TWC Tucson Water Company
a community owned and volunteer operated non-profit corporation since 1990

12490 Salem St.
Henderson, CO 80640

Dave Grandlienard
ORC

To: **People of Tucson Estates, Henderson, CO**

Subject: Irrigation Water System Status Report - October 2004

Dear neighbors, co-owners and customers:

Our second year of irrigation water restrictions ended on October 1st. These same restrictions will resume on May 1st, 2005. Then, after our May annual meeting everyone will rotate to a new schedule. Reminders will be mailed before the restrictions resume in May as part of the annual meeting notice/process.

The new irrigation well (#421-R-R) on Salem St. has been shutdown for the winter but the old well (#420-R) on Racine St. should stay online, except for maintenance, throughout the winter months.

The Little Well That Could... In the first year of operation our new $40,000 well started off producing just 40 gallons per minute of the expected 150 gpm. But, by the middle of the summer production was up to almost 70 gpm. In total, this one well produced about 7 million gallons (21 acre-feet) during the 6-month season. The electric bill alone was about $1500 for 18,000 kwh. This is about 80 times higher than the cost of using 480v 3 phase power available at the old well. Some of the production increase came from tuning the VFD motor controller and some from a rising Static Water Level (SWL increased about 1 foot).

Greeley Water Court... You all should have received a copy of our water court filing sent out by the court clerk. Amazingly, there were no objections filed in opposition to our application. I will probably file again to amend the application with some minor corrections and an increased gpm claim for the new well. I have been working with Johnie Vaughn and other neighbors to be included in a new court application for a plan of augmentation and other water rights issues that he needs. We can all benefit by supporting this effort.

Augmentation Water... The right to pump our irrigation wells comes by having augmentation water to replace our out of priority diversions. The Central Colorado Water Conservancy District (CCWCD) provides this for us. You will see two of their tax items on the ballot when and if you vote; they are the last two items on the ballot. If we lose our CCWCD water we are really screwed. Their court case including our augmentation water is next May. Another company, GASP, augmented most of the surrounding irrigation wells and they went under during 2002. Most of these well owners lost their ability to pump in 2003. Our neighbors in Levi Circle to the south assessed themselves about $5,000 per lot to develop a plan to replace only a small part of their augmentation water lost with the collapse of GASP. Maybe some of us who were complaining about the $500 we were charged last year should think about this.

Our Old Irrigation well... The SWL at the old well has risen more that 2 feet since the water storage construction project stopped pumping into the ski lake last fall. A very good sign. We still have 3-4 feet to go to return to normal. If this happens our new well should also recover SWL and gain even more production capacity (the pump and motor can run all the way up to the 150 gpm we are decreed). We do not have the SWL or automatic controls needed at the old well to run the larger pump yet. We do not have the resources to bring a civil suit and prove material injury to our senior water rights then recover damages. Nor the resource to add a VFD motor controller to one or both of the old well's pump/motors. I wish we did. If there is anyone with some deep pockets or free attorneys, please give me a call. :-)

Co-Operating the 3 Irrigation Well Pumps... Lacking the SWL or VFD needed to run the largest *papa* sized well pump (used in the glory days of unlimited water for $10/month) we ran the new smaller *baby* sized well pump as the primary and used the older well's *mama* sized pump as the secondary. This minimized the cycling of the medium sized pump – lest we burn it out. Therefore, in 2004 we actually pumped less water from the old well using the mama sized pump, about 4.5 million gallons or 14 acre-feet, than the new well (7-MG/21-AF) with its more expensive operating costs. Hopefully, the SWL will continue to rise during the winter months and then maybe... the board of directors can ease the schedule restrictions for 2005, if we can find a way to co-operate the pumps and agree on a fair schedule change acceptable to most, if not all, of the homeowners.

Water Meters... CCWCD has notified us that everyone will be required to meter their augmented wells in 2005. Our new well has an $800 meter that started sticking after one month (B.S.). The old well has no meter at all and no room to add one. The 4.5MG above for the old well is an estimate using electric consumption (KWH) records for the new and old wells. We will have to work with CCWCD to install a new meter outside the underground pumphouse on Racine St. and get our new meter fixed (winter construction projects – volunteers?). There may be some funding available to help us do this. It would be a good idea to include a sand trap with the installation.

Most of the individual irrigation meters at our property probably do not work. The company has a hard time simply getting the domestic meters read timely and accurately, much less maintained. So please thank your volunteer meter readers when you see them!

All of our individual water meters need to be replaced on a regular basis (10-15 years). Some are unreadable, too low, corroded, sand blocked, and/or their pits are collapsing. At the time the company was created in 1990, the individual meters and meter pits remained the property of the homeowners. They are their responsibility and NOT the water company's. In the past, the board has provided new meters and new PVC pits to anyone who needed to replace them but no board has proactively managed the meter problem. I have nagged the various boards about this over the years. In the future, if we cannot find a way to replace and maintain all of our meters on a volunteer basis the board may be forced to take the responsibility from the homeowners and bill them for it (it won't be cheap). I suggest that this be discussed at next years annual meeting. Meters are about $35-$50 and new pits are about $20-$40. For safety reasons, the industry is changing to new backflow prevention meters and electronic remotely read meters that cost more. Often it's a lot of work to dig out and raise or replace a meter or pit... that's why it hasn't been done. Also, it's difficult to confront and demand maintenance from a homeowner when it may be contentious or costly... and there are always more important tasks at hand. (Any volunteers?)

What is fair... Most of us became water pigs before 2003 when it was cheap and unlimited. Most have been understanding and supportive of the rate increases and restrictions since that time. Overall, people have followed the restrictions, paid their bills on time, and not tried to cheat their neighbors. We have a scheduling system that gives everyone more or less the same amount of time to water and hopefully we may be able to increase the scheduled time in the future. However, that does not mean the system is fair. There are 43,560 sq.ft. in an acre. Some homes water 35,000 sq.ft. and others less than 5,000 sq.ft. A fairer system would probably have everyone pay for what they actually use; but that probably means maintaining irrigation meters when we aren't doing a very good job with our domestic meters. Some of our homeowners spend many hours "volunteering" their time to make this company run. Others, though willing to help, don't have the time or skills to do so. Don't get out the violins yet. Life isn't fair and we all probably take things for granted that we shouldn't. Like living in the greatest country on earth.

I may as well fill up one more page... so that the back of the "Protect Your Meter Pits from Freezing" figure enclosed does not have to get mailed out blank.

Money, Money, Money... Our first priority is always the drinking water supply and quality. That's why the first major expense of our new 2-year-old company, done with a bank loan, was about $20,000 to bring a second drinking water well online, into the Laramie-Fox Hills aquifer. A few years later the loan was paid off and we spent another $20,000 (with the help of Henderson Elementary, 27-J) to bring our 1st irrigation well online. When our bank account was full in 1999-2000 the board of directors decided to start paying to have some of the "volunteer" work we needed done. This didn't last long because shortly after getting "labor only" bids for the first job we paid a neighbor to do, $3500 for about 3 days work to install a 500' drainage line for well testing and maintenance, we discovered our primary drinking well was sucking air. It then cost us $20,000 to video, acid rehab, reset and lower a new pump into that well. We then used the new $4500 drainage line to develop the rehabilitated Arapahoe well before returning it to service. We would do it all over again because that is highest priority. Since that time, other than paying out small amounts for labor and giving out gift certificates there have been no significant payments to any neighbor, except me. From May 2003 until April 2004 I logged 600 hours on the new irrigation well and was paid a total of $3000 over a 6-month period from the $40,000 cost of installing the community's 2nd irrigation well. I estimate that we saved over $25,000 in donated labor and discounted material on that project alone. Former resident Dennis Irvine, and others, saved us over $25,000 spending an entire year fixing leaks and bringing our irrigation system online. My nearby neighbors, other contractors in the neighborhood and their relations have saved us at least another $25,000 over the years on numerous construction and repair projects that few people know anything about. Now Johnie Vaughn, who discounted our new well's concrete vault by $4000, is preparing to spend tens of thousands on legal and engineering fees for an augmentation plan that we may be allowed to participate in at little or no cost to us.

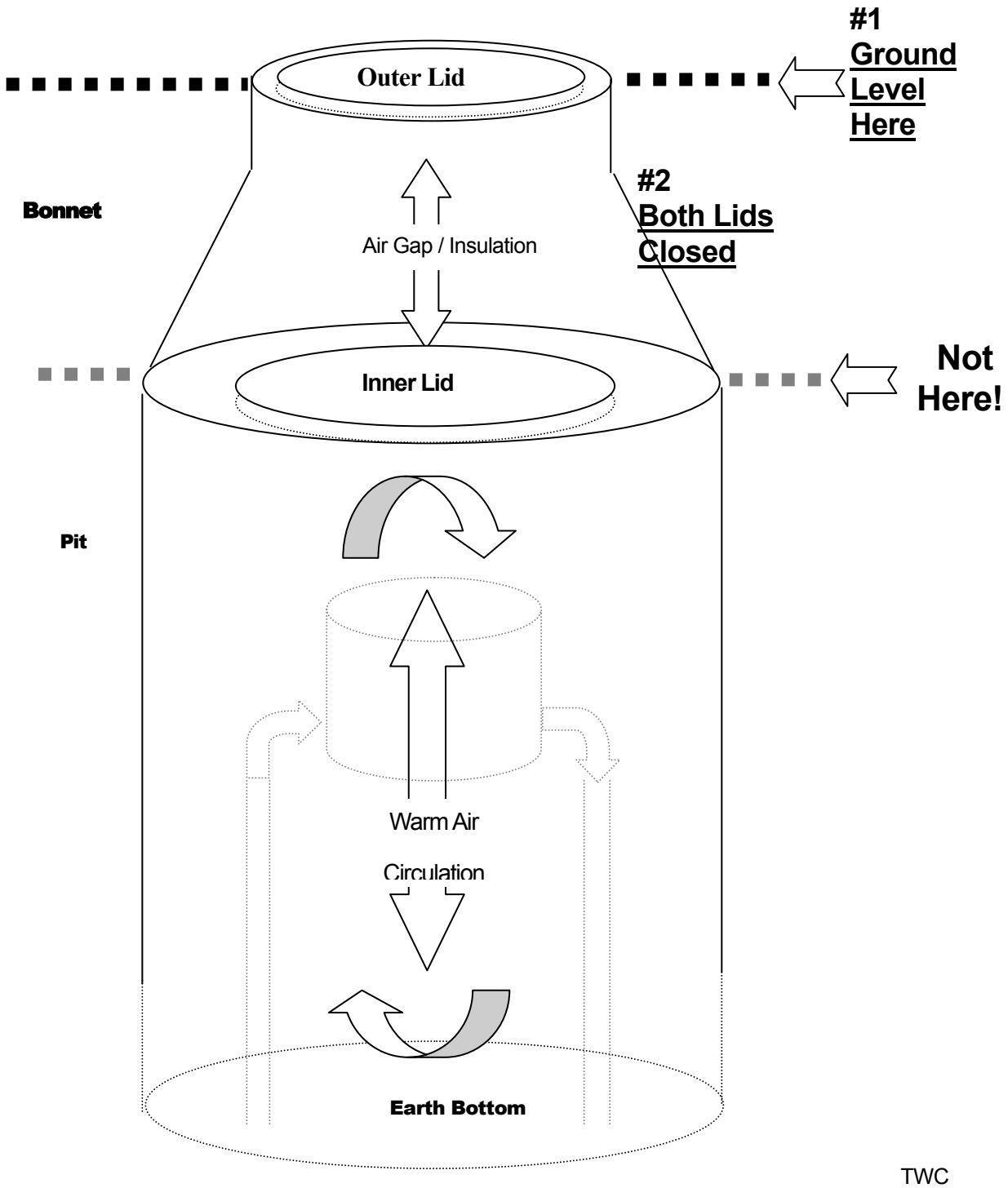
What's the point... We have a good thing going here. When we cooperate and help each other we all benefit. We are no longer a "one well company" serving 20 homes from a bankrupt land developer. Our property values have doubled and tripled in the past 15-20 years. We operate 4 wells and 2 pressurized distribution systems for 36 homes plus the elementary school. We are a public utility and an incorporated Colorado nonprofit company. Our operations are heavily regulated and monitored by the EPA, the Colorado Department of Public Health and Environment (CDPHE) and the Department of Water Resources. We have multiple water plant / distribution licenses and operators as required by law. We are required to belong to the Utility Notification Center of Colorado (UNCC) to provide water utility locates in our community. We generate complex reports and legal documents for federal and state agencies. We routinely undertake major construction projects and repairs with full liability and safety requirements. We have a half dozen lines of credit or commercial accounts with local companies and contractors. We work to generate good will within the community by picking up trash on the highway and cooperating with other neighbors, the school district, and government agencies on matters affecting our subdivision. We file taxes, generate meeting agendas & minutes, hold elections for the board of directors, appoint officers, and do the bookkeeping of a real company all on a shoestring with a few "volunteers".
"We" - are all of us. If you want to help, have a question, suggestions, or just want to talk please contact a board member or corporate officer.

David H. Grandlienard

Tucson Water Company, Inc.
CDPHE – Operator in Responsible Charge (ORC)
Drinking Water Class C #2912
Distribution Class 1 #10578

Protect your Meter Pits from Freezing

Every year we lose one or more water meters from freezing.
A single frozen meter can cause a water supply shutdown for everyone.
Follow steps #1 and #2 below:



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