

**Comments Regarding the Draft Economic Analysis
and Environmental Analysis
For Critical Habitat Designation for the AR Shiner**

August 4, 2005
By John C. Williams
For
Canadian River Municipal Water Authority

The following comments result from a review of Section 4 of the Draft Economic Analysis prepared by Industrial Economics, Inc. for the U. S. Fish and Wildlife Service in regard to the proposed designation of Critical Habitat for the Arkansas River Shiner, issued August 1, 2005, and the associated Environmental Analysis of the same action.

It should be noted that Section 3 of the Economic Analysis contains estimates of administrative costs related to projected formal and informal Section 7 consultations which might result from designation of Critical Habitat. No comments have been prepared on these estimates, except to note in general that a formal consultation is projected if CRMWA expands its wellfields (Exhibit 3-5). The report does not elucidate on the costs related to this consultation, which it attributes to the USBR. Consultation costs (ongoing) are also attributed to brush (salt cedar) control by NRCS. No attempt to analyze these costs has been made.

Section 4 of the Economic Analysis contains the Potential Economic Impacts to Water Management Activities, including the modification of reservoir operations and provision of instream flows which may be necessary to benefit the AR shiner. In summary, the Analysis does not attribute any economic costs to Lake Meredith from these causes. A substantial cost is assigned to Ute Lake due the assumed possible requirement to furnish water to maintain current levels of stream flow downstream from that structure.

Several factual errors are noted in the report regarding Sanford Dam, Lake Meredith, and CRMWA operations:

Exhibit 4-1 indicates that the primary purpose of Sanford Dam is for Flood Control. Municipal/Industrial Water Supply is mentioned in Section 118 at Page 4-5, but not in Exhibit 4-1, which could give an inaccurate impression of the function of Lake Meredith.

Section 118 (page 4-5) states incorrectly that CRMWA diverts water from Lake Meredith under a 1984 permit from the State of Texas. In actuality, the permit was originally issued in 1956, and was confirmed by adjudication in 1984.

Section 118 also gives the cost of water to CRMWA member cities in FY 01-02 as \$51/ per thousand gallons, whereas a correct figure would be \$0.51 per thousand gallons. It should be noted that FY 01-02 was not a representative

period, being the first (partial) year of operation of the Groundwater Supply Project. Costs to member cities in FY 03-04, when a high proportion of groundwater was required due to low levels in Lake Meredith, rose to \$0.62 per thousand gallons.

Section 119 (page 4-6) refers to estimates of firm yield made by USBR prior to construction of the Canadian River Project, stating that a 1959 estimate was that Lake Meredith could supply 126,000 AF/yr, which was revised downward in 1960 to 103,000 AF/yr. Actually, both estimates were contained in the USBR Definite Plan Report prepared in 1960. USBR estimated that prior to any further development by New Mexico (no reservoirs downstream from Conchas Dam), the yield would be 126,000 AF/yr. After New Mexico took full advantage of its rights under the Canadian River Compact, the yield of Lake Meredith would be reduced to 103,000 AF/yr. The aqueduct system of the Canadian River Project was sized to deliver 126,000 AF/yr; while contracts with member cities were based on the lower delivery rate of 103,000 AF/yr.

Regarding the economic assumptions made in the report, it is difficult to follow the logic which was applied. No costs were assigned to water operations at Lake Meredith, based on 1) the conclusion that requirements to release water from Lake Meredith are not evaluated because there is no target flow established, and 2) impacts on flood control operations were not evaluated because it is uncertain whether flood control would be halted as a result of any consultation. The analysis mentions the possibility that CRMWA member cities might have to find a replacement water supply if releases were required to sustain the shiner, but no evaluation of resulting costs is included. A footnote (no. 42 on page 4-5) quotes FWS comments to the effect that there is no federal nexus associated with operation of Lake Meredith, other than for flood control. If this determination is accepted, there should be no mention of the possibility of requiring releases for Shiner benefit, since control of the water supply is totally outside of the Federal interest.

On the other hand, the uncertainty of consultation being required at Lake Meredith for flood control purposes is exactly why we have complained about the extension of Critical Habitat into the flood control pool of the reservoir. At the very least, the economic impact that would occur if consultation should interfere with flood control operations should be stated as a possibility. That eventuality is certainly as likely as the events which were evaluated for Ute Dam.

At Ute Dam, costs of providing releases to maintain downstream flows were included in the analysis. The logic here is even more obtuse, because requiring releases to replace "lost" seepage flows could only occur if 1) the seepage flows were diverted to provide a beneficial water supply for some group of users, so that the net effect would be zero, or 2) the level of Ute Reservoir fell so low that seepage would not be produced, in which event there would be no water to release. (However, I do not feel that we should make

adverse comments regarding the economic impacts attributed to effects on Ute Lake. The point is that the logic employed throughout the analysis is quite cloudy.)

With respect to the Environmental Analysis, only one comment has been formulated to date. On Page 37, the EA states that “Maximum possible elevation of impounded water behind Sanford Dam, in Lake Meredith, is 2,965 feet.” This is a mis-interpretation of the design data, since the top of the flood control pool is at elevation 2965.00 feet MSL but the reservoir could rise higher during passage of extreme floods. The actual maximum possible elevation for impounded water would be at elevation 3004.9 feet MSL which is the elevation which would be reached during passage of the inflow design flood. (Later flood studies actually indicated even higher levels.) Once the reservoir rises above elev. 2965, flood control operations would be ceased and all outlet works would be operated at full open until the reservoir level declines back to that level. The time period during which the reservoir level might exceed 2965 is relatively short, estimated at 21 days for passage of the spillway inflow design flood.