



Groundwater Conservation Pilot Program for the Lower Rio Grande

The New Mexico Interstate Stream Commission (NMISC), in cooperation with New Mexico First, held a series of three Listening Sessions for an upcoming grant opportunity as part of its Groundwater Conservation Pilot Program (Program) in the Lower Rio Grande. The sessions were intended to receive input on the proposed grant Program, which is focused on the conservation of groundwater. Program participants will receive grant funds to temporarily stop the use of groundwater so that impact to regional aquifers can be assessed. A total of 120 people from across New Mexico registered for the listening session. A total of 86 people participated across the three listening sessions.



Moderated Discussion

Lilly Irvin-Vitela, MCRP, President and Executive Director of New Mexico First, moderated the discussion. Participants were welcomed and a road map for the listening session was provided.

- Highlight expectation about a productive session and ground rules
- Overview Summary of the Groundwater Conservation Pilot Program for the Lower Rio Grande
- Q & A and Discussion
 - Clarifications
 - What's concerning?
 - What's promising?
 - Any suggestions for consideration?
- Next Steps
 - Sharing notes
 - Refining and updating the application based on public input
 - Reminder about application information sessions

Wendy Wintermute, Ph.D., SHARE Program Director, and Erika Robers, MA, Strategic Civic Engagement and Policy Manager for Ag Resilience and Natural Resources, monitored the meeting chat and drafted notes from the listening session.

A Message from John Longworth, Special Assistant to the State Engineer

Good afternoon. My name is John Longworth and I have worked within the NM Office of the State Engineer (OSE) and the NM Interstate Stream Commission (ISC) for over 22 years. I am currently the Assistant to the State Engineer, and I have been actively managing this Groundwater Conservation Pilot Program for the ISC.

The purpose of this Pilot Program is to initiate groundwater conservation actions that will ensure New Mexico will have a sustainable groundwater supply not only today, but for future generations of New Mexicans. The Pilot Program will provide grant opportunities to the agriculture community to conserve groundwater by not irrigating a parcel within a 12-month period. This period must be initiated sometime between January 1st through October 31, 2021.

So, why is the Pilot Program being implemented?

The State Legislature appropriated \$7 million dollars in 2020 to the NMISC to develop and fund a Water Management Pilot Program for the Lower Rio Grande. The first phase of the Water Management Pilot Program is this Groundwater Conservation Pilot Program. This Pilot Program is not intended to be managed by the NMISC beyond FY 2023. It is expected that a local entity will be created to manage this or other groundwater conservation programs in the future.

The areas and aquifers that are covered by the Pilot Program are located in the Rio Grande valley from Elephant Butte Dam to the Texas border. The Pilot Program includes the areas irrigated within the Rincon and Mesilla valleys in Doña Ana and Sierra Counties and their underlying aquifers.

These listening sessions are just the beginning of the Pilot Program. Grant applications will be accepted between November 9th and November 23rd, 2020. Please go to the New Mexico First website for more information on the grant application process. This website is nmfirst.org.

Links to this site are also located on the NMISC's Program website:

<https://www.ose.state.nm.us/LRGPilot/>

There will be two types of participants that may apply. First are landowners with groundwater irrigated parcels and the second are landowners with tenants that have groundwater irrigated parcels. The word "parcels" in this Pilot Program means 'irrigated lands.'

For a parcel to be eligible to participate in the Pilot Program the following criteria must be met.

- A parcel must be at least 10 acres in size
 - 10-acre partial areas within a parcel may also be acceptable.
- Parcels must have groundwater or groundwater/surface water right.
- Parcels must have been irrigated with groundwater only or groundwater and surface-water at least four out of the past five years.
- There are due diligence requirements related to parcels proposed to be entered into the Pilot Program. These requirements need to be completed by the NMISC to comply with State mandated rules related to financial considerations.

I believe it is important to note that this Pilot Program will only apply for a short period of time and will not permanently enter parcels into groundwater conservation agreements.

Thank you for your participation today and we look forward to hearing your feedback to provide a better Pilot Program to the agricultural community.

Outreach

Q: What was the distribution list for this meeting?

A: OSE did a direct mailing to all water rights holders. NM First did an email blast to its agricultural resilience and natural resource initiative stakeholders. A press release was sent to local media outlets in the Lower Rio Grande area. Resources were translated into Spanish.

Q: What's the communication like between EBID and SOE?

A: OSE staff spoke with EBID general council to coordinate mailings.

Application/Eligibility/Timeline

Q: What's considered the Lower Rio Grande?

A: We are looking at Caballo Reservoir through the Texas state line, Dona Ana County, Sierra County and Elephant Butte Conservation District.

Q: Why was that area chosen?

A: It was chosen because of the Legislative charge to the Interstate Stream Commission. We are following the guidance from the legislation.

Q: My farm is in Tularosa. Am I eligible for this grant?

A: No. This grant is restricted to the Lower Rio Grande.

Q: How long is the program?

A: Grants for this pilot program will be a one-time 12-month cycle, with the 12-month cycle starting anytime between January 1, 2021 to October 31, 2021. We have to see if it's successful before deciding whether to continue on subsequent cycles

Q: Are you focusing on small tract properties? Are you incorporating soil profiles in considering applications?

A: For administrative purposes, the smallest parcel considered is 10 acres. We are focusing on the lowest bidders first. We will look at whether the parcel has been irrigated during 4 of the last 5 years. We are not looking at soil profiles.

Q: So the land needs to have been in production during the last 4 out of 5 years?

A: Yes, that's correct. At least four years between 2014-2019.

Q: Is there a financial incentive to join this program?

A: Yes. What we've established after talking with people in the ag community is a range of prices. You can propose between \$400 and \$800 per acre. We know that people will want to get the highest amount. That being said, we don't know that we can pay everyone at the \$800

rate. It probably won't work if everyone seeks the highest amount. We have \$5 million and when that's spent, there's no more to spend.

Q: How did you come up with the price range for acreage? When you consider the price, you need to look at your previous investments.

A: We looked at similar kinds of agreements throughout the southwest. We looked at some in Colorado to understand the ranges for the kinds of agreements that we are entering into. The low of \$400 and the high of \$800 came from members of the ag community who were bringing up the investments that had been put into their land. There has to be consideration for upfront investments you've made and other expenses: taxes, assessments, bank payments. We are aware of that, and we're looking at it. That's why we have a range of amounts.

Q: Will there be consideration of price given the type of land, crop, etc.?

A: Not at this time.

Q: You said between \$400 and \$800 per acre? Do all the farmers have to bid at the same level?

A: Different applicants can come in at different prices/bids. They will be reviewed independently. We will be looking at price points. We will start with the lower price applicants before the higher priced bids. We will stop funding grant agreements when we run out of money.

Q: Will the grant money be allocated on a first come, first serve basis?

A: No. By having an open period to submit applications, we give everyone time to fill out their applications. Once we close the application period on November 23rd, we will start evaluating the applications. The time date stamp of when it comes in will not be evaluated as long as it's within the window.

Q: Do you have to be the landowner to apply?

A: There will be different types of agreements. Some will be combined agreements between landowners and tenants and some will be landowners.

Q: What is the application review process?

A: The applications will first be reviewed to see if they meet basic eligibility requirements. There may then be some requests for further information or clarification.

Q: Will I have the possibility of bargaining with you if you don't accept my first bid?"

A: This isn't a question we can answer right now. Staff will need to know what kind of capacity they will have to do that. The preference will be for the lower prices.

Q: Once we apply, how long does it take for the application to be confirmed or denied? We lease to another farmer from January to December each year. We need to know before the end of the year if we get the grant or not.

A: One reason we have a conservation agreement is to allow for flexibility as to when conservation would begin. Our intention is to enter into agreement as quickly as possible with as many landowners as possible. The money must be properly spent and as quickly as we can. There are needs from the ag community in terms of planning ahead. That said, we don't know how many people will apply. More applications will take more time to process. We are striving for a two-week turn around. If we run into caps with money, the Commission will have to consider and think about adding more money to the program. We are doing our best to ensure we reach out to all applicants within the close of applications on November 23. We know we can decide if the applicant is eligible within 2-3 weeks.

Q: The FAQ on your website mentions that you need an EBID parcel report. What needs to be included in that?

A: We will more clearly define this in our FAQ to make sure that EBID, ISC and the applicant are all on the same page.

Comment: OSE has a frequently asked questions (FAQ) on the program website to explain help potential applicants anticipate the information needed to complete an application. The applications will be open starting on November 9th and ending on November 23rd. The application link will be posted on NM First <http://nmfirst.org/event-details/lower-rio-grande-groundwater-conservation-pilot-program> and SOE's Program website <https://www.ose.state.nm.us/LRGPilot/>. The primary point of contact for the applications will be New Mexico First. Further information sessions will be held on November 12th, 10:30-11:30 AM; November 12th, 5:30-6:30 PM; November 17th, 1-2 PM.

Grant Requirements

Q: Does the parcel have to lay fallow all year?

A: We are doing 12-month cycles during which time the parcel won't draw groundwater. The 12-month water conservation cycle can start anytime between January 1, 2021 and October 31, 2021. One concern that people have expressed is that their crop cycle may not start in January, so some people won't start at the beginning of the year. The reality of their operations are that they have various crop rotations.

Q: If you do the first year are you committed to another year after?"

A: No. We are looking to have just that one year to study. We aren't anticipating more than one cycle before we look at results from the pilot program.

Q: Can we farm the parcel with ditch water?

A: Surface water can't be used for the selected parcels, but it can be relocated and used for other parcels.

Q: Let's say you have an irrigation well that you're using, and you take that acreage out of production, can I continue to irrigate the other acreage?

A: Yes, you can do that.

Q: What about the 2 acres I have of pecan trees? Can't I water them? We can't retire water and have trees survive.

A: You can set aside the two acres to water, and the rest of the 15 acres can be entered into the conservation program. Your water rights would pertain to the two acres.

Q: Instead of setting aside a parcel, could you just overall reduce the amount of water you pump on your other acreage?

A: There was a pilot that tested what you are suggesting. What the study found was that there wasn't a reduction of water consumptive use. The management or verification of that is very hard to do. How do we know that it's saving water? It becomes difficult to measure. This program isn't addressing surface water. Those who enter into this conservation agreement can still use their surface water on another parcel. EBID has a program where you can divert your surface water to another parcel.

Q: What happens to the EBID rights during the program? What happens to the surface water rights? Can you irrigate with surface water?

A: We are trying to see if we can stabilize or reduce the rate of decrease in water of the aquifer. We are trying to get as much water to the surface as possible. So surface water could be used, but not ground water.

Q: Can we exercise the pumps every few months so that we know that they are still in good maintenance?

A: Exercising wells is a reasonable request. We'll look into that request to see how to accommodate it.

Q: Is the State committed to pay us and come through with your end of the bargain?

A: We have \$5 million allocated for this program. Once we enter into a grant agreement the state is obligated to pay the money to the grantee as long as the grantee keeps up their end of the bargain. We may do a 25% payment upfront, 50% payment during the conservation and then another 25% of the payment at the end. We frontload the grant allocation so that the majority of the obligation has been met early. During the conservation agreement we will have verification to ensure compliance with the agreement. The money has already been budgeted for the agreement. The state legislature has already appropriated that money.

Q: How does this differ from the Pecos River reclamation project?

A: We looked at this program to get a sense of how it worked. That project was very different. This is not a "buy and dry" project. Rather this program takes lands out of production for just a 12-month period.

Q: The City of Phoenix did something similar. Have you looked into what they've done and is there anything they did that we might do?

A: Phoenix has longer term leases with agricultural producers to ensure city water. It's hard to see how these would be conserving water.

Q: What effect would this have on water rights?

A: There is no impact on water rights. This is a temporary agreement to keep land out of production for 12 months, and we're looking at land that's been using water for 4 of the past 5 years, so there's no danger of abandonment or forfeiture.

Evaluating Success of the Pilot Program

Q: How will you measure success? How will you know that the program was a good investment? How can an accurate assessment on ground water usage be made by only retiring a minimal of ground water wells? How will this generate statistical values that can be extrapolated over a larger geographical area?

A: This is a pilot program. We know that in 12 months we won't solve our water issues and provide a sustainable water system. It's understandable that you have doubts about seeing results for such a short amount of time, but we're collecting information now that can be used for modeling to extrapolate from the pilot program to determine how much acreage would be needed to make an impact. The goal is to keep the aquifer in balance.

We're also gauging interest: how many people will enter into contract, the feasibility of the administrative costs, etc. We'd like to look at which activities are successful, which were not appropriate, and how we can design more effective programs for the future. The intention is to look at the process to understand how we can do this successfully. That way when we move forward in the future, we can use our lessons learned.

Q: Since the purpose is conservation, how are you monitoring the recharge? How do you see the benefits of it?

A: There are a network of groundwater wells that monitor ground water levels. In terms of water ground water conservation, it will be a combination of taking the acreage in the program along with the amount of pumping and modeling it. We also have to look at the amount of surface water that is allocated. That will allow us to adjust how many acres need to be put into the conservation program.

Q: What about soil erosion and dust? What is the effect of air borne particulates to our air quality? Have you all thought of combining this program with a low water use cover crop?

A: At this point we won't have requirements about land management, because the period of time is so short. However, we want to work with the Dept. of Agriculture to find ways to minimize soil erosion. Shallow root cover crops and clod plowing might be options. We need to bring that back to the Commission to see how to address that. We have to look into this quickly.

Q: How will this impact the indigenous communities in the area?

A: This pilot program is intended to include any entity that has ground or surface water rights. Indigenous communities can participate in the program if they would like and if they are active in the area.

Q: Will the water be analyzed? The area is known for ramifications from the Trinity Site. Is there any testing of the water that will happen?

A: One of the objectives is to conserve ground water. Surface water would be coming from Elephant Butte and the Rio Grande. This program isn't doing water quality testing.

The Bigger Picture

Q: I have a big concern. If we are using conservation, is that something that will only affect Rincon to Mesilla? I'm concerned we won't have water for our homes. The water table in the south is dropping because of El Paso and Texas to feed the ever-growing demands. We can see that around Canutillo. I think that it has dropped 20 to 30 feet when they are pumping. How will we consider the pumping that they are doing? If this continues, we will lose any water we have for our crops.

A: This program is focused on how to manage our aquifer related to NM. It sounds like you are asking about how other states have managed water. For example, El Paso had to diversify because of the way they managed their aquifers. Albuquerque is addressing both ground and surface water so that they can rely on both when one is low. This is a first step to think about how the balance will be available for municipal growth and agricultural use.

Q: How much of the aquifer is usable for agricultural and human consumption? What about water quality?

A: At some point, we do need to integrate with drinking water suppliers so that conservation extends to different entities. We're not doing that in this program. We're not looking at water quality. But a multi-agency, multi-state coalition was looking into how to mitigate salinity issues. We can track down that information.

Q: How does this initiative connect with other efforts around long-term viability of the aquifer and groundwater in terms of quantity and quality?

A: That is a complex question with many national, state and local actors involved, not all of whom we have control over. It's like a spider web – if you pull on one thread the whole web shakes. We need to balance interrelated effects. There is a lot of "what-if" modelling being done that could be used to answer these questions, but we're very early in the process. Our goal is to determine how we can manage the aquifer for New Mexico. There are a number of ways that supply issues can be managed. This is a first step to test a conservation strategy.

Next Steps: Information Sessions

The New Mexico Interstate Stream Commission (NMISC), in cooperation with New Mexico First, will hold a series of Information Sessions for applicants to the Lower Rio Grande Groundwater Conservation Pilot Program. The sessions will cover grant objectives, eligibility, timeline, funding bands; review the grant application form; and be open for questions.

The session dates and times are:

- Thursday, November 12th, 10:30-11:30 AM
- Thursday, November 12th 5:30-6:30 PM
- Tuesday, November 17th, 1:00-2:00 PM

Register for one of these sessions at: <https://nmf-ose-listening-sessions.eventbrite.com>

Visit the Groundwater Conservation Pilot Program website for additional information:

<https://www.ose.state.nm.us/LRGPilot/>

Visit the New Mexico First website for application information:

<http://nmfirst.org/event-details/lower-rio-grande-groundwater-conservation-pilot-program>

Listening Session Registered Participants

Carlos Armijo, Las Cruces
Samantha Barncastle Salopek, Las Cruces
Rebecca Baum, Las Cruces
Jacque Bowens, Clovis
John Butler, Las Cruces
Lee Carver, Mesilla Park
Joe Clayshulte, Mesilla
Juan Colquitt, Las Cruces
Greg Daviet, Las Cruces
Reina Delgado, Grants
Caleb Del, Las Cruces
Cristina Dominguez, Anthony
Larry Dominguez, Las Cruces
Gary Esslinger, Las Cruces
Michelle Estrada-Lopez, Albuquerque
Katherine Fauske Maynard, Las Cruces
Ian Ferguson, Denver
Erek Fuchs, Las Cruces
Frank Garcia, Las Cruces
Emily Geery, Helena
Steven Glass, Albuquerque
Victoria Gonzalez, Las Cruces

Max Henkels, Las Cruces
Chrysa Johnson, Albuquerque
Phil King, Las Cruces
John Knopp, Las Cruces
Richard Knopp, El Paso
Rachel Kullman, Santa Fe
John Longworth, Santa Fe
Henry Ludwig, Anthony
Jerry Melendez, El Paso
Andrea Mendoza, Las Cruces
Gilbert Mesa, El Paso
Rebecca Mesa, Las Cruces
Adelaida Montoya, Mesilla Park
Charles Moore, Las Cruces
Suzanne Odom, Santa Fe
Herman Ogaz, Urbandale
A J Olsen, Roswell
Orlando Ortega, Clovis
Steve Pacheco, Las Cruces
Page Pegram, Albuquerque
Thomas Perez, Fairacres
Tiffany Rivera, Las Cruces

Stephanie Russo Baca, Albuquerque
Sam Salopek, Las Cruces
Ryan Serrano, Las Cruces
Kent Simpson, Las Cruces

Joshua Smith, Las Cruces
Jesus Sosa, El Paso
Cheryl Thacker, Las Cruces
Ronald Watson, La Mesa