Irrigation District, has determined that the best alternative in moving forward is to be aggressive and pro-neighborly in working with the adjacent landowners. Therefore, Chase Hurley and Chris White set up landowner meetings in the area to inform and educate them on the subsidence issue as well as trying to motivate the groups to move forward on potential solutions.

#### **Here is the current work to date**

- The subsidence area has been split up in two regions.
  1. The southern area (known as the Redtop Farmers) from the San Joaquin River east to Road 4 and the north/south boundary from Highway 152 to approximately 1 mile south of Sack Dam.
  2. The northern area (known as the Washington Ave. Farmers), from the San Joaquin River east to Highway 59 and the north/

south boundary from approximately Sandy Mush Road to Highway 152.

- The Redtop Farmers agreed to move forward with a hydraulic and geo-technical study to obtain valuable information upon which they can make informed decisions on how to move forward. The study has been completed and the group is now defining a process to move forward. The Washington Avenue Farmers will soon be doing the same.
- SLCC, CCID, Madera County and Merced County have all agreed to help fund the studies.
- The studies will lead to identifying the following:
  - (1) Potential lands that could be used for recharge basins when flood flows occur in the Chowchilla/Eastside Bypass system
  - (2) Increase the potential to naturally recharge the area within the existing local streams during times of flood flows
  - (3) Ability to abandon deep wells that are perforated below the Corcoran clay and replace them with newly drilled shallow wells.
  - (4) Finding potential partners for a supplemental surface water supply
  - (5) Ability to work with State and Federal agencies to acquire the necessary permits to move forward with projects adjacent to, or within the Eastside Bypass channel

### **What is the financial impact to the Company’s annual budget?**

The Company is in the infancy stage of this issue since it has only been on our screen for the last six months. We will be spending approximately \$40,000 this year to do all the work described above. The land subsidence financial impacts to SLCC are still unknown. The hope is that with an aggressive “on-farm” approach the rate of subsidence can be minimized and then eventually flat lined over time. It is SLCC’s thought that this “on-farm” approach is a wise investment on our part rather than waiting for others to solve the problem. Currently, the Board of Directors will be reserving money in FY2013 and FY2014 to create a funding stream once an agreed upon implementation plan is approved.

## SAN JOAQUIN RIVER RESTORATION PROGRAM (SJRRP) *CONTINUED...*

agencies are very concerned that a rush to introduce the Spring Run Salmon into the system would put local diverters at risk under the Endangered Species Act. In order to protect our position, we are negotiating with the Bureau and the National Marine Fisheries Service so that we are to be fully protected if and when this experimental fish is diverted into our head works or happens to die within the river system. This experimental reintroduction is planned for the spring of 2013.

The SJRRP Reach 4b channel investigation is still on-going. This Phase 1 project borders the entire northern boundary of the Company. The agreed upon court settlement states that reach 4b must be built to a minimum of 475 cfs. You need to remember that the spring pulse flows for the program will be up to 4500 cfs. Therefore this channel must either be built for 4500 cfs or if not, be at a minimum of 475 cfs with the balance of flows being channeled into the adjacent Eastside Bypass. The local landowners have been trying to work closely with the Bureau in identifying the appropriate route for this restoration flow (4b channel vs. bypass channel). In our minds, the 4b channel is wrought with a variety of issues that

leads you down the path of engineering a restoration channel within the local flood control channel that can handle both fish and flood water. In saying that, this option must meet the main objective of the flood control district: maintaining capacity within its channels to protect the local landowners from flooding during releases from Millerton Lake. The potential setback levees for a newly designed Reach 4b channel will take a large amount of productive agriculture out of production.

The Company is going to have to spend considerable resources to protect itself within Reach 4b. Some of the issues are as follows:

- SLCC conveyance and drainage facilities
- SLCC water rights and shareholder stock on lands that would potentially be purchased by the Federal Government
- Seepage Impacts

The design and engineering for the Company’s SJRRP Fish Screen and Sack Dam Project has been put on hold until the land subsidence issue can be more fully vetted. If not for the delay, the project would have been started in January of 2013 and completed in the fall of 2014. The estimated construction costs are \$30 million.

## GETTING TO KNOW YOUR NEIGHBORS

<b>Grassland Water District:</b>	(209) 826-5188 • www.gwdwater.org
Date Established:	1953
General Manager:	Ric Ortega
Chief of Field	
Operations/Watermaster:	Mike Gardner
Secretary / Treasurer:	Veronica Woodruff
Board President:	Pepper Snyder, Sprig Haven Farms Duck Club
Total Acres:	51,537
Grassland Turnouts within SLCC canals:	14
Grassland Acreage served by SLCC turnouts:	2,879
Conveyance Contract with SLCC:	signed in 1998 for a 25 year term



## ON THE DOCKET

### • Delta Habitat Conservation and Conveyance Program

The Company is participating in current policy discussions for the formulation of a habitat conservation program in order to decide if they will proceed fiscally and politically on the Delta Habitat Conservation and Conveyance Program. This is the habitat plan for the proposed Peripheral Canal within the Bay Delta conveyance system.

### • San Joaquin River Exchange Contractors Water Authority Water Resources Plan

This plan is multi faceted and will help ensure flexibility and reliability for the Company if and when it is required to take a portion of its deliveries off of the San Joaquin River. It will also allow the Exchange Contractor member agencies the ability to work with neighboring irrigation districts on projects that provide multi-benefits to both parties. The plan is being devised and implemented in a fashion that would allow the Company flexibility in who pays for the proposed projects and therefore receives the benefits. Future projects, if perceived to be beneficial to the Company, would be paid for out of reserves built into future water rates.

### • San Joaquin River Exchange Contractors Water Authority proposed 25-Year Water Transfer Program:

The environmental document (EIR/EIS) for the Exchange Contractors transfer program is scheduled for final approval in March 2013. This document will be the basis for negotiating new conserved water transfers to willing buyers within the Bureau of Reclamation's Central Valley Project Place of Use. SLCC has been part of an active transfer program that has allowed it to annually transfer water that it has conserved. The revenue stream from these transfers has been a vital cog in the Company's budget as it relates to capital investments and infrastructure rehabilitation within our canal and drainage system. The ability to get the environmental document approved early this year is vitally important due to the fact that the current water transfer program ends in December 2013.

### • Winter maintenance work:

1. Dredging of the Lone Tree Canal and Midway Canal systems was completed.
2. Construction was successfully completed on six long-crested weirs on the Arroyo Canal. Within the last thirty months, every weir on the Arroyo Canal has now been modernized in order to more efficiently deliver water to our water users while at the same time helping decrease operational spill. This modernization work was done in partnership with the US Bureau of Reclamation through their Water Smart grant program.
3. Installation of a new crossing on the bottom end of the Arroyo Canal. Along with this crossing, both banks of the Arroyo Canal will be rehabilitated. Over the years, the banks have narrowed due to erosion. This new crossing will greatly enhance our maintenance productivity.
4. The upper pond of the Arroyo Canal along with the Temple Santa Rita Canal, the Orchard Canal and the San Pedro Canal were the only systems in service this winter in order to make contract deliveries to our local refuges.

## AT THE HEAD GATE

Resource management, as with the rest of California farming, has become ever more dependent on efficiently and effectively using raw materials to produce the bountiful harvest that all Americans rely on. California farmers do a great job of feeding our citizens, yet there are those that believe that these same tillers of the land are growing subsidized crops with subsidized water at the expense of the environment. Whether that environment is a free flowing stream, water stored behind a dam, salmon swimming out to the Pacific Ocean, the multitude of critters in the every changing Bay Delta estuary, or the water quality for a diversity of users, our Company shareholders need to remain pro-active in protecting our asset.

We must also protect, in my mind, our water's ultimate beneficial use: feeding the people of our great nation so that we never put ourselves at a national security risk of having to import the majority of our food supply.

Within the boundaries of our small Canal Company, we continue to produce a viable revenue stream from conserved water transfers that allow for construction of annual modernization projects within its conveyance system. This modernization program goes a long ways in fighting the good fight relating to regulation, endangered species issues and beneficial use.

The water transfer revenue, combined with funds derived from the shareholder assessment and tiered water rates, have been carefully crafted within a multi-year budgeting process to help ensure the long-term future of the Canal Company while at the same time maintaining the real value of shareholder stock; your land.

I hope that these newsletters will be helpful in educating you on issues that the Company is dealing with on a daily basis. Feel free to call or stop by the office with any questions you may have.

## IN THE PIPELINE

**SLCC's** Centennial Celebration  
has been rescheduled for

**Saturday, September 14, 2013.**

The celebration will be held in the O'banion Building at the Los Banos Fairgrounds. We invite all shareholders to help us celebrate 100-years of cultivation and management of our valuable resource. Please look for your formal invitation later this summer.



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Greg Pearl, *Vice President*

David Pruitt, *Secretary/Treasurer*

David Carlucci

Cannon Michael

Anthony Neves

Aldo Sansoni

Chase Hurley, *General Manager*

Carole Jordan, *Water Clerk*

Ruth Madera, *Accountant*

Palmer McCoy, *Executive Assistant*

Alejandro Paolini, *Water Conservation Coordinator*

John Paul Petroni, *Operations Supervisor*

## DID YOU KNOW?

The Company is celebrating their 100 year anniversary.

Here are some interesting tid-bits from 1913:

- Woodrow Wilson succeeds William Howard Taft as the 28th President of U.S.
- Governor of California was Hiram Johnson(R). First 4 term governor to be reelected.
- Oregon passed the 1st minimum wage law in the US.
- The first law regulating the shooting of migratory birds was passed
- Death Valley, California breaks the highest temperature recorded in the world at 134° (still the record)
- Stainless Steel was invented by Harry Brearley
- 1913 World Series was won by the Philadelphia Athletics. They beat the New York Giants 4 games to 1.
- Cracker Jack started putting prizes in the box.

*Sack Dam - Actual sacks in the river, prior to 1947*



*Delta Canal flume at Salt Slough prior to 2008*

