

## **Supplemental information on the Rio Grande Project New Mexico-Texas 2008 Operating Agreement between the Elephant Butte Irrigation District, the El Paso County Water Improvement District No.1, and the United States Bureau of Reclamation.**

Each Rio Grande Project irrigation district is entitled to an amount of Rio Grande Project (Project) water in direct relation to its respective acreage. The Elephant Butte Irrigation District (EBID) has 88/155<sup>th</sup> (56.8%) of the Rio Grande Project acres and the El Paso County Water Improvement District No. 1 (EP#1) has 67/155<sup>th</sup> (43.2%) of the Project acres. The districts reimburse Reclamation for the operation and maintenance of the Project in these same percentages plus adjustments for any municipal and industrial water used within the district. The Rio Grande Compact also is intended to secure the amount of water which the Rio Grande Project is to receive on a year to year basis. Groundwater pumping in New Mexico affects the proportionate deliveries to EBID, EP#1 and Mexico.

The Rio Grande Project Operating Agreement (Agreement) is designed to offset for the diversion of Project water by ground water pumpers in New Mexico and Texas. Factors which affect the ability to make surface water deliveries to each water users are taken into account in making the allocation of water to each district and Mexico. The Rio Grande Project water users intend to utilize only the amount of ground water needed to make historical water deliveries to each of the Project users.

Prior to the installation of the Agreement, EP#1 was not receiving its proportionate share of the Project water supply under the 56.8/43.2 ratio because of the fluctuating irrigation requirements from one year to the next. This accounting procedure was an impediment to conserving water, as each district's conserved allotment was subsequently divided the following year along the 88/155 – 67/155 basis. The Agreement allows each district the ability of carrying over water allocation to following years ( up to 60% of a full allocation) making it possible for each district to receive and utilize its proportionate share of the Project water supply over the course of several years. The carry over limit for EBID is 305,918 acre feet and 232,915 acre feet for EP#1.

Reclamation has been in discussions with the New Mexico Office of the State Engineer (OSE) and the New Mexico Interstate Stream Commission (ISC) and the Engineering Advisors (EA) to the Rio Grande Compact Commission since 2008 on Project operations under the Agreement. There is a concern from New Mexico that the water allocation procedures, water accounting calculations and water carry over accounts that have been instituted with the Agreement are not fair to (EBID), advantageous to (EP#1) and may impact the Rio Grande Compact. Staff from the ISC and the OSE have made various mathematical and hydrological analyses to show that the way the Project is presently being operated by the two districts and Reclamation is inconsistent with the way it was operated prior to the Agreement.

The methods that were used to operate the Project were changed in negotiations which resulted in a signed agreement and a dismissal of various lawsuits. What has remained consistent with previous Project operations is the total amount of water that the Project uses (releases) on a year to year basis plus the deliveries made to Mexico in compliance with the Treaty of 1906.



Reclamation and the districts have shown that in the four years since the Agreement has taken affect, the Project as a whole has used less water and been able to carry over water for future use. The water that is allocated to Mexico has also remained consistent with past allocations. The year by year surface water allocations to EBID have been reduced due to the allocation carry-over provisions in the agreement and because of the continuing drought.

During the negotiations of the Agreement it became apparent that ground water use in New Mexico as well as the use of ground water in the Texas portion of the Mesilla Valley was affecting the ability of the Project to deliver surface water. The districts agreed that each would manage the effect that ground water use in their respective states has on Project water deliveries. EBID manages this effect by using their surface water allocation to insure the deliveries to EP#1 and Mexico. This was vital in persuading EP#1 to sign the agreement. In return EBID would be able to utilize more Project water at times when ground water conditions and irrigation drainage return flows are higher. EP#1 complies with the ground water effects caused in Texas by requiring the City of El Paso to offset the affects from their municipal pumps on Project water by making discharges from their waste water treatment plants back to the river.

Unfortunately the Project has been in a drought situation since the Agreement was instituted. The ongoing drought has not allowed ground water in the Rincon and Mesilla Valleys to recover as it has after previous droughts. EBID has not been able to take advantage of any increases in ground water or drain return flows which occur during years of normal or abundant water supply. It is likely to take several years of above normal water supplies before conditions become favorable to EBID.

EP#1 managed to build up their carry over allocation account such that they reached the cap of 60% of a full allocation imposed on both districts by the Agreement. This allowed EP#1 to have a decent water supply for 2011. EBID has utilized the majority of its allocation each year and did not have much water to carry. Farmers in EBID have relied on ground water to supplement the surface water allocation. At the completion of the 2011 irrigation season neither district will have water to carry over into the 2012 irrigation season. Unless there is a good snow pack accumulated during the 2011-2012 winter, both districts and Mexico will have very little water with which to irrigate. Presently Project water in storage in Elephant Butte and Caballo is at 45,000 acre-feet or 6% of what is needed to make a full year's allocation. Total water in storage is 270,000 acre-feet or 12% of Project storage capacity.

Several meetings have been held with the staffs from the ISC and the OSE in order to address the concerns from the State of New Mexico. These meetings with the staff from the ISC and the OSE have also included managers and staff from the irrigation districts. Reclamation has tried to show that the Project water users are in agreement - that the 2008 Operating Agreement is working as designed. The committee which works to make allocations and communicate on the Project operations has also made changes to the Operating manual sections of the agreement when it became evident that improvements were needed.

The engineering advisors from New Mexico and Colorado have been invited to sit in on the monthly allocation meeting with the districts, Reclamation and the International Boundary and Water Commission in hopes that they could achieve a better understanding of the operations of the Project.



Concurrently the United States is in negotiations with the State of New Mexico on the Lower Rio Grande adjudication. The state of New Mexico has made the operating agreement an issue in the adjudication and has made it a condition on reaching finality in the adjudication.

There are currently four main issues that the ISC is concerned about with the operating agreement:

- 1) The release to delivery ratio used to calculate the allocation to EBID.
- 2) The maximum release by EP#1 allowable during an irrigation season (cap on release).
- 3) The effects of the City of El Paso Canutillo well field on Project surface water deliveries.
- 4) Transparency of Rio Grande Project operations.

The release to delivery ratio calculation method agreed to by the district and Reclamation is a better indication of the amount of water that will be chargeable against a water user's account and does not over commit the water resources of the Project still available for allocation. In order to insure that the best data possible is used to calculate the delivery ratio, the two districts will be sharing personnel resources to get more frequent metering of the canal headings. More specifically, EP#1 personnel will be helping EBID personnel to measure the canal headings more often. Under the present operation dictated by the drought the diversion ratio calculations closely approximated the calculations which the ISC and the State engineer prefer.

On the issue of a cap on allowable release from storage, Reclamation and the districts have explained that there are presently limits set on EP#1. The amount of water that EP#1 may divert at their river headings is capped as a result of the Texas adjudication of the Rio Grande in the reach above Ft. Quitman, Texas. In addition EP#1 has demonstrated that it is their intent to carry over allocation from one year to the next as a hedge against low water years such as we are facing in 2011. Reclamation will also guard against non-authorized and non-beneficial use of Rio Grande Project water.

On the issue of the surface water ground water interaction in the Mesilla Valley, specifically within the Canutillo well field Reclamation and the districts have transferred water from EP#1's allocated water account to EBID's allocated water account to compensate EBID for the direct effects of the water pumped by the City of El Paso. We will continue to work with the districts and the city to model the surface water ground water interaction in the Mesilla Valley.

The issue of transparency of Project operation has been addressed by inviting staff from both the states of New Mexico and Colorado to our allocation meeting and our yearly review of the Operations manual. It was recently pointed out by the ISC staff that the Rio Grande Project should have a system similar to the one in the Middle Rio Grande where all key metering stations are available through the internet on a real time basis. Reclamation has provided



information to the state on New Mexico where similar if not more extensive information is available on the web sites of each irrigation district also on a real time basis.



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