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Thank you for providing me the opportunity to speak on this important topic.

The Middle Rio Grande Conservancy District ("MRGCD") has been a key player in preservation of water for agriculture and supporting the survival of an endangered fish species—the Rio Grande Silvery Minnow (RGSM). Since 1996, MRGCD has cooperated with Federal Agencies (BOR/FWS) to achieve desired rates of flow for the RGSM while not causing injury to irrigated agriculture within the MRGCD.

- The Bureau of Reclamation (BOR) claimed jurisdiction over Rio Grande (RG) water for the RGSM which is destined for Middle Valley farmers.
- The courts agreed that the federal agencies cannot take water from irrigators and provide it to the RGSM.
- As a part of negotiated Mediation in year 2000, Over 200,000 acre-feet of water was released for the Minnow which did not produce desired results.
- MRGCD continues to work with ESA Collaborating Work Group to convey water for the Minnows below Isleta and San Acacia Diversion dams.
- Keeping the river continuously wet with high flows during drought is not the ultimate solution for the Minnows.
- The MRGCD has worked with the ESA work groups to seek non water or less water solutions to create habitats for the Minnows to avoid extinction and jeopardy.

**THE 2003 BIOLOGICAL OPINION**

Beginning in 2003, the Biological Opinion (BO) that included RPA's that allowed the RG to dry at places and under certain conditions.

The environmental groups did not challenge the 2003 BO even though it allowed the river drying they had contended would cause extinction of the species. The extinction as predicted did not occur.

Since that time, MRGCD has participated in multiple programs with the federal agencies while not causing injury to irrigators. MRGCD helped ensure that the required flow targets under the 2003 BO were met.

The problem currently facing the RGSM is that there may be insufficient supply to meet the flow targets in the 2003 BO. A new BO must be produced in 2013 that continues to meet the needs of the RGSM. It must be based on the best available science that is peer reviewed and hydrological reality and cannot simply replicate the flow requirements under the 2003 BO.

The question raised by all of the scientific community regarding the flow targets is whether the RGSM survived during the ten year period of the 2003 BO because of the flow targets, or not. Given there is insufficient water supply to replicate the previous ten years, it will be incumbent on the federal agencies and non-federal agencies, including the MRGCD, to craft a set of actions in the middle Rio Grande that science tells us will help the RGSM, not simply follow historical precedent.

Since 2001, the MRGCD has participated with federal and state water managers in the water operations conference calls to determine the water needs of all water users, including the RGSM, and how to most effectively meet those needs with a limited resource.

## WATER CONSERVATION AND IMPROVEMENTS IN EFFICIENCY BY MRGCD

The MRGCD has made great strides in water conservation and efficiency that can have the indirect effect of helping the RGSM. Some of these are set out below;

- 1) Reduced MRGCD diversions—Assisted in Rio Grande Compact and ESA Compliance.

MRGCD has worked to tailor its diversions to meet actual demand as closely as possible which has placed considerable burden on MRGCD and irrigators, but produced much more predictable flows in River.

Total annual diversions prior to 2000 were claimed to be around 600,000 AF/year. In 2001 total diversions were reduced to 480,000 AF. From 2002 to present, total annual diversions have averaged 350,000 AF/year. Reduced diversions have important implications for RGC and RGSM issues.

- 2) Water Conservation

MRGCD has actively encouraged water conservation practices to its water users. The reduction in diversion, strict rotation and scheduled water delivery practices has produced some savings of water. However, the savings are less dramatic than the large change in diversion numbers would suggest.

Continued compliance with the 2003 BO, or compliance with any new BO, will be difficult since there is limited water supply and storage. Water conservation practices, while essential for the MRGCD, cannot produce large amounts of water for species needs. The RG is an extremely limited resource, needs continue to expand, and water is becoming increasingly scarce.

## WHAT THE MRGCD WOULD LIKE TO SEE IN A NEW BIOLOGICAL OPINION

1. **Flexibility:** The MRGCD considers simple prescriptive flow requirements in specific amounts as were contained in the 2003 BO neither supported by good science nor necessarily helpful to the RGSM. This causes unnecessary injury to irrigators while not providing a corresponding benefit to the RGSM. A flexible set of flow targets based on varied conditions is preferable.
2. **Movement toward Recovery:** The MRGCD believes that the focus of solutions should be aimed at habitat improvements, flexible flow management in certain reaches, and related actions that will create long term habitat rather than treating the entire river the same.
3. **Adaptive Management:** While this term is used, and at times improperly used, the concept of not being frozen into a set of stream system fixed flows, but rather designing, testing and utilizing diverse actions that would benefit the RGSM is far preferable. Thus, key managers could work to develop alternatives and work collaboratively to implement them.
4. **Population Viability Analysis (“PVA”)** All members of the collaborative working group have supported statistical methodologies to ensure ascertain the actual needs of the RGSM based upon empirical analysis of biological data, rather than deductive analysis based upon the capacity of federal agencies to garnish water from other uses.
5. **Best Available and Peer Reviewed Science:** The ESA and all court decisions considering it have demanded that solutions to assist species be determined by the best available and peer reviewed science not by abstract policy views such as western rivers should flow year round like eastern rivers. Or, that irrigation and successful propagation of species are inherently incompatible.

Given the scarcity of water in the Rio Grande, there is no longer any room for management by clichés. Rather it must be based upon the best available and peer reviewed science.