

listed as endangered or threatened. As noted under the "Background Section" above, when the silvery minnow was listed as endangered in 1994, we found that critical habitat was not determinable. Subsequently, we were ordered to publish a final determination regarding critical habitat for the silvery minnow, *Forest Guardians v. Babbitt*, Civ. No. 97-0453 JC/DIS. On July 6, 1999, we published a final designation of critical habitat for the silvery minnow (64 FR 36274), pursuant to the court order.

Critical habitat will affect private, State, or Tribal activities when Federal funding, permitting, or authorization is involved. If there is Federal involvement, consultation will be completed within the statutory time frames. The process of section 7 consultation does not stop growth or development.

(66) *Comment*: Your last economic analysis found that there would be no impacts associated with the designation of critical habitat for the silvery minnow.

*Our Response*: We were required to prepare a new critical habitat designation under the court order from the United States District Court for the District of New Mexico, in *Middle Rio Grande Conservancy District v. Babbitt*, 206 F. Supp. 2d 1156 (D.N.M. 2000). We prepared a new economic analysis, a draft EIS, and a new proposed rule pursuant to that court order. A new economic analysis was completed to address this revised final designation, the previous economic analysis is not reflective of this designation or our current approach for analyzing economic impacts.

(67) *Comment*: The economic analysis only considered the middle Rio Grande as an entire unit and did not evaluate economic impacts to different areas within the middle Rio Grande. An economic analysis that does not take local land and water use into account does not disclose the full economic costs of the designation and is of no benefit to the Service or the public.

*Our Response*: The economic analysis includes specific analyses within the area designated as critical in the middle Rio Grande by estimating the cost of designating critical habitat in each of the five reaches. The analysis utilized all information provided by the Federal, State, local, and Tribal respondents operating in the area, including models created by and technical assistance from the New Mexico State University Agricultural Extension Service. Information concerning the local and regional economy was analyzed to conclude that there would not be

significant economic impacts associated with the designation of critical habitat for the silvery minnow (*see also* the "Economic Analysis" section of this rule).

(68) *Comment*: The draft economic analysis uses alfalfa as the basis for calculating the cost of forgone production and secondary economic impacts. The estimated economic impacts were likely underestimated because alfalfa makes up about 56 percent of the agricultural crops in the middle Rio Grande. The costs of forgone production on the other 44 percent of agricultural crops would likely be higher, since alfalfa is a relatively low-value, high-water-consuming crop.

*Our Response*: Based on interviews with local crop scientists and because of the dominant status, annual planting cycle, and relatively high water requirements of alfalfa, the economic analysis assumes that acres retired from planting will be those devoted to the alfalfa crop. However, the economic analysis indicated that this assumption is likely to be conservative and to overstate effects on the regional economy when compared with modeling reductions in water available to other crops. A second calculation using a reduction in hay production is included in the final economic analysis to provide comparison. Modeling the same reductions in water available to the second most prevalent crop in each study area (pasture hay for the middle Rio Grande and cotton for the Pecos) produces a total value of forgone production that is 3 percent less than that produced by modeling removals from alfalfa. Given that 90 percent of the irrigated acreage in the middle Rio Grande study area and over 75 percent of the irrigated acreage in the Pecos study area are devoted to the two dominant crops, it is likely that water removed from irrigation would come from one of these two crops, validating the assumptions set forth in the economic analysis.

(69) *Comment*: The draft economic analysis does not consider that NM has had an active water market for years and many farmers have not chosen to sell their water rights. Consequently, the acquisition of water to meet supplemental flows may not be available.

*Our Response*: Under New Mexico State law, users of water must hold a water right. Such rights are treated as property rights, and are traded in a market. Since a competitive market exists for water rights in NM, it is assumed that the price of these rights represents the expected economic benefit of water made available by these

rights, in its highest and best use. That is, in paying for water rights, buyers are making clear the implicit value of the water to them. The economic analysis concluded that (1) there is an active market in NM to move water to uses other than the original use; (2) there are multiple buyers and sellers of water rights; and (3) the price of water rights can be predicted from expected underlying economic factors.

Studies and historic and current data indicate that "water flows uphill toward money" (Brookshire *et al.* 2002; Hall 2002). In other words, water will move toward the highest valued use in accordance with the economy. For example, 90 percent of all water rights transferred (*i.e.*, leased or sold) in the middle Rio Grande from 1976 to 2000 were previously held by irrigation (Brookshire *et al.* 2002). Consequently, we believe that the voluntary acquisition of water to meet supplemental flows will be available.

(70) *Comment*: The economic analysis underestimates the farmland removed from production to provide for supplemental flows.

*Our Response*: The economic analysis used models created by the New Mexico Cooperative Extension Service and NM agricultural statistics from the New Mexico Agricultural Statistics Service to estimate costs and returns for the State's farming industry in 2001. The commenter did not provide any data for us to consider and did not explain why he or she believes our estimates to be inadequate.

(71) *Comment*: Agricultural production in the middle Rio Grande valley is on a scale that does not allow comparison to agriculture elsewhere in the United States. Consequently, the values of agriculture are as much social and cultural as they are economic. The Service should consider these values before finalizing the designation.

*Our Response*: The economic analysis estimated: (1) The opportunity cost of water needed to supplement instream flow; (2) direct, indirect, and induced economic effects resulting from the resulting changes in the use of water, including cultural and secondary impacts on water sellers and communities; and (3) costs of section 7 consultations. The EIS also analyzed the social and economic impacts, impacts on land use, and impacts on cultural resources. Please refer to the economic analysis and EIS for a complete analysis of these impacts.

(72) *Comment*: The economic analysis assumed that the market for water rights may not result in actual delivery of "wet water" (*i.e.*, water in the river) once the middle Rio Grande is adjudicated.