Gary L. Esslinger has been the Treasurer-Manager of the Elephant Butte Irrigation District since 1987. Gary is a third generation member of a pioneer farming family living in the Mesilla Valley. His grandfather, J. L. Esslinger, Sr., settled in La Mesa in 1913 prior to the completion of the Elephant Butte Dam. Gary's father, J. L. Esslinger, Jr., also farmed for over fifty years. Gary kept his roots in farming as well as other agricultural based industry and lives on the family farm with his wife, Tina. Gary and Tina have three daughters. Gary earned a bachelor's degree in business administration from Northern Arizona University in 1973. He returned to the Mesilla Valley and began working for EBID in 1978, where he has been for the last 30 years. Gary has had the honor of being appointed by Governor Bill Richardson to chair the search committee to select the State Engineer for New Mexico as well as being appointed to the Office of the Dona Ana Flood County Commissioner, a position he held from 2002 until 2006.

Lower Rio Grande Project Operating Agreement: Settlement of Litigation

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Good morning and thank you for this opportunity to speak to you about the operating agreement that was signed down in the Lower Rio Grande in Southern New Mexico.

John Hernandez spoke yesterday about a distinguished group of risk-takers and today I would also like to add to these famous risk takers a few of my own. I have my own version of a group of men that I believe did a lot in the Rio Grande Project to settle on this operating agreement, so if you will allow me to read something.

A WATER LINE DRAWN IN THE RIO GRANDE

Wild stories, like weeds, spring up out of the West,
Spirited by folklore, legends, and history at best.
Most recent of all, the tale of a water allocation claim,
Uniting the Rio Grande Project farmers with historic fame.

In the Valley of El Paso, where the Rio Grande does run,
Grew up the El Paso County Water Improvement District, Number One.
Johnny Stubbs, the Chairman, was called out and elected to lead,
His character, convictions and family roots, they knew they would need.

In the Valley called Mesilla, where three crosses stood,
Elephant Butte Irrigation was upstream, with a reservoir in their hood.
The Salopeks, Arnolds and Garys names became known,
Where their Grandpa's roots were as deep as the pecan trees grown.

The stage was set for the greatest duel on the Rio Grande,
Each District's Board drew their lines in the wet silty sand.
Twenty nine years of bleeding because each side was sued,
'Whiskey for drinking, water for fighting," the battle pursued.

A West Texas lawyer, wily and cunning, they called him Jim Speer,
Drew his sites on New Mexico and put his jurisdictional claim in gear.
Yet ready and able were Hubert and Hernandez, the dynamic duo,
To counter the claim for New Mexico and argue 'esta agua es mio".

A hired hand from Texas, called out from the City of Austin,
A technical wizard, Al Blair, dealt carryover storage to bargain.
From upstream 'New Mexico' they hired from Aggie Land,
Phil King, the professor, who countered a D-3 curve ace in hand.

Reyes, Esslinger and Cortez, the Wranglers, the best on each side,
Were called to be time keepers and clock this wild ride.
Who would have thought, from the Rio Grande Compact would come,
Pat Gordon, the peacemaker, to step in and 'getter done'.

Who could forget Reclamations role and their government hitch,
"We're here to help!" they say, so they called in Chris Rich.
And where would the West be without justice so swift,
They called upon Lee Leininger from D.C. to give them a lift.

The dust has all settled, and the Rio Grande will still flow,
An operating agreement spells out the direction the water will go.
A compromise and settlement was added to end all the grief,
Rio Grande Project farmers will get back their lifeblood, a welcome relief.

Happy Valentines Day
February 14, 2008
Gary Esslinger

John D'Antonio, our state engineer, is always asking, because we give him such a hard time down south, "Where's the love?" and this first figure (Fig. 1) represents the EBID and EPCWID#1 board members from down south signing a Valentine Card to send him. Actually this is the official Operating Agreement signing ceremony that took place on February 14, 2008.

Figure 1. Operating Agreement signing ceremony

The Rio Grande Project, which I won't go into a lot of detail about here, was authorized in 1905 and largely completed by 1916. The water was divided between New Mexico (90,640 irrigated acres) and Texas (60,010 irrigated acres) 57% and 43%, respectively. The Treaty with Mexico was also very important in that authorization and allowed 60,000 (ac/ft) to be delivered to Mexico in perpetuity. The Project was operated by Reclamation from1916 up until 1978. The Districts paid off their entire debt to the U.S. and began operation maintenance of the Project in 1979 to the present. During those historic dates, there were more dry years than wet years. There was a full allotment (3 acre-feet) of water between 1979 and 2002, but then returned to the drought of 2003, and in my opinion still exist today.

The Rio Grande Compact was another institutional development that took place during this period of time that laid out the division of water between the three states. The Rio Grande Compact apportions water between Colorado, New Mexico, and Texas. It is also important to point out that the Bureau of Reclamation operated the Rio Grande Project as a single unit at this time, but I will talk about that a little bit later. The other important feature is that the entire Rio Grande Project is located in Texas, so that makes EBID sort of a an island to say the least. No provisions for apportioning water were contemplated in that Compact for the Rio Grande Project, so actually the operating agreement, as it now has been developed, is really a mini-compact within the Rio Grande Compact.

Post compact years represented in Figure 2 are what we refer to as D1 and D2 curves. The blue regression line is the historic D1 delivery curve and the green line is D2 historic diversion curve. As you can see, the post-Compact problem was the sustained drought period from 1950 thru 1975, and the Bureau measured the release from Caballo reservoir and delivery to the head gate. When the districts took over the Bureau realized that they would have to rely on the diversion curve measurements instead, since the districts were taking over at the diversion dams and then measuring the water to the head gate. The two linear regression curves represent the historic period of time during the drought as measured and accounted for future allocation to EBID, EPWID and Mexico. So, for a given release of 600,000 acre-ft, you get to divert 713,000 acre-ft. The plus amount is due to accretions. This is a little bit of what Dr. Phil King was talking about yesterday. On the other hand, when you release 600,000 acre-ft and you try to deliver it, you will only be delivering 393,000 acre-ft because of what we lose from seepage and evaporation in our canal system.

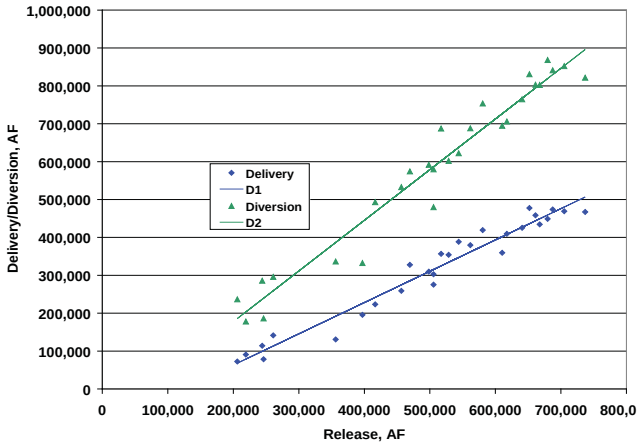

Figure 2. Post Compact

Let's talk about the Post Reclamation years. In 1979-1980, the districts pay off construcion loans. This is very important because when we began taking over the operation of the Project in 1979, both districts agreed to sign an Operation/Maintenance contract with Reclamation that obligated the Bureau to develop an allocation and operating plan. In 1980, the City of El Paso applied for groundwater well permits in the New Mexico portion of the Mesilla Bolson in the Lower Rio Grande. It was a major lawsuit for the young district, and when the dust settled the State of New Mexico denied the application and the ensuing lawsuit was finally dismissed in 1991. So the plan to put the operat-

ing agreement together was put on the back burner once again, and we let the operating agreement simmer for a while longer. The period from 1979 to 2002 also helped because that was a 23-year period of full water supply for EBID, EPCWID #1, and Mexico, so no one was really worried about water shortages at that time.

However, we started seeing things begin to happen in1997. The United States government filed a Quiet Title lawsuit; EPWID #1 filed a cross claim alleging inequitable allocation of Project water by Reclamation because of groundwater pumping in New Mexico. This created negotiations among the districts, Reclamation, and other interested parties. That started in 1998, but collapsed in 2000. In 2001 the Quiet Title suit was dismissed, but EBID felt like it was important to keep the suit going in federal district court in Albuquerque based on the fact that Reclamation still hadn't implemented the operating agreement.

Then comes the return of the drought in 2003, after 24 years of full supply. This created big problems for my district as well as for Chuy Reyes's district and for the Bureau because none of us had ever operated in a drought under the new operating rules and regulations of releasing the water, diverting it, and measuring it at the farms not as a single unit but instead to separate units, in two different states. Reclamation tried different methods during that period of time, but they were really operating without a legitimate plan, to which all parties were in agreement. Mexico's allocation was based on useable water in Project storage and the remaining diversions were divided between EPCWID #1 and EBID in 43% and 57% proportions, respectively. This created major problems as the drought deepened.

As a manager, Figure 3 is easy for me to describe. The problem is the diversion from the river to the farm gate altered by groundwater pumping. If you understand this, then you will know why it's important to have an operating agreement in place that everyone has bought into. As you can see by this Diversion/Conveyance diagram, you divert water from the Rio Grande, put it in the canal system, the canal seeps, some water gets delivered to the fields, the crop uses water, the fields drain into the drain system, and it is returned to the river. I have a pretty good system of managing the surface water flow, along with metering and measuring. Unfortunately in our particular area, there's seepage and drainage that returns to our groundwater and recharges the aquifer. There is a hydrologic connection between the groundwater and the surface water, so I have to consider how to balance the two together. When you complicate matters by sticking a well in the aquifer, what happens is that you get a cone of depression occurring, and its hard to move this water through the system without the water filling those cones of depression before it gets to the state line. EBID saw this coming. You can visualize this from Figure 4. The D2 curve, the diversion curve, shows that we have plenty of water before the impact, even during wet and dry years. But look at the start of the last drought in 2003 up until now. You can see we are way below our standard deviation.

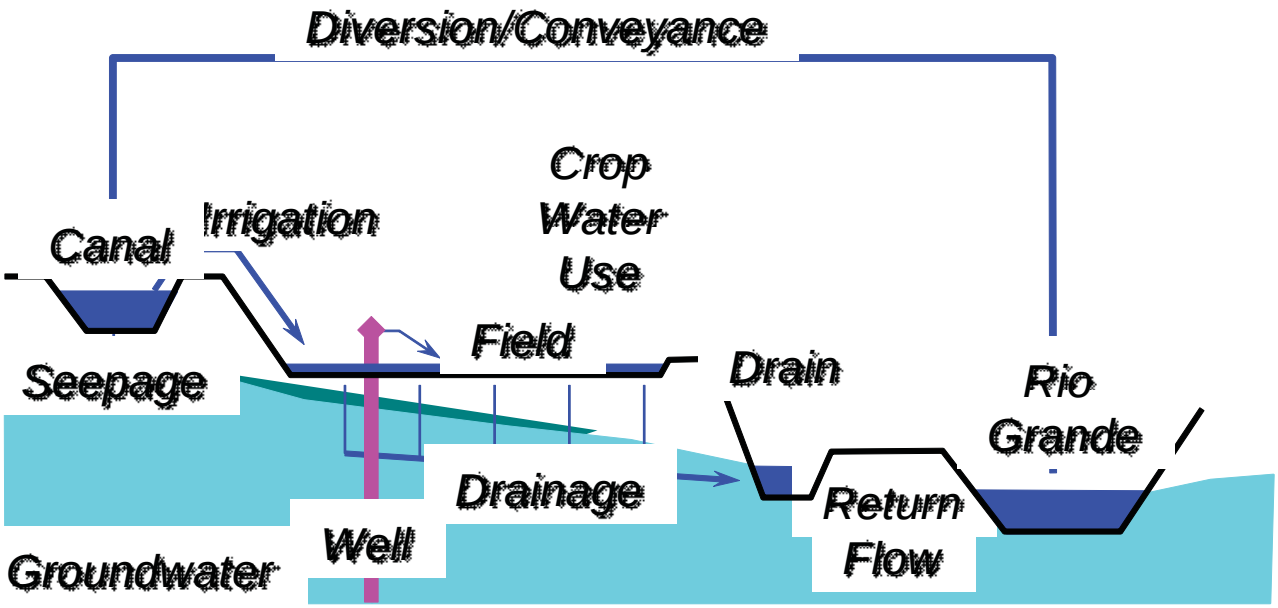

Figure 3. Problem: Release to diversion hydrology altered by groundwater pumping in New Mexico

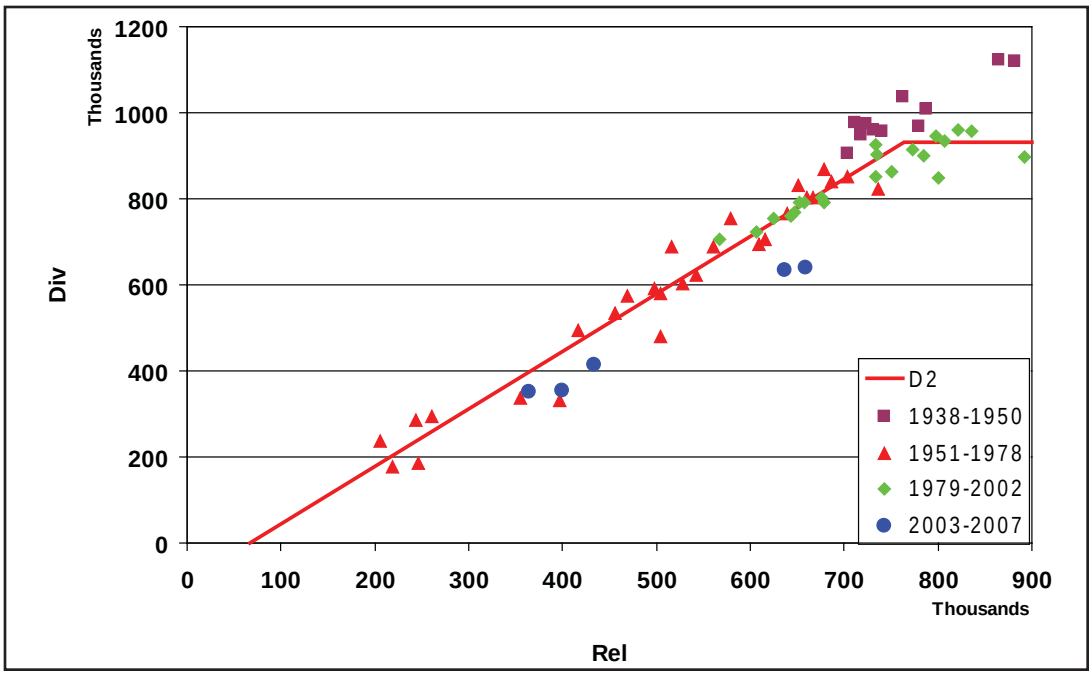

Figure 4. Visualizing Groundwater Impacts

Visualizing the groundwater impacts from 1979 to 2000 indicated that we still had a lot of water, so we had nothing to worry about. However, things began to change from 2003 to 2007. You can see that we were considerably further away from the D2 historic line, which concerned EBID. We knew we were fixing to go to federal court or the U.S. Supreme Court. In Figure 6, the D2 red line represents the drought of the 1950s and 1978. The blue dots represent the new drought of 2003-2007. You can see that in 2005 we were way below the deviation of D2 because of the current drought. So as tension started to brew between the districts and the Bureau of Reclamation, the ad-hoc method the Bureau of Reclamation was using and an unwritten operating plan all brought that simmering pot from the back burner up to the front burner and things started boiling. In 2006, EBID proposed a reallocation methodology tying EPCWID#1 and Mexico's allocations to the Project release based on those historic D1 and D2 curves. In 2006, Reclamation implemented this new methodology called D3, but also tried to introduce in 2006 and 2007 a concept called carryover storage. This was contrary to assurances to EBID that they wouldn't. The Bureau promised to one district that carryover would not happen while promising the other district that carryover storage would happen.

Year	Release	D2 Diversion	Actual Diversion	Deviation
2003	363,963	396,939	350,231	-46,708
2004	399,576	444,583	355,000	-89,583
2005	659,000	791,640	639,230	-152,410
2006	433,000	489,297	415,680	-73,617
2007	636,136	761,052	632,872	-128,181

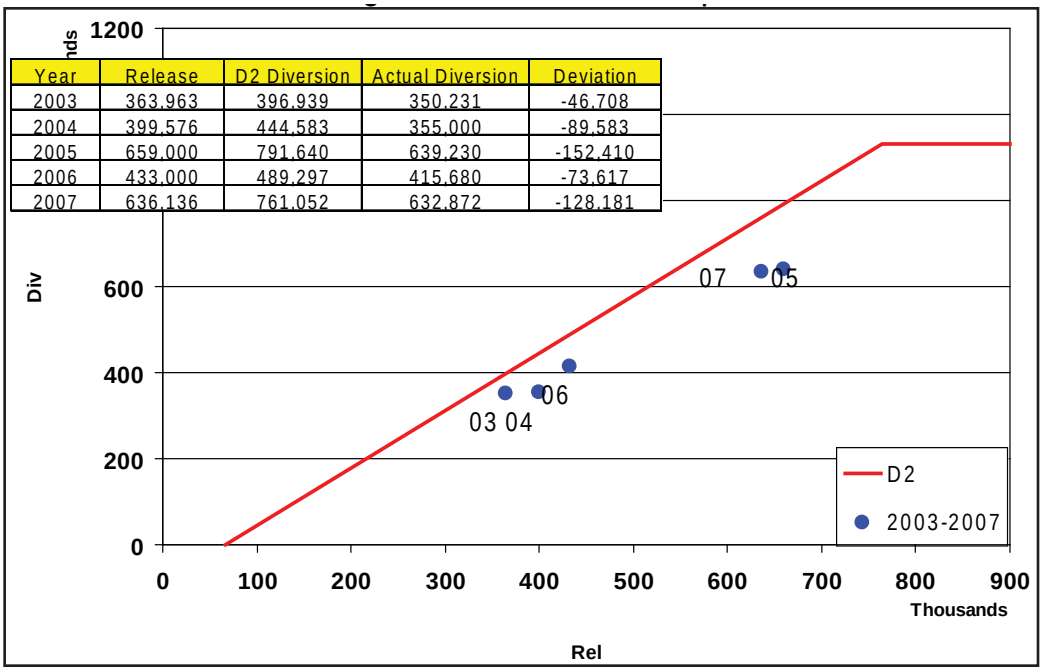

Figure 5. Visualizing Groundwater Impacts

In 2007, EPCWID#1 filed a lawsuit in federal district court in Texas based on Reclamation's inability to address the carryover issue equitably. It looked like this was all heading down a litigious trail. The settlement talks started in the first part of 2008 because farmers realized they would be the most impacted on both sides of the state line and if they didn't come to the table and decide what to do, some judge was going to do it for them.

We began negotiations in January on Martin Luther King Day. Reclamation brought in their lawyers from D.C. and the regional office in Salt Lake City, and the two boards, technical teams and lawyers met down in the El Paso, Texas at the Texas Compact Commissioner's Office. Pat Gordon was a great mediator; he did a wonderful job in keeping the parties focused. There were times when negotiations got a little heated, but we finally addressed all the issues on January 31 and we worked out the details up until Valentine's Day, February 14, 2008.

So what did we do on Valentine's Day? The operating agreement settlement gave an annual water allocation using 1951 to 1970 hydrologic conditions to quantify equitable allocation to EPCWID#1 based on releases from Caballo Reservoir. The allocation methodology protected EPCWID#1and Mexico from groundwater impacts in New Mexico. The 1951-1978 level of everyone's groundwater pumping in New Mexico was grandfathered into the agreement.

Concerning carryover, the unused allocation will equal 60 percent of a full allocation and may be accumulated by each District: 306,000 acre-ft for EBID and 233,000 acre-ft for EPCWID#1. Excess carryover will go into the account of the other district if these amounts are exceeded. EBID can capture new storm water instead of releasing it downstream and EPCWID#1 will benefit from improved upstream flood protection.

Both districts dismissed their lawsuits in New Mexico as well as the one in Texas. Reclamation agreed to an internal review of operations in the El Paso Field Office under the Managing for Excellence program. The allocations and operating procedures specifically tell each district how to divide and charge the water at time of release. Nothing in the agreement can change without consensus agreement by all the parties.

In terms of benefits, we avoided mass court costs and compliance costs. It didn't cost the State of New Mexico anything other than some studies that they participated in with us. Resources that we have internally can now be focused on improving productivity rather than on litigation. Equity in the Project water allocation is clearly defined between New Mexico and Texas irrigation districts. The potential for the Lower Rio Grande to develop innovative management of water resources is there. Primary motivation for OSE's Active Water Resource Management implementation is eliminated. We'd rather manage our resources in our area then have them regulated out of Santa Fe. With that I will leave you. Thank you.