

Lower Rio Grande Water Users Organization

c/o City of Las Cruces Utilities – P. O. Box 20000 – Las Cruces, NM 88004
575-528-3511 telephone / 575-528-3619 fax

NOTICE OF BOARD MEETING

A meeting of the Lower Rio Grande Water Users Organization Board is scheduled for Thursday, March 19, 2009 at 1:30 p.m. at the City of Las Cruces Utilities Center, Conference Room 213, 680 Motel Blvd, Las Cruces, NM.

AGENDA

1. **Approval of Minutes**
 - a) September 17, 2008
2. **Lower Rio Grande Public Water Authority** – Martin Lopez, Mesquite Mutual Domestic Water, will present.
3. **Implementation of the Operating Agreement between EBID and El Paso County Water Improvement District #1 (EPCWID)** - Dr. J. Phillip King will present.
4. **Project Status** – Grand Unified Groundwater Model Development for the Lower Rio Grande – Dr. J. Phillip King will present.
 - a) WRRI
 - b) EBID
5. **Other Items of Interest**
 - a) 2008 Annual Report
 - b) State Water Plan Update – ISC Regional Meeting, April 14th.

If you need an accommodation for a disability to enable you to participate fully in this event, please contact us 48 hours before the event at 541-2000/v or 541-2821/TTY.

City of Las Cruces (Fiscal Agent) – New Mexico State University – Doña Ana County
Elephant Butte Irrigation District – Doña Ana Mutual Domestic Water Consumers Association
Town of Mesilla – Village of Hatch – Anthony Water and Sanitation District

Lower Rio Grande Water Users Organization

Minutes for meeting on

September 17, 2008

10:00 AM

680 N. Motel Blvd.

Utilities Center, Conf Room 213

Board Members Present:

Chairperson Karl Wood, NMSU WRRRI
Jim Robles, Dona Ana Water
Jorge Garcia, City of Las Cruces Utilities
Director
Gary Esslinger, EBID

Board Members Absent:

Jesus Caro, Town of Mesilla
Karen Perez, Dona Ana County
Rob Richardson, City of Hatch
Sharon Thomas, City Councilor

Others Present:

Debbie Lujan, Town of Mesilla
Sue Padilla, Dona Ana County
Dale Doremus, NMED
Mariano Martinez, Dona Ana MDWCA
Greg Lewis, NMISC
C.D. Huestis, DAMDWCA
Phil King, NMSU/EBID
Bobby Creel, NMSU
Steve Hernandez, EBID
Adrienne Widmer, City of Las Cruces Utilities
Diane Gamboa, LRGWUO
Debby Seely, City of Las Cruces Utilities

The meeting began at approximately 10:07 a.m.

Wood: Today we have a busy agenda, we'd like to get through. First I would like to introduce people in the room, maybe we can start with the left here and have introductions at the table and then the people in the audience can introduce themselves.

Robles: I'm Jim Robles with the Dona Ana Water.

Lujan: Debbie Lujan with the Town of Mesilla, for Jesus Caro.

Wood: I'm Karl Wood with New Mexico State University.

Esslinger: Gary Esslinger with Elephant Butte Irrigation.

Padilla: Sue Padilla with Dona Ana County

Martinez: Mariano Martinez, Dona Ana Water

Hernandez: Steve Hernandez and I'm an attorney.

Widmer: Adrienne Widmer, City of Las Cruces Utilities

Gamboa: Diane Gamboa, Lower Rio Grande

King: Phil King, NMSU and EBID.

Lewis: Greg Lewis, Interstate Street Commission.

Doremus: Dale Doremus, New Mexico Environment Department.

Huestis: Chuck Huestis with Dona Ana Water.

Garcia: Jorge Garcia, Utilities.

Wood: Nice to have you all here.

1. Approval of Minutes.

Wood: First thing on our agenda this morning is the approval of the April 3rd minutes. Do I hear, they have been sent to you previously and hopefully you have them and studied them, any changes to be made in those? Do I hear a motion to approve?

Robles: Motion

Esslinger: 2nd

Wood: Two votes all in favor say Aye.

Wood: Any opposed?

2. Resolution LRGWUO 08-01.

Wood: Ok, next item on our business is resolution for the Lower Rio Grande Water User Organization 08-01. Copies of that have been passed around and hopefully you have those. What the resolution does is it urges the state legislature to pass a budget for the Interstate Stream Commission that includes a recurring budget item of an additional \$345,000 for the update of four regional water plans each year. One of which is ours, we're proud of our regional water plan but we realize it needs revision all the time. Is there any discussion from anybody on this resolution? At the table or on the floor.

Esslinger: I've been attending those meetings for the Lower Rio Grande.

Wood: We appreciate that too.

Esslinger: Thank you, and certainly Bobby covers when I can't. This resolution was something that the (inaudible) felt was necessary so that this funding would be a continual fund to the Lower Rio Grande, for the regional water plans and it's a rotation of funds that as you come up through the rotation you would be funded for additional help on your regional water plan. The suggestion from the committee was to go to all the entities and try to get consensus from the different regional water plan units to develop a resolution that would come before the interim committee as a suggested legislative bill for this coming year. And so apparently, quite a few of them are coming in from the different entities, Elephant Butte Irrigation District who worked to pass this resolution, I don't know if other (inaudible) but that was the intent of the legislation and the resolution (inaudible) was to get the other entities that are part of Lower Rio Grande Water Users to join in this resolution.

Wood: Thank you. I have been watching the news with other organizations also and I have heard no opposition to this. There may be some, but I haven't heard of that. Would anyone else like to make a comment? OK, do I hear a motion for a vote?

Robles: I motion.

Esslinger: 2nd

Wood: OK I think we need to do this one at a time, City of Las Cruces. Jorge are they absent?

Garcia: They are absent but staff does support (inaudible).

Wood: They support it?

Garcia: Staff supports it.

Wood: Staff supports it, so is that an in favor vote?

Garcia: You need to mark it as absent.

Wood: OK, Dona Ana County.

Padilla: Yes

Wood: Town of Mesilla.

Lujan: Yes

Wood: New Mexico State University is yes. Elephant Butte Irrigation District.

Esslinger: Yes

Wood: Anthony Water, no one is here. Dona Ana Mutual.

Robles: Dona Ana Mutual presented this at our regular board meeting and it was voted for approval unanimously.

Wood: Great. And I believe the Village of Hatch is absent. So those here it is unanimous. Thank you.

3. Rio Grande Salinity Project.

Wood: Rio Grande Salinity Project, this is an interesting movement. A couple years ago, we called up Dale Doremus at the Environment Department and said we're interested in this, and her comment was so are we. There had been talks going on among different groups about doing this, so they came together and formed the Rio Grande Salinity project and we asked her to come here today and give us a presentation on what it is and the status of it. So Dale, with that, we will turn the time over to you and we certainly appreciate you coming down and being with us.

Doremus: And I appreciate you inviting us.

Wood: Phil would you turn the lights down a little bit. Great.

Doremus: Well, I'm Dale Doremus and I'm with New Mexico Environment Department. I work in an agency capacity on salinity issues and currently on the Rio Grande and currently with the Lower Rio Grande. Dr. Wood invited me to come and brief you on an initiative that is currently underway in this region which is known as the Rio Grande Salinity Management Program. The extent of it is from San Acacio, NM to Fort Quitman, Texas. Before I get into the details of that program, let me just give you a little background and context for how we got here. As everyone here knows, there has been concern and contention over elevated salinity in the New Mexico Texas border region for a long, long time. In fact, in the early 2000's elevated salinity was a factor in the threatened litigation by the state of Texas in terms of the quality of water that New Mexico is delivering. The New Mexico legislature

appropriated funds to address this litigation and with that the State responded with its own investigation to evaluate the salinity and water quality trends. Today, there has been more than 1.5 million spent on water quality investigations and drilling projects to look at water quality and water level elevations and also a monitoring network looking at water quality, looking also at the ground water and surface water. These studies, the studies by the State of New Mexico and SAHRAD, You know SAHRA, the consortium of Universities out at the University of Arizona that includes New Mexico State University and other universities. New Mexico State University and others all concluded that natural up welling of sedimentary brine is the dominant salinity source in the region, the dominant source of concern. So following these conclusions, the Rio Grande Compact Commission meeting in 2006, at that meeting the Compact Commissioners requested that the engineering guys from the state work together to pursue an interstate salinity management program which resulted in a workshop that was held in El Paso in 2007, and I think we talked about this in a previous meeting. The primary objective of that workshop was to identify ways to improve Rio Grande water quality by reducing salinity in the New Mexico/Texas border region. There were over 100 participants. We had folks there from several states, primarily people that were actually users, the irrigation districts and municipalities from the region. We also had the Colorado River Salinity Control (inaudible) folks there to help give us some lessons and learn. Folks from New Mexico and IBWC were participants as well. Out of the meeting, those that were interested in pursuing salinity management formed the Rio Grande Project Salinity Management Coalition. I'll talk a little bit more about the composition of that group in a minute. The next thing that happened, the coalition began to meet and in January 2008 at a meeting with the coalition, the New Mexico State Engineer offered \$250,000.00 for salinity management work to be a non-federal cost share for the Corps of Engineers, Water Resources Development Act, Section 729 project, and that would have 75% federal match resulting in a total of a one million dollar budget to initiate salinity management measures. So, after a lot of bureaucratic pain, this says five months, I think it's more like six, we finally have the contractual paperwork, and what I mean by that is the paperwork between the Interstate Stream Commission and the Corps for cost share agreement and we're ready to begin project work with the USDS at the university. I'm happy to say. This is sort of jumping back to something that I mentioned earlier, this is a map that shows the wells. I see wells on the New Mexico/Texas border region that were drilled in 2002-2003 period and these wells span from Anthony to the El Paso narrows, and there are multiple completion wells that were designed to look at water level elevation as well as water quality. In fact, we did test these wells for salinity and other water quality constituents and this is the cross section of those wells and what those investigations showed was that we have, you can see we (inaudible) the bedrock and we have an increase in salinity as you move down the basin and where the bedrock is uplifted, we see high concentrations. I see, and I apologize for the, it's very hard to see the concentrations, but this is 31,000 parts per million total dissolved solids and greater than 14,000 parts per million chloride. ISC-4 which is in the El Paso region, where it's barely shallow to the top of the bedrock.

Wood: That's 31,000 (inaudible) sea water is it not?

Doremus: Yes,

Guest: Where exactly?

Doremus: Do you know where El Paso Electric is? It's right across Montoya drain from El Paso Electric. So that's exactly where it is. As you can see here, the top of the bedrock is

only about 200 feet here and the concentrations are, this concentration is right at the top of the bedrock.

Widmer: So that well is kind of near what is that Mount Cristo Rey kind of comes together?

Doremus: Yes and it's just before the Montoya drain and the river, pretty close to there. You can see the river from there.

Guest: I have a question, Gary what's the concentration coming out of the Montoya drain?

Esslinger: Probably in that area around 1,800.

Doremus: That's what.

Guest: (inaudible) So it clearly isn't drain flow?

Doremus: No, this is actually a multiple completion well. There is a well that is, a completion is about 100 feet and there is a concentration at the top of the bedrock. It's clear that the concentration at the top of the bedrock is about twice as high as what you see in the shallower well. So you know there may be some contributions from El Paso Electric's activity, but we've also been looking at the concentrations that from there (inaudible) at the drain and nothing is anywhere near as high as this. Also the (inaudible).

Guest: So you can back out all those external sources and give the natural numbers.

Guest: Well, we think it's close to that. I don't know if we want to say (inaudible)

Doremus: I wish it was super, super clear, but I think it is plenty clear. I think it's (inaudible).

Esslinger: We haven't gone to court so it must be right. In the El Paso case (inaudible), this was all discovered near (inaudible) and that's one reason that El Paso backed off when they were putting the wells cause the records already indicated this well (inaudible) you know (inaudible) to prove (inaudible) a lot of this was discovered (inaudible).

Doremus: Yeah, and I think I should add that the trend indicates that the source of salinity is in the drain, our studies show that, and other studies show that the salinity in Montoya drain is a mixture of water its not solely irrigation water and we believe that there is upwelling brine and a contribution to brines in that drain.

Guest: Are they coming in laterally into the drains?

Doremus: Well they are probably coming in in multiple locations but.

Esslinger: If you look at Canutillo reach, I mean Canutillo, Texas on the east side of the river all the way down to Donovan and that area, it's all alkaline (inaudible). So a lot of that alkaline soil is draining into the Montoya connector drain and those all lead into the Montoya which bring water up as far as Canutillo to El Paso Electric customers, So there is a lot of bad water that is on the top but it's not all New Mexico's water either, it's also coming from Texas. All those drains come together.

Doremus: So what this points towards is the opportunity to look if we have focused areas with high salinity then there is a potential for us to intercept (inaudible) such as what we see (inaudible) and reduce salinity in the river. We feel that this could result in improved water quality in the winter months when there is no release and higher concentration. This is a partial list of impact to Rio Grande salinity. I think everyone here is aware that failing water with (inaudible) utilization of our water resources. Particularly in this area, it would impact (inaudible) water supplies, potentially reduce crop fields and crops ability, reduce quality urban landscapes, and soil and ground deterioration. That, as I said, is a partial list of what we want to focus on in salinity management. This is, let me just move to this slide here, I think this is in your packet, and I apologize that you can't read it on the slide, but luckily Diane made copies of this and passed it out. This is just the composition of the salinity management coalition and it's composed of folks that are committed to managing salinity. The state water management agencies are involved, PCEQ, the Texas Water Development Board, the New Mexico Interstate Stream Commission, the New Mexico Environment Department, and the Colorado Division of Water Resources. Also, the university research organizations in the region and that includes WRRRI and the Texas Agri-Life Research and Extension Center. I'm still not used to that name. The El Paso Center for Environmental management out at UTEP. The local water utilities and irrigation districts that have been participating are El Paso Water Utilities, Las Cruces Utilities Department, Elephant Butte Irrigation District, EP1 and Hudspeth District 1 and of course the Rio Grande Compact Commissioner because he has been involved and committed to this effort throughout the beginning. So the coalition has met three times in 2008 and has put together a plan, collaborative plan, on what their objectives are and how to move forward with this effort, and this is just a summary of the primary objective of the coalition. They want to initially compile and integrate studies the existing studies and data and with that look at the mass balance efforts that have been done to date and develop a preliminary estimate. (Inaudible) mass balance for the reach (inaudible) equipment. The first effort also needs to identify and then fill the critical data gap that we need to be able to pinpoint an area where we actually want to do projects. So the second objective is to develop a plan to find and implement targeted salinity rejection projects that will help us increase (inaudible) water supply and improve the Rio Grande water quality. And then of course, most importantly, build support for funding, congressional funding for Rio Grande salinity control and litigation project. The coalition envisioned this in four phases, and I'm going to talk about those phases. The first phase is the work plan that we're involved in currently with the Corps of Engineers Section 729 project. The first phase will be performed based on the coalition's work plan that they put together as a collaborative work plan and the Corps is contracting researchers from the United States Geological service from the Texas Agri-Life Research and Extension Service and WRRRI and New Mexico Tech and utilizing other SAHRA researchers and technical advisors. This is a map of the project area from San Acacia to Fort Quitman. I'd like to point out that initially we talked about going from San Rafael to Fort Quitman, but input from researchers and folks from the coalition pointed out that there are some significant inputs of salinity in the reach from San Acacio and San Rafael so we agreed to expand it to above San Rafael. For the first phase, which is the work plan that we have gotten in good shape to move forward with. There's basically four tasks. The first task is to document and integrate salinity data and information. What this entails is compiling and putting together the four research reports that will be used to document salinity conditions. There's been a lot of research done to date, so this is the first piece, as well as development of the (inaudible) salinity database that will be done by the geographic systems team out of Austin, Texas. The second step here is to develop a baseline salinity budget which means basically synthesizing the current state of knowledge regarding dissolved solid (inaudible)

in the river and that includes evaluating the variability of dissolved solids and developing a baseline budget for a specific region along the Rio Grande and then resulting in the conceptual model of dissolved solids in the Rio Grande. I think these two should be switched. Actually, the next step is not really, some of these things done (inaudible) but this will be the preliminary economic damages analysis for residential, agricultural, municipal and industrial uses. This will be done by researchers from NMSU and WRRRI as well as Texas A & M Agri-Life Research Center. With that, the last step is to identify critical data gap. This will be the key issues and questions that are needed to direct future study in need for development for potential salinity alternative. This will give us the information that we need to move into the next phase. Phase two is actually to develop the salinity management alternative. We need to fill the critical data. The gap is not all the data gap but those that are relevant and that we think will help us in targeting salinity management projects. We would enhance monitoring system as needed, develop and evaluate potential salinity management strategies and based on stakeholders' needs and priorities. I think this is going to be something the coalition will be of great help in terms of focusing what our priorities are. A detailed assessment of economic damages and benefits based on the information that's gathered in the previous study, and conduct a detailed assessment of the environmental impacts. Most importantly, I think identifying which location for salinity projects and conducting feasibility and cost analysis for those locations. The next phase is to actually implement pilot scale testing, this will include design permitting and implementing specific salinity control projects, quantifying reductions in salinity and potential increase in water useable supply. Then the last phase is the monitor and document improvements that these projects result in and to quantify the associated benefits of reduced salinity so that we can justify future funding of projects. And that's all I have here if you guys have any questions I will try to entertain them.

Guest: What kind of salinity control maintenance are we talking about? Can you give me some examples?

Doremus: If you look at that (inaudible) region and that is something we've talked about a lot, one potential is to intercept the salinity, intercept a portion of it. You don't actually have to remove all of it, but if you can remove part of it, then you can reduce and significantly impact the salt impact. I don't think that's gonna, there are a lot of things that will occur after that. What do you do with it once you get it out.?

Guest: We didn't know, is this a useable water supply? Are you taking the intercepted water out (inaudible)

Doremus: I think you'd have to look at the benefits of that,. You could reduce the useable water supply, but you could also increase the useable water supply for other uses.

Guest: Right if you (inaudible) in the wintertime, you'd be (inaudible)

Doremus: People won't be using it for as many things.

Guest: Maybe you reduce the flow to the river by five CSF's, but you'd have one that is useable directly. It might be clear on the useable versus quantity, increase the useable supply which may not necessarily mean an increase in volume over all. The water would have less saline but more utility.

Guest: It is used for irrigation.

Guest: Not so much in the winter.

Doremus: Not in the winter.

Guest: (inaudible) is mixed with it to (inaudible) I think one of the goals there (inaudible) for obvious reasons, (inaudible) there may be a potential to have useable water in the winter time (inaudible) as well. (Inaudible)

Guest: I remember having this conversation with Gary about identifying lands in the area that shouldn't be irrigated because they are really contributing to the salt load that's going in. Looking at a way to possibly target those (inaudible), you know to see whether the cost of benefits are there to do that sort of program and encourage that to be built on instead of irrigated.

Doremus: And I think, yes exactly.

Guest: And that's certainly been part of our discussion with the USDS (inaudible). A lot of salt into the system and how to take those off line.

Doremus: Yeah I think that should be part of the alternative analysis where you're gonna get the most value.

Guest: And are there, you know I keep reading about these algae fields, are there applications that you could use lets say you found (inaudible), is there something you could grow there that would save water that wouldn't have the drain impacts but would allow that water to be utilized in some sort of production.

Doremus: I mean that's a possibility. I mean that's not something that I'm that familiar with that I've seen looked at.

Guest: I think that was part of the governors' innovation grant. He granted somebody you know a lot of money to investigate the use of saline water to grow oil producing algae and they're experimenting with that saying its eleven times more productive in terms of what it's yielding than corn.

Wood: There's a large research program with that going on over in Artesia and will it become real world, we hope so. That would be great.

Doremus: Is that where the governors' innovation funds (inaudible)

Wood: I'm not sure if it came from the innovation funds. It's the NMSU, Artesia research station has a large algae growing research program and we keep hearing in the paper about how great it is.

Guest: The funding is expected to be like 70 mostly from the Corps 729 program and then with the non-federal match.

Doremus: It's 2575.

Guest: And so far New Mexico has been riveted 250, as for the state of Texas.

Doremus: The state of Texas has not contributed to date, however, in the meetings they have committed that El Paso Water Utilities will apply in the next phase to the Texas Water Development Board for I don't think as much as 250. I think they were talking 125 and that could change depending on the availability of funds that the Texas Water (inaudible)

Wood: I thought originally that Kevin Ward committed quarter million to match ours. It hasn't happened.

Doremus: I thought that too, no it hasn't because I talked to Ed about, Ed Archuleta about it a few times and his thinking is that we need to see where this is, before they actually apply. How far this one million stretches because would they be applying for phase 2 or would they be applying for part of phase 2. So the idea is once we get to the point where we have a work plan to move forward with the next phase, that's when they would put in that application.

Guest: It looks like most of the benefits for this kind of program is gonna be for Texas anyway.

Doremus: That's right.

Esslinger: That's sort of my concern is that ranges from that map the targeted area is clear its not drains is about (inaudible) salinity source coming from brine in the pass (inaudible). The money should be spent on fixing it not study everything else. I think there is other places that maybe some wells could go in and determine the other hot spots. I think there is one in Rincon now, wherever the narrow is at, the valley's narrow you have this build up of most surface water trying to get through that narrow and plus the upwelling of the ground water is trying to move and I just sometimes am leery that these studies do too much and then we don't do anything and then the money runs out before we get something done. Here you already have a very well established well known brine plant in El Paso on the east side, but certainly maybe a smaller packaged (inaudible). I don't know what it is but that should be looked at to take this upwelling brine. I don't know how much is down there it's brine water and should be reused and that should be targeted pretty quick. I mean it shows pretty clearly that that's a big problem, and when you go into New Mexico like your saying where, I don't know, maybe giving (inaudible) is not needed (inaudible) of the place where its gonna be most (inaudible) is going to be El Paso. Maybe that water could be used in Juarez if it's cleaned up. There is all kinds of things that I think that water can be used for. If this thing continues, I think we need to make sure we keep focused and try to address these hot spots with something on the ground not just.

Doremus: Not just study.

Robles: Having lived in Dona Ana County most of my life, two of the worst places for drinking water is domestic wells is Dona Ana between the second Madre and the Village. The water there tastes like sewer, salty. And the other place, I looked at the old maps where the Rio Grande was, and it is exactly where that path came in. It was within a half mile of the Village of Dona Ana. I don't know who ever did that to that area there. Then Vado was the other place. They drilled a well and it's not 500 feet deep. You're gonna run

into a lot of salinity. So, that is two places that are real, real bad and I think those need to be studied and done something with.

Doremus: Right and this gets back to taking the existing work that's been done cause there has been a lot of work that's been done in the area and looking at where the top spots are and then prioritizing which ones we will get the most from. There is a lot of technical issues involved too in terms of structural geology and that kind of thing. There is probably input geothermal, that are coming that are in (inaudible) so I agree with Gary, but I think the coalition feels that in order to justify funding, we're gonna have to have one document that summarizes all this information and says we have looked at it and looked at all the different studies and these are the ones that we think technically we can target and move forward with the request. Justify the (inaudible) funding for.

Guest: In terms of benefits for New Mexico, one of the reasons that the coalition wanted to extend the study area of San Acacio and in fact (inaudible) picked a reach that has the biggest salinity input, is up there. Actually, I think it's estimated at about 40% of the salinity input from head waters to Texas and comes in at San Acacio, Bernardo maybe down to Lemitar. I'm sort of reaching there. So that's another area we definitely need some more information on. That's another area where we have saline at the surface just North of San Acacio, the (inaudible) down there, very (inaudible) water, similar to what (inaudible) but perhaps higher quantities. Yeah, I agree with Gary. I'd love to see something start actually on the ground. But these are the types that I think a deliberate process is needed to look at those and say where are we really gonna be able to have the most impact and have the most benefits in a good way to sell it and get the federal funds that are needed to meet the task.

Robles: Yeah, I talked to some of the old timers around Vado and I asked them why the water was so bad. The old timers are not engineers, say that water comes from the Tullarosa Basin into Vado. It's coming under the Organ Mountains and into there. That's possible and maybe not possible.

Wood: Do you believe that Bobby?

Guest: Anything is possible, I thought it was leaking the other way. The Tularosa (inaudible)

Wood: Right, but does it come all the way over.

Guest: Some of the researchers have seen that there is a geothermal, so they are thinking these (inaudible) geothermal is where a lot of the brine is coming from. The Vado area is one of those high temperature areas. It's kind of a dome of high temperature water. In fact ,Dr. King was involved in that particular research project with June (inaudible).

Wood: Other comments and questions. Well, we thank you for coming. It was very enlightening and we appreciate it.

4. Update on case ruling domestic well statute unconstitutional.

Wood: Our next presentation is Steve Hernandez and he is going to update us on the domestic well statute unconstitutional. Jorge will you hit the lights please. Do you have a PowerPoint Steve?

Hernandez: No

Wood: No

Hernandez: I'll stand behind the bulletproof glass. The domestic well issue has been debated in the legislature at least with our involvement, maybe the past 5-7 years. You know, it's been the cause of a lot of concern in the state. The most notable place obviously has been in the paper. All the time that we have been trying to put together a settlement over there there was a lot of numbers that were not there. You know, we boiled it down to a 13-15 thousand acre foot (inaudible) to deliver to Texas under the compound and somebody put a pen to paper and said you know, if you added up all the domestic wells and what you think their use is on the (inaudible) there's your short fall. That's what it is it's that number. Carlsbad Irrigation, which I represent, is at the very bottom of the river in New Mexico just like we are here with EBID. We always have concerns about domestic wells and about you know what was going on upstream in terms of just regular ground water wells in the Roswell Artesian Basin. Ultimately, we reached a settlement calculating in what we thought was necessary to bring the river back in balance. The legislature funded a buyout of land in the Roswell Artesian Basin and the Carlsbad Irrigation District. Those purchases are almost complete. We probably got record credits on the Pecos this year and the state has finished putting in their augmentation well field there and you know we look like we are well on our way. What continues to keep bothering me though is if they continue to keep granting domestic wells then that equilibrium that we thought we established with a set number you know go back into the negative and we're gonna be looking at a future problem again. On the ground there's a little small river, I think it's probably 11 or 12 miles called Black River and its one of the tributaries the Carlsbad Irrigation District uses water from in terms of delivering water to it's farmers. Over the years, the district has seen a lot of problems with trying to get water through that system and using the water in that system that was appropriated and deliver that to those farmers that have rights off of that particular part of the district. What continued to happen was domestic wells kept going in and some were drilled just right on the banks of the river and there was no doubt that those small domestic wells were just clearly taking the (inaudible) right out of the Black River and it made irrigating those guys in that section of the district really difficult. So several years ago, Carlsbad wrote a letter to the state engineer and said, look this is clear, this is (inaudible), you have to do something about stopping these domestic wells. The response was we can't do anything about it because the statute says if somebody applies for a domestic well we must grant it. In fact , even the Interstate Steam Commission wrote a letter because they put a lot of money down into the Carlsbad District to get some return flow that would come back through that Black River system and come back into the river and to some extent those monies weren't put to the best use they could have been because of the domestic wells interfering with what we had going at the time and what we had studied at the time, so its been really frustrating over there. So you know the idea of trying to resolve this hit the legislature and we brought these problems to the attention of the legislature. The state engineer brought these problems to their attention. The Interstate Stream Commission brought the problems to the legislature. We just couldn't get any movement on trying to regulate these wells. In this last section, we are down to 15 minutes and that bill was there and we had 15 minutes and it didn't get out. There is a lot of speculation about why that happened. You know five individuals have been named as being very prominent in stopping that bill from going through and reaching a compromise among all the competing interest in that arena, but the bottom line is we didn't get anything

done. There have been law suits contemplated by a number of areas in the state that have had problems with a number of domestic wells foremost being Carlsbad Irrigation District really contemplated filing suit over there. We had looked at that but were concerned because the papers had not been fully adjudicated that it might not be the right case to take up. When here comes (inaudible) into the office, we're being impacted and I will refer you to the decision now because Judge Robinson does a very good job of taking you through this very chronologically. The Bounds have 157 acres with a 1869 priority date (inaudible). The Mimbres basin was closed in 1972 and there is no water available for corporation, in fact all of the basin, ground water and surface water have been adjudicated. So we didn't have any questions. Oh well, we're not fully adjudicated or we don't know who's senior or we don't know who's junior. I mean those questions, there wasn't any questions. The people clearly have senior priority and if they were being impacted then we had a case to go forward on. The Bounds file of declaratory action that the domestic well statute which exempts well applications from notice and hearing you know is unconstitutional. It violates Article 16 Section 2 of the Constitution. We know that we're a beneficiary state with a prior appropriation doctrine that means with the appropriated rights, the earlier use the better. The right of a junior appropriator is always subservient to that of a senior. The senior gets to fill the water rights first. We pointed out to Judge Robinson that in 1910 at the constitutional convention, the State of New Mexico had a choice to make, we could pick a higher (inaudible) in the state. We could have said that domestic use is the most significant use and should be given priority over all other uses in this state. That was rejected at the constitutional convention and instead New Mexico chose to have its higher (inaudible) use based on first in time first in right. Now other states such as Arizona picked domestic use as a higher use among competing uses and you know it's a different situation there. They went the other way. Remember, we came in at the same time as Arizona with the same enabling act and we were once territories together. Arizona went that way on domestic wells and we went the other way. Just as in New Mexico, we went the way of saying we were going to permit ground water (inaudible). Arizona decided it was not going to permit ground water and they were only going to permit surface water and of course now they are having all sorts of issues in Arizona because they didn't start taking a look at how ground water really interrelates to surface water and they're quickly coming up to speed in trying to manage those resources. Our basic argument was that the granting of a domestic well statute didn't take into consideration whether or not it was appropriated water it was just granted. Being fully appropriated or over appropriated, that application was just granted and there was no notice given. There was no way for anybody to go in there and say this was wrong or this is hurting me or you are taking something from me and there was no hearing or no due process according to other people who had legitimate and senior water rights. You can tell that the due process really bothered Judge Robinson who was very concerned that nobody had a voice to come in and say something when a domestic well application was filed. The judge was real reflective in this case. He said, I don't think the Bounds have to wait until they're actually impaired because when the water is gone it will be too late, and he was right. If we are fully adjudicated as we are there in the Mimbres, any future granting of water idea is going to impair something and you don't have to wait until your water is actually gone for you to bring a law suit to do that. He said, I'm not worried so much to come in here and prove that their water was taken as I am that I don't feel they need to wait till that happens, because then what do you do when the water is not there. John Deantonio gave his deposition and admitted that there were a number of problems with the domestic wells statute, but really his hands were tied. He attempted to resolve the situation through regulations, domestic well management regulations, and those were challenged. The court didn't believe that you could fix an unconstitutional statute through

regulation and that just wasn't gonna happen. He found that really the State Engineer had no discretion in granting these permits. The State Engineer had always treated the statute as mandatory in making him grant these. So in the end, Judge Robinson concluded that the statute, because it gave no notice, because it provided no hearing where somebody could go in and protest whether or not there was appropriated water, it was unconstitutional and violating the first in time first in right priority appropriation doctrine in New Mexico. He ordered the State Engineer when he received domestic well applications to treat them no different than he does the regular application. So that is his ruling. That case is on appeal. We briefed it and we are actually waiting for the reply to reach the State. We just got another month extension to file that brief. Francis Bassett, that had been one of the key lawyers for the state, has retired and gone to Colorado I think, and so we will have another month before we see the final state's reply. I've known John a long time and I have sat in a lot of hearings. He has really had a tough time with the domestic well statute. He's tried to reach common ground on it and we just couldn't get the legislature to move because nobody wants to take the first step. Nobody wants to admit that this is going on. You know, the last committee hearing that was held at New Mexico State, I testified on a panel telling them that look this is affecting all of you sitting up here. All of your constituents are involved in this. You need to do something because the worse case scenario is the case is upheld and there is nothing done for people that have applied for domestic wells. What you have is a range of people. You have that person out in the middle of nowhere putting in a domestic well that isn't going to hurt anybody. And then you have those people that are developers and have bought property that had water rights and then sold them and then told everybody, we just drilled domestic wells. They double dip. They made their money and sold their rights. They are not accountable. They don't feel they have to be accountable for leaving any water on that land to provide service to somebody. Bill (inaudible), the governor's liaison on water, testified at the same hearing that I was at and gave a great speech to the legislature that we had to do something. So Bill and I sit on the governor's blue ribbon task force. The task force has been asked to look at potential legislation that could be supported by the governor's office this year. I shouldn't have said anything cause then I was quickly appointed chair of the committee and I'm trying to filter through the various position by everybody. There is a lot of people who believe it's over why mess with it. Let the State Engineer treat these applications, domestic well applications, like everybody else. What's there to fix, you know, let them go through the process like everybody else. Let them find the legitimate water right. Let them transfer it in and let it take however long it takes, just like everybody else, whether you're a rancher or a farmer or you have irrigation rights or you're a municipality. Why should you be treated any different?

Wood: That's a good question why should they.

Hernandez: Well there are some people you know on the task force that believe that, and then on the upper end, I had a lawyer from Santa Fe who wants to have the legislature declare that all existing domestic well rights are really water rights that can be bought and sold on the open market. Which of course has never been allowed. Well, I shouldn't say that. I believe Tom Turney at one point allowed some domestic well rights to be retired and placed into a mutual domestic and then when there was a funding request from the Water Trust Board that fact was brought out and there was a lot of controversy on whether or not the application by this mutual domestic was no good. There were no water rights associated with the mutual demand. John Deantonio's position is then that you can't do that. These aren't water rights that you can place into a mutual domestic. You need to get legitimate water rights into your system. That's probably to the most extreme and then

everywhere in between there are suggestions that we can streamline the process because most domestic well use is really a small amount measured maybe .25 acre feet that if an application is submitted for .25 acre feet that they should be given a faster process to run through that public welfare should and conservation of water requirements be automatically met that they shouldn't have to put on evidence of that. And if there are areas of the state where hydraulic use (inaudible), we could be one of those areas where we do have a good handle on what transfers really cause problems on the water system. We could have an expedited hearing of finding .25 acre feet domestic wells to be automatically granted and it would be up to the protesting to stop that. This of course got Paula Garcia up in arms. She said that's absolutely ridiculous, you are cutting off our rights to preserve our heritage and we need to keep peace for the right of the communities even if its .25 acre feet. It should still be ours. All your gonna do is allow these big developers to come in and raid the institutes. I've got Paula yelling at me here, and somebody else here, and it really does illustrate to me that we are all over the place on what to do with domestic wells but I haven't heard anyone saying we still have to do something if the legitimate people that need domestic wells are to be taken care of. John DeAntonio suggested to me that we start back with his regulations of domestic wells management areas. We look at those areas where there seems to be consent with some of the various (inaudible) developers in the city and that that's a starting spot. I've really got ideas all over the place in terms of what to do with this. John tells me that if nothing happens and the suit goes and he has to process these applications, that he's gonna have to hire a bunch of people to then start reviewing these applications and we'll have to go to the legislature and ask for a certain amount back. At the last interim committee hearing at New Mexico State that I mentioned, John was asked what is this gonna cost you in terms of having to process timewise if nothing happens and all of a sudden you have to treat New Mexico well applications like everything else. John I guess is working on that number and may have a number. There is another interim committee meeting tomorrow and I don't know if John will be recording on that number, but we may have a better idea what he thinks it's going to take if nothing happens and the suit proceeds forward and the decision stands.

So, it's very interesting, but you know, how does that affect us here? Well, it affects us here because, you know, as you heard at one of the last meetings, the operating agreement, you know, that EBID has signed with Texas assumes, you know, a certain river efficiency running through the district. And if that river efficiency starts changing because of domestic well applications that are being granted, that means that EBID has to release more of its water supply to meet the Texas obligation. And um you know, I will sit here and tell you today that, you know, our legal advise to Gary is, we won't put up with that for very long when it starts coming out of the farmers pockets because we have domestic well applications that are being granted and we eventually wind up like the (inaudible). Everybody decides well, I don't need to go buy a senior water right, I just need to drill a domestic well and I don't have to worry about it. Well, you do have to worry about it. You know, what will it do? I've been asked that question. I said, you know what I think that the roll of the mutual domestics has become much more important in this state because, you know, the mutual domestics have, in a sense, been the people outside of the cities that have stepped into the (inaudible) to provide domestic water to most of our counties and lower populated areas. I mean the cities always seem to be able to take care of themselves so to find the water rights they do what they have to do. They even have authority under the statute to stop domestic wells within their service area. Their was a case that went to the Supreme Court involving the City of Santa Fe and their authority to do

that and the court ruled, look you have the authority to stop these domestic wells from being put in you service area. You know I pointed out to the legislative committee that many of mutually domestics have in their bylaw provisions that say if you take water from us you can't have a domestic well. You can't be double dipping. And there were, I think, a lot of legislative members that were surprised at that, that mutual domestics down here were much further along in terms of recognizing that, you know, we need to keep our system in balance. And that they could learn a lot from, you know, what's happen down here. I said well you know that's because of groups like this group. You know that have pulled together and want to know what the issues are out there because we've always got (inaudible) in El Paso and we have to know that our house needs to be in order for them. I think we are a little more progressive in understanding the relationships between surfacing ground water and our deliveries in Texas and most areas. And a lot of that we've done through this group through the original (inaudible) litigation, through the New Mexico/Texas Water Commission and so on. We hope that some of those lessons will work their way up north. Then we will wait to see what happens with potential legislation in this session with domestic wells. I will stand for any questions.

Wood: Back to the lawsuit (inaudible) Appeal. Do you expect that is going to go through real quick and be ruled out real quick or do we got hundreds of interveners that are going to tie this up for decades?

Hernandez: I haven't any interveners yet.

Wood: None yet? So it could be moving along pretty well.

Hernandez: Well, I hope the court will rule pretty quick. I mean, the good thing about it is the judge found it to be a strictly illegal quest. I mean, we are not going to get too bogged down in the particular facts of this ditch and this well (inaudible) the hydrology. It's just a strict legal question. The statute impermissible allows somebody to get a water right and all that impairs a senior. The constitution either means what it says or it doesn't.

Wood: So you expect within the next year?

Hernandez: I would hope so, yes. And this

Wood: Then the other situation is probably the ideal situation for the state, was it not.

Hernandez: It was the perfect situation for the plaintiffs. I don't know about the state.

Wood: That's what I mean. Within the state for the plaintiff, that was the perfect situation

Hernandez: It was the perfect situation. I mean, we had looked at two or three other places to bring the suit, but this one had the perfect (inaudible).

Wood: Other questions? We thank you very much.

5. Alternative Water

Wood: Okay, next presentation, Dr. Phil King is going to talk about one of our favorite subjects Alternative Water Resource Management.

King: Thank you. It's been a busy little while here. Let me just update you a little bit on where things are going from the EBID perspective. You will recall that on February 14th the two districts signed an operating agreement that essentially resolved many of the issues between the two states and one of the requirements for implementing that was the development of a operations manual where the actual operating agreement basically settled the dispute on the allocations principals and so on. The operations manual gets down into the nitty gritty day-to-day, you know, how do you compute charges, type detail. And we were charged, the engineers, Blair and myself (inaudible), were charged with turning out but (inaudible) we tried to turn that out by July 15th. And so about 3:00 in the afternoon on July 15th, we did get that thing out, and it went to the lawyers, and it's now being implemented. It is actually being used this year to calculate charges. If you are interested in hearing any of the details on the operating agreement, I think I've given this talk so many times I don't remember who I've given it to or when or anything, but it is constantly evolving as it is a situation progresses. But tomorrow afternoon at 3:00 o'clock, we have a water lecture series over at NMSU that is currently sponsored by WRRRI Civil Engineering and College of Ag. And the speaker this week is an absolutely fascinating speaker, me, talking about the operating agreement and that will be over in Wooten Hall. The title of the talk is (inaudible) and the Rio Grande Project. So it will specifically address the operating agreement and the operations manual and some of the issues we are looking at this year. One thing that you'll notice that things overlap is that it really has been a lot of things piled up on top of each other. On July 8th which, I'm sorry July 11th, which I think was the day after the Bound decision came out, EBID met with the State Engineer and his folks and we presented a concept proposal for an offer of judgment and that's still in negotiations. So I won't go into a lot of detail on it but, we since then, have made a technical group including Greg Lewis, Peggy Barrel, myself, and Tom Mattock, have been talking about some of the technical requirements for implementing any sort of an offer of judgment and they certainly focus on various forms of hydrologic model monitoring and modeling. Everything from ground water levels and ground water storage to drain flows and river diversion ratios river efficiency, that's if you will. At this point also, you'll recall that one of the details of the operating agreement is that as long as El Paso gets their water, EBID basically gets whatever is left. As we did have a rather productive monsoon season, we've actually gotten, we are getting quite good at playing the monsoon run offs. We have been watching them come in and we ordered Caballo, as soon as we are relatively confident that we are going to have a storm inflow, we take that to make our diversion and deliveries and we are charged for it at this point. There is a stipulation where by we wouldn't be charged for it, but I don't think I want to implement that just yet, and this is where I start to sound like a tax attorney. What happens is if we have no release from Caballo for EBID yet we are diverting water, that increased the diversion ratio which increases our allotment. So by taking that water instead of release from storage water, what we are actually doing is exchanging that storm water for storage water up in Caballo that then increased our allotment. So it's a little bit of a shell game here. El Paso gets their water, some of the storm flows through and are not charged because it is too much to handle. But this is one of the major aspects we are developing and we are developing it with a series of a strategies starting with the obvious, monitoring. The continental scale of weather patterns and the Doppler radars starts to come in anticipating where we will get the impact of these monsoon storms anywhere from a couple of days to a couple of hours where they actually hit. We're also incrementing. We're beginning the instrumentation of some of the water sheds that we go from watching on the computer, watching the atmospheric water, to actually watching it hit the ground with real time (inaudible) gages up in headwaters in some of these larger systems. We are currently working on the Placitas in

Rincon and Picacho arroyo systems and hopefully that will give a little better handle on exactly how hard we are going to get hit before we do get hit. Moving right down the water shed then we pick up (inaudible) at some of the arroyos and if you go on EBID's website right now, the river wash, you'll notice that there are two, the Placitas and Rincon arroyos are on line already and you can see a lot of these events coming down. The 3,000 CFS came down in July right after we went online with it and we got to sit there and watch that and said well, what now. But it's actually worked out pretty well and we are very rapidly increasing our ability to capture and use these storm flows. The credit status that I would say on the alternative water resource management or alternative to state priority that we've been talking about for a number of years now is really, I think, where we want to be. At this point, we've got the EBID offer of judgment in process. We haven't really got any official feedback from the State Engineer's Office where that's going to be. We have had what I consider to be very productive technical discussion, so I'm hopeful we can have some difficult issues to get passed. What I would recommend at this point is if we wait and see how those discussions play out before we try to do anything too specific, just because if we do come up with an offer of judgment that really would by far be our largest water supply here. That has very much been the framework in how we approach this alternative administration. I think that was about all I had. Steve was there anything else on that you wanted to throw in.

Hernandez: Well you know, I think obviously I put the gag order on Phil not to say too much about our negotiation, but I don't think there's any question that EBID and the State Engineer have to come to some agreement about how we're going to monitor and manage. About how we're going to monitor the surface water and ground water in terms of the traditional requirement metering and measurement and reporting and then just (inaudible). And whether that comes through the legal process of an Offer of Judgment or ultimately you could possibly get legislative action that somehow makes EBID some sort of assistant special water (inaudible) to the state to help it, you know, manage what's going on down here. That's going to have to happen one way or another. We just don't know which form it's going to take and how much legislative help or regulatory change or implementation of an Offer of Judgment that's going to occur. We're going to get there one way or another because we have this great opportunity now because of the operating agreement that allows us to pick up. As Phil pointed out to you, a lot of the waters that are coming in and all I ever hear about from Gary is climate change and we've got to change the way we think about what coming down the river (inaudible) going to be the same way. We got to think of our resource down here which is (inaudible). We've got to start implementing things that allows us to capture that water (inaudible) not just let it go down (inaudible) to Texas. And the more we can get of that water, the more we can hang on to our (inaudible) for when we really, really need it. So I think, as Phil has told you, the Offer of Judgment proposes some things that have management proposals in there and hopefully that will be, you know, the jumping off point for something that's pretty comprehensive.

Esslinger: Certainly we've had to reconsider something that I think comes with storm water management to manage the water quality and clearly our ability to capture this water and reuse it is worth for us down here in Southern New Mexico. There's a deal right now in congress called the (inaudible) bill and it (inaudible) authorization for clean water right. And the way the bill is written right now, it could be detrimental to EBID or anybody else who is attempting to capture storm water and reuse it. And you know, the Ag industry, the dairy industry are opposed to the way this bill is written out, yet our state has advocated (inaudible) so it puts us in a precarious position right now. And we need to make sure we

watch that bill and keep a close eye on it because I think it plays a great role for another source of (inaudible). There was an article in the paper the other day where the State Engineer was saying we don't have any new water in the State of New Mexico. I believe that we do, if we use it right. We are just flushing it, so to speak, through our system and getting it out of our state. And clearly, I think Bill can attest to the fact that just this year the rain we got, the little bit of water we were able to capture and reuse, was significant to keep our agency going without having to put (inaudible). And in years like 2006 where you had this phenomenal amount of water coming into our system below Caballo, we let a lot of water slip by us. And in the wet years, back when I was just starting out with EBID, I think it was millions of acres deep during the 80's. In the wet years, we just let it slip right past us. We had no way to capture it, no way to regulate it, no way to manage it and all that water just went down stream. We just got to start in different (inaudible) and make sure that NMED, State Engineer, ICS, everybody's on board. Just to understand that (Inaudible) has to rethink how he'd regulate this water (inaudible) these diversions that we have these (inaudible). (inaudible) that the infrastructure is in place and we just need to try to enhance it, improve it, and try to (inaudible).

Wood: Phil, a day or two ago in the paper it came out and said the new FIMA map is out and several thousand people will now need to buy flood insurance. When that came out I think a year or so ago you were quite critical. Is this map any better?

King: I haven't looked at it yet, but I think it's initially the one we intended to come out with before their, my understanding of their analysis is that they run their hundred year flood, for example, and calculate a water service elevation with the levies in place and then they imagine the levies don't exist and they extend that same water surface elevation (inaudible). Which if you have a calculator, that kind of flow would be hundreds of thousands of CFS. It would just be an absolutely apocalyptic flow. I thought that with the IBWC repairing some of the deficiencies in levies that they would defeat that, but apparently not.

Wood: Okay, are there any questions or comments? Any questions or comments for Phil? Thank you.

6. Other Items of Interest:

Wood: Okay, Other Items of Interest. Anybody have any other items of interest?

Robles: I was going to ask Gary about the flood at Rincon recently. That one of the two (inaudible) said it was a dam that broke and the other said that it was a levy that breached near the arroyo.

Esslinger: It was again a combination of two things; according to our records we had quite an intense rain, two inches or more to the east of the interstate and the Rincon arroyo. That filled about 3:30 in the morning some (inaudible) morning. We had already had a two inch rain in the Hatch area the night before, on Monday, and we had flooding in the Arrey area. The flow of the Rincon was probably around 750 CFS, but it was eating into a bank that was not easily accessible and it did breach the levy. We were in there trying to at least patch it and stop the little town of Rincon from completely going under water, but we did flood or the arroyo did flood that platform. And as we worked through the day, there was no rain no stormy dense to the east and about 2:30 in the afternoon another spike on our (inaudible) gage that the arroyo started running again 750 CFS and we think that some

place up in the east mesa there is a stop tank. There must have been a huge stop tank somebody (inaudible) or something like that stop tank and it must have breached because we got this other surge but we were able (inaudible) and so no further damage was done to the dam. It's just events were strange that day.

Robles: So that water, Texas just gets it, huh.

Esslinger: No, this is what Bill and I are working on. That Rincon arroyo just runs wild into the Rio Grande. With Arts telemetry, we know what's guided the river. Even though our gates were closed (inaudible) and we had farmers that placed orders for corn and alfalfa, so we were trying to deliver that water through our system. But we got in the operating agreement we have to be very precise. In the manual that is part of the operating agreement, we have to be very precise how we deal with that water. And when the bureau announces that it is no longer releasing it's storm water, then we can divert it and use it. And if the farmers will take it, well definitely, if we can store it and let it seep into the aquifer, that's another way of using the water. One strange thing that comes out of this is that we could even deliver that water onto a harvested corn farm and people might think well you're flood irrigating, you're wasting water. Technically you're actually (inaudible) and it's just a mind set that we have to change.

Wood: How many acres of feet of floodwater have you been able to capture this year?

Esslinger: Bill do you have an idea of what we've captured this year in floodwater?

King: It depends on how you estimate it. There is something on the order of 4,500 to 6,500 acre feet and we also did just pass a policy. One problem we have is when we get these rain fall hits, we have people who ordered water a couple of days ago and its just arriving when the rain fall hits so they cancel their orders and historically what we've done, since they don't want their water, we wind up dumping back in the river. They don't want to be charged for it since they got rained on. What we do now is ditch riders, first of all, look for someone else to deliver it to and they can put in an order and charge it to them on the spot. If they can't find anybody to do that, we try to find anybody who will take it for free. That is to say, they'll protect the water (inaudible) and they won't be charged for it and the idea is to rather than dump it into the river, dump it into the aquifer because you'll be dumping it presumably (inaudible) to get it out. And we're still working on some of the language here because we've had one (inaudible) who was sitting in a meeting who past it and he (inaudible) importing rather than cancelling it. What one policy we are working on right now is when we do have these arroyo flows into our system, directly into our system from the water shed into our canal system, our drain system, delivering that without a charge if necessary. With a charge, if we can but delivering it in any case so that instead of rerouting it to the river we reroute it to the aquifer. And then also we have flood poles going down the river diverting them and supplying what we can wherever we can just to get an info credit. Even alfalfa land can be irrigated under this or can have water applied to its (inaudible) irrigation.

Esslinger: And part of this is also work from the City of Las Cruces to divert water to Burn Lake. We are almost at that staging point where I think after this winter we'll have the actual pumps that will be installed and the pipeline with transmission line back to our canal system where we will be able to actually recharge Burn Lake and regression it with surface water or storm water and then pump it out and use it down stream for irrigation purposes.

Wood: And I noticed on the way over here it's got more water in it today that I've seen in years.

Actually since we implemented our operating agreement, our (inaudible) has come up. The rain helped.

Guest: Those storm flows have much higher sediment levels. Is that going to cause problems in your (inaudible) your canals?

Esslinger: Yes, and that's part of the (inaudible) moderate issue. Is we need to go in there and move the setter. And again if you're restricted on having to do more and more permits and all of the (inaudible) that certainly could come with that new authorization it could be difficult to do that. The other problem and the more serious is the ecoli issue. That's a water quality issue that comes of these arroyo runs and we already have a procedure in place to begin sampling them and testing those flows that come off to determine where we have maybe some hot spots and these viruses. Some of these viruses flow 20, 30, 40 miles (inaudible) on the west mesa and that contributes to a lot of wildlife activities and other things that are being (inaudible) to that ecoli.

Wood: A thorough benefit (inaudible) brings nutrients.

Esslinger: Right, and one of the actual grants we have at NMBD this year is developing an inline storage opportunity for one of our grants to be used for, first of all, capture and the second section of the drain would be used for purification and running it through a sort of a wet land to take out the bacteria's. The third would be a reuse; either pump it out and reuse it or send it down to the restoration side of the river. The fourth section is actually developing what the (inaudible) project the river restoration project and we've got that \$200,000 grant with NMBD now. So we're testing a pot, we actually have a pilot project in place.

Wood: I think you missed my point, which you got these flood flows coming off the Denver and they're heavily laid in the sediment with beneficial nutrients coming to those to go out on the fields, so it's more nutritious water than water coming down the river.

Esslinger: The problem with the sediment miller is it's a clay material. The farmers won't take it because it will soak their crop. So you have to have a storage, it's like a series of rocks. You have this (inaudible) storage where you can settle out and put the cream on top let that flow to the next level.

Wood: Some of these sandy fields could use a little clay.

Esslinger: They could they could, but clearly not all of our storm water goes to drains, much of our storm water goes to our canal systems. And that's the other problem is evacuating your (inaudible) water in the middle of July, when their full, and trying to put storm water in the canal, otherwise we'd be wiped out somebody's house 5 miles south of where the flood began. Flood water on top of irrigation, it's a lot of fun.

King: When we get to applying the storm water, you know to fields that don't really need it ,we would certainly pre-identify sandy fields would typically have pecans or alfalfa

something that could take it without you know too much risking anything and that would certainly improve their irrigation efficiency during the regular season. Those farmers know that and they like to get the muddy water, but it is more of the sandy field, you're right.

Widmer: So which drain is it?

Esslinger: It's the drain that we're doing the pipe project on; it's called the Seldon drain. It's up there in the area of Leasburg.

Widmer: Yeah, I love it when it rains and I walk in the back area.

Wood: Okay, other comments? I certainly thank everybody for coming today and our speakers for the most informed session. Do I hear a motion to adjourn? All in favor, thank you.

The meeting adjourned at approximately 11:40 a.m.

Karl Wood, Chairman

Lower Rio Grande Water Users Organization

c/o City of Las Cruces Utilities – P.O. Box 20000 – Las Cruces, NM 88004

(575) 528-3511/Fax (575) 528-3619

2008 Annual Report

January 1, 2008 through December 31, 2008

Submitted: March 19, 2009

This annual report is submitted on behalf of the Lower Rio Grande Water Users Organization (LRGWUO) in fulfillment of the requirements under the Lower Rio Grande Water Users Organization Joint Powers Agreement No. 97-046 approved February 27, 1997. The following annual report summarizes project activity.

New Board Members – The following individuals were appointed by the organizations listed to serve as Board members.

Dona Ana Mutual Domestic Water Consumers Association - James Robles

City of Las Cruces - Sharon Thomas

Rio Grande Project Settlement of 2008 – This settlement agreement was signed February 14, 2008 between the Elephant Butte Irrigation District (EBID) and El Paso Water Improvement District.

Highlights of agreement:

- Annual Allocation based on D3 procedures (D1 basis for Mexico allocation, D2 basis for El Paso #1 allocation)
- 1951-78 level of groundwater pumping grandfathered in
- EBID benefits from Project supply in excess of D2 level if release is greater than 600 kAF
- Carryover equal to 60Percent of a full allocation may be accumulated by each district (306kAF for EBID, 233 kAF for EPCWID)
- Excess carryover goes into account of other district
- Mexico's allocation based on actual release.

Key Points of Compromise:

- EPCWID wanted and got carryover, protection from impacts of excessive groundwater pumping in New Mexico
- EBID wanted and got D3 as basis for allocation of Project Water regardless of origin, and accountability from Reclamation
- EBID and EPCWID dismiss their lawsuits
- Reclamation will conduct an internal review of the operations of the El Paso Field Office under the Managing for Excellent program
- Allocation and operating procedures are specifically codified, subject to change by consensus agreement.

Legislative Workshop – A legislative workshop was held May 7, 2008 to update local legislators and elected/appointed officials from each of the LRGWUO entities on the Rio Grande Project Settlement of 2008 and to address local water issues of common concern for the 2009 legislative session.

LRGWUO Flood – Related Initiatives

- Funding Requests - \$3,050,000
- Need continued Dam Safety – Pilot Project
- Need an Early Warning System
- Need a Storm Water Capture and Use program

Aquifer Storage and Recovery Pilot Project

- Funding Requests – \$575,300

Municipal and Industrial Surface Water Treatment Initiatives

- Funding Requests - \$15,200,000
- Village of Hatch – Rincon Valley
- Dona Ana Mutual Domestic Water Consumers Association – North Valley
- City of Las Cruces
- Mesquite Mutual Domestic Water Consumers Association – South Valley

Wastewater Reclamation and Reuse Initiatives

- Funding Requests - \$22,200,000
- City of Las Cruces
- Dona Ana Mutual Domestic Water Consumers Association – North Valley
- Village of Hatch – Rincon Valley
- Dona Ana County

Total Funding Requests - \$41,025,300

LRGWUO Resolution 08-01 - A Resolution Urging the State Legislature to pass a budget for the Interstate Stream Commission that includes a recurring budget item of an additional \$345,000 for the update of four regional water plans each year was approved by the LRGWUO Board on September 17, 2008.

Rio Grande Salinity Project – The Rio Grande Project Salinity Management Coalition was formed to foster efforts to evaluate and control salinity from San Acacia, New Mexico, to Fort Quitman, Texas. The Coalition agreed to seek funding to conduct the following work:

1. Rio Grande Project Salinity Assessment
 - Compile and integrate Rio Grande Project salinity source information
 - Develop a baseline salinity budget
 - Determine critical data and information gaps needed to develop salinity management alternatives
 - Develop preliminary estimates of the economic and environmental impacts of elevated salinity in the study area
 - Prepare a scope of work to conduct 2 below.
2. Develop Salinity Management Alternatives
 - Alleviate information gaps
 - Devise and install monitoring systems, as needed
 - Develop and evaluate potential salinity management strategies based on stakeholder interests
 - Conduct a detailed assessment of economic damages and benefits to residential agricultural, municipal, and industrial sectors based on local conditions.
 - Conduct a detailed assessment of environmental impacts
 - Identify the most promising methods and locations for salinity control projects
 - Conduct feasibility and cost analyses for salinity control
 - Develop work scopes to conduct 3 and 4 below.
3. Implement Pilot-Scale Testing
 - Conduct pilot scale salinity control projects
4. Evaluate Project Effectiveness
 - Monitor and document water quality improvements and salinity management benefits.

Update on case ruling domestic well statute unconstitutional - Bounds vs. State of NM Case NO. CV-2006-166. Conclusion:

1. Whether §72-12-1.1 is constitutional is question of law.
2. §72-12-1.1 is unconstitutional because it creates an impermissible exception to the priority administration system created by N.M. Constitution Art. XVI §2.
3. The OSE shall administer domestic well applications the same as all other applications to appropriate water.

Alternative Water Resource Management – EBID met with the State Engineer’s Office (OSE) and presented a concept proposal for an offer of judgment that is still in negotiations. Technical requirements for implementing any sort of an offer of judgment will need to focus on various forms of hydrologic monitoring and modeling. Recommendation at this point in time was to wait and see how the discussions play out with the State Engineer. Basically, on hold until EBID and OSE come to an agreement on metering, measurement and reporting surface water and ground water.

Regional Sustainable Water Project – Phase I & II – Environment Protection Agency Grant Assistance Agreement No. XP-98661101 Status

Grant expires September 30, 2009. Grant balance as of 12/31/08 is \$70,810. Summary and status of each project under this grant is listed below.

Summary of Phase I - Tasks 1 through 7:

Task 1, Installation of Deep Piezometers at the Las Cruces Hydrologic Section

Amount Billed to Date: \$110,085.

Contract complete.

Task 2, Hydrogeologic Feasibility Analysis for Aquifer Storage and Recovery in the Lower Rio Grande Area.

Amount Billed to Date: \$34,776.93.

Contract complete.

Task 3, Water Rate Study.

Amount Billed to Date: \$33,799.53

Contract Complete

Task 4, Northern Dona Ana County Water Treatment Plant Implementation Plan.

Amount Billed to Date: \$30,098.81.

Contract Complete.

Task 5, Predicting Watershed Contributions to the Lower Rio Grande for Planning Purposes.

Amount Billed to Date: \$0.00.

Cancelled.

Task 6, Organizational Review of Transfers of Surface Water from Irrigation to Domestic Use.

Amount Billed to Date: \$35,000.

Contract Complete.

Task 7, Evapotranspiration Study of Dona Ana County, Phase I

Amount Billed to Date: \$45,032.

Contract Complete.

Summary of Phase II - Tasks 1 through 10:

Task One, Installation of Deep Piezometers at the Las Cruces Hydrologic Section IB

Amount Billed to Date: \$73,680

Contract complete.

Task Two, Digital Framework-Rincon Valley.

Amount Billed to Date: \$25,000.00

Contract complete.

Task Three, Hatch Surface Water Facility Study

Amount Billed to Date: \$28,603.00

Contract complete.

Task Four – Chaparral Water Supply Study

Amount Billed to Date: \$22,936.00

Contract complete.

Task Five – Digital Hydrologic Framework- Mesilla Basin

Amount Billed to Date: \$45,000.00

Contract complete.

Task Six, Evapotranspiration Study of Dona Ana County – Phase II

Amount Billed to Date: \$17,848.00

Contract complete.

Task Seven – Town of Mesilla Water Rate Study and Basic Supply Capacity Analysis

Amount Billed to Date: \$8,786.25

Contract complete.

Task Eight - Hydrogeologic Feasibility Analysis for Aquifer Storage and Recovery in the Lower Rio Grande Area, Phase II.

Amount Billed to Date: \$10,623.77

Contract complete.

Task Nine – Grand Unified Groundwater Model Development for the Lower Rio Grande

Federal Share: \$121,278

Non-Federal Share: \$99,227.45

Total Project: \$220,505.45

Project ongoing. Three tasks make up the total project. Tasks B and C are a continuation of the Grand Unified Groundwater Model Development project which has already been approved by LRGWUO Board and the EPA. Completion of Tasks B and C will complete this project and will utilize the remaining grant funds available.

Actual Federal Project Amount: \$44,150.00 (Task A)

Amount Billed to Date: \$44,150.00

A. The MODFLOW-2000 Farm Package Case Study: Southern Rincon Valley, NM Technical Report prepared by New Mexico State University (NMSU) was presented to LRGWUO Board for approval on August 21, 2006. Final Report is pending completion of Tasks B and C by NMSU and the Elephant Butte Irrigation District (EBID).

Estimated Project Amount: \$31,228.00 (Task B)

Amount Billed to Date: \$6,318.49

B. Jornada del Muerto Aquifer Model - An amended proposal dated June 8, 2007 was submitted by NMSU, Water Resources Research Institute, to develop an extended model of the Jornada del Muerto aquifer basin. Work ongoing. Deliverables expected to be presented to LRGWUO Technical Committee in May 2009.

Estimated Project Amount: \$45,900.00 (Task C)

Amount Billed to Date: \$ 0.00

C. Instrumentation to Monitor the Hydrology of the Southern Rincon Pilot Study Area - A supplemental proposal dated January 20, 2005 was submitted by the EBID focusing on the instrumentation to monitor the hydrology of the Southern Rincon pilot study area. Work ongoing. Deliverables expected to be presented to LRGWUO Technical Committee before May 2009.

Task Ten – USGS Well Equipping

Amount Billed to Date: \$7,453.25

Contract Complete.