

July 9, 2004, Draft – Navajo Nation Water Rights Settlement

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MEMORANDUM

July 9, 2004

To: New Mexico Interstate Stream Commissioners  
From: John Whipple, Staff Engineer, Interstate Stream Commission  
Subject: Responses to Public Comments Received on the December 5, 2003, Discussion Draft San Juan River Basin in New Mexico Navajo Nation Water Rights Settlement

Representatives of the Navajo Nation and the State of New Mexico on December 5, 2003, released for public review and comment a draft Settlement Agreement and appendix documents that would resolve the rights of the Navajo Nation to the use of waters of the San Juan River Basin in New Mexico and provide water development projects for the benefit of the Nation. The Navajo Nation Department of Water Resources and the New Mexico Interstate Stream Commission received substantive public comments on the December 5 draft Settlement Agreement. The Interstate Stream Commission staff offers the following responses to substantive issues raised by the public comments. Other issues and technical comments were also considered, with revisions made to reflect or address many of them, though each is not explicitly addressed herein.

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## SETTLEMENT PROCESS

- 1. The public review and comment period was too short to allow non-Navajo interests to have meaningful participation in development of a Navajo Nation water rights settlement, and further comments will be submitted.**

Unlike offers of judgment on sub-files negotiated between the New Mexico State Engineer and non-Indian water users in the San Juan River Adjudication, a proposed Navajo Nation water rights settlement was distributed on December 5, 2003, for public review because contracts for water supply from Navajo Reservoir and federal funding for water projects require Congressional approval, and consequently, need political support. The proposed settlement documents were released for public review and comment when the Navajo Nation and the State Engineer felt that a settlement package had been negotiated to a point that water users and citizens in the San Juan River Basin could see the scope and details of what a settlement might entail. Nevertheless, the main components of the draft settlement are the same as those presented in public presentations to water users and citizens in the Basin in previous years by the State Engineer, and the same as those that Interstate Stream Commission staff and Navajo Nation Department of Water Resources staff discussed in general concept with various parties in the Basin from time to time in the past.

The comment deadline of January 15, 2004, was to ensure fair consideration of comments and concerns received prior to finalizing settlement negotiations so as to make a settlement agreement as acceptable to the public as possible before approving a settlement and going to Congress. Since January 15, representatives of the Navajo Nation and the Interstate Stream Commission have continued to receive written and oral comments on the proposed settlement from numerous parties in the San Juan River Basin, and have met to discuss the settlement with representatives of the cities in the Basin, the power plants, the agricultural water users, the San Juan-Chama Project, other Indian

tribes and the public. The revised proposed Settlement Agreement, with revised appendices, addresses several of the concerns raised by the public comments regarding the settlement of the water rights of the Navajo Nation and also concerns raised about the administration of water rights in the Basin by the New Mexico State Engineer.

Further discussion of the revised proposed Settlement Agreement will occur during the next several weeks as the Navajo Nation and the State of New Mexico consider the settlement documents for approval. If the Navajo Nation and the State of New Mexico approve a settlement, further comment and discussion on the proposed Settlement Act and Settlement Contract will occur throughout the Congressional legislative process. If the proposed Settlement Act is enacted into law, all water users that are party to the San Juan River Adjudication may file objections to the provisions of the proposed Partial Final Decree with the Adjudication Court after a motion is submitted to the Court requesting entry of the decree to establish the Navajo Nation's rights to divert and use water in and from the San Juan River Basin in New Mexico. The Court through the *inter se* process will consider the proposed Partial Final Decree and any objections, and may approve, modify or reject the decree. If the Partial Final Decree is not approved in substantially the same form provided in Appendix 1 to the Settlement Agreement, then the Settlement Agreement and the water project authorizations provided by the Settlement Act will be revoked. In addition, further public review and comment on the proposed Navajo-Gallup Water Supply Project will occur during the formulation of the environmental impact statement for the project.

## RESERVED RIGHTS

- 2. The Navajo Nation waived its reserved rights claims to the use of the waters of the San Juan River Basin in New Mexico, except for the San Juan River irrigation projects.**

It is the State of New Mexico's position that in support of the Act of June 13, 1962, the Navajo Nation waived its reserved rights claims to the waters above Navajo Dam, except in relation to the Fruitland-Cambridge and Hogback-Cudei irrigation projects. In doing so, the Navajo Nation agreed to accept an amount of diversion needed to irrigate 110,630 acres under the Navajo Indian Irrigation Project and to share shortages between the Project, other Navajo Reservoir water supply contracts, and the San Juan-Chama Project, as opposed to asserting a senior priority against the latter uses. The proposed settlement recognizes a reserved priority date of 1868 for Navajo Nation uses of the Navajo Reservoir water supply, but provides for a June 17, 1955, priority date consistent with New Mexico State Engineer File No. 2849, under which the Secretary of the Interior supplies the uses.

- 3. The Navajo Indian Irrigation Project is not practicably irrigable acreage and should not have a reserved priority date, and the federal municipal and domestic water supply projects also should not have a reserved priority date.**

Congress by passing the Act of June 13, 1962, made the determination that the Navajo Indian Irrigation Project was practicable for the diversion of up to 508,000 acre-feet per year for the irrigation of up to 110,630 acres of land. No other determination has been submitted. The proposed settlement recognizes that the water rights for the Project are Navajo Nation reserved rights and provides for a June 17, 1955, priority date consistent with New Mexico State Engineer File No. 2849.

The Navajo Nation in pursuing the authorization for the Navajo Indian Irrigation Project did not waive its reserved rights claims for waters of the San Juan River for municipal, domestic and other uses as needed to fulfill the purposes of a permanent



homeland. As part of resolving such claims, the proposed settlement provides that the Navajo Nation's water rights for diversions and uses in New Mexico under the Navajo-Gallup Water Supply Project would have an 1868 reserved right priority for the municipal, domestic and other needs of its homeland, but that the Project uses would be served under New Mexico State Engineer File No. 2849 with a priority date of June 17, 1955, for water originating in the drainage of the San Juan River above Navajo Dam, and File No. 3215 with a priority of December 16, 1968, for inflow to the San Juan River arising below Navajo Dam. The Navajo Nation's water rights for diversions and uses under the Animas-La Plata Project would have an 1868 reserved right priority, but the Project uses would be served under New Mexico State Engineer File No. 2883 with a priority date of May 1, 1956, for water from the Animas River.

The Navajo Nation could assert an 1868 reserved right priority for water for the Navajo Indian Irrigation Project and the Navajo-Gallup Water Supply Project if the ability to receive water for the projects under the Settlement Contract is irretrievably lost, such as due to removal of Navajo Dam, in which case the Navajo Nation would have a senior right on paper with no physical capability to access significant amounts of wet water. It is not the intent of the proposed settlement that the subordination of the reserved right priority be nullified on an acre-foot per annum basis on account of shortages to the Navajo Reservoir water supply. The Navajo Nation agrees to take water for the two projects and share shortages under the priority dates of State Engineer File No. 2849 for the Navajo Reservoir water supply and File No. 3215 for inflows to the San Juan River below Navajo Dam. The Navajo Nation uses under the Animas-La Plata Project are further subject to the Animas-La Plata Project Compact.

## NAVAJO INDIAN IRRIGATION PROJECT

- 4. The Navajo Indian Irrigation Project is not economically sound or profitable, and the United States should not complete construction of the Project or pay the operation and maintenance costs of the Project.**

Congress by passing the Colorado River Storage Project Act and the Act of June 13, 1962, made the determination that through construction and operation of Navajo Dam and the Navajo Indian Irrigation Project, it is practical and viable to provide for the irrigation of up to 110,630 acres of land. Congress also made the bargain that the Project would be built in exchange for the Navajo Nation agreeing to waive reserved rights claims to the waters arising above Navajo Dam, except in relation to the Fruitland-Cambridge and Hogback-Cudei irrigation projects. Construction of the Navajo Indian Irrigation Project remains uncompleted over 40 years later, while the San Juan-Chama Project also authorized by the Act of June 13, 1962, was completed within ten years from the date of the Act. The United States has prepared various planning and environmental impact studies for the Navajo Indian Irrigation Project since the mid 1950s, and National Environmental Policy Act and Endangered Species Act compliance activities have been completed for the Project. In addition, negotiations have begun on a memorandum of understanding between the United States and the Navajo Nation that would include provisions for transferring ownership of the Project facilities to the Nation.

The United States has an ongoing commitment to complete the Project, although the funding ceiling for the Project needs to be increased and further appropriations need to be made to complete it. The proposed settlement would authorize the funding needed to complete construction of the Project. It may be reasonably anticipated that the Project would be completed without the proposed settlement, but that there would be no timeframe or deadline established for completing the funding and construction of the Project. Under the current pace of construction, approximately 2,000 acres of land are

added to the Project's service area each year. Alternatively, the Navajo Nation in the future may desire to reduce irrigated acreage on the Project and transfer rights to other water uses in the San Juan River Basin for economic or political reasons.

The Project has struggled economically for various reasons; however, the Bureau of Indian Affairs continues to help implement improved farm management and water conservation measures on the Project. Also, the current water delivery contract for the Navajo Indian Irrigation Project between the Secretary of the Interior and the Navajo Nation does not require the Navajo Nation to pay for the water delivered to the Project or the operation and maintenance costs of the Project. The proposed settlement provides for the Navajo Indian Irrigation Project to be completed, and for the Navajo Nation to take ownership of the Project upon its completion. The proposed settlement also has been revised to require the Navajo Nation to assume full responsibility for operation and maintenance of the Project, including funding the annual operation and maintenance costs of the Project, once it receives ownership.

**5. The acres of water right for the Navajo Indian Irrigation Project should be reduced even without consideration of economics.**

The March 1957 Bureau of Indian Affairs' Supplemental Report to the Feasibility Report for the Navajo Indian Irrigation Project indicated that 5 percent of a total Project area of over 110,000 acres would be in roads, buildings, farmsteads, and other non-productive areas, leaving some 105,000 acres of land with irrigation service. The Navajo Nation argues that the Act of June 13, 1962, may be read to allow for construction of Project facilities to an irrigation service area exceeding 110,630 acres, so long as the acreage irrigated in any year does not exceed 110,630 acres. The proposed settlement would provide for construction of facilities to a total irrigation service area of 110,630 acres of land.

**6. The diversion right for the Navajo Indian Irrigation Project exceeds the diversion required to irrigate Project lands, and should be reduced to reflect the sprinkler redesign for the Project.**

The Act of June 13, 1962, authorized the irrigation of 110,630 acres on the Navajo Indian Irrigation Project, and the proposed settlement provides the Navajo Nation with the right to irrigate that amount of acreage on the Project. With the Project now built for sprinkler irrigation instead of flood irrigation and consolidation of the acreage further east than was originally planned, the Bureau of Indian Affairs in its 1999 Biological Assessment for the Navajo Indian Irrigation Project estimated that the diversion requirement to irrigate the total Project acreage will average about 337,500 acre-feet per year assuming that each acre is irrigated each year and that further water conservation measures are implemented as currently planned. A 1974 opinion of the Deputy Secretary of the Office of the Solicitor concluded that the Navajo Nation is entitled to divert for irrigation on the Project no more water than is necessary to irrigate 110,630 acres of land, whatever that amount is, regardless of the authorization in the Act to divert up to 508,000 acre-feet per year as necessary for the principal purpose of irrigation of the Project lands. For example, with the redesigned Project and water conservation measures, the Project would be entitled under the opinion to divert up to about 337,500 acre-feet per year of the 508,000 acre-feet per year authorized. The amount of diversion required could change depending upon Project conditions. For example, if planned water management changes and water conservation measures are not implemented or fail to result in as much savings of water as is anticipated, then the diversion requirement to irrigate all project lands each year could be as high as about 372,000 acre-feet per year, according to the 1999 Biological Assessment for the Project. The 1974 opinion of the Deputy Secretary of the Office of the Solicitor referred to a

diversion requirement of 370,000 acre-feet per year for the Project under the sprinkler design.

The proposed settlement recognizes that beneficial use is the limit to the right to use water in New Mexico, including under the Navajo Nation's rights that would be adjudicated under the proposed Partial Final Decree. Based on the 1999 Biological Assessment for the Navajo Indian Irrigation Project, the amount of diversion required for beneficial consumptive uses by the Project currently is anticipated to average between 337,500 acre-feet per year and 372,000 acre-feet per year if all 110,630 acres were to be irrigated each year, depending on the implementation and effectiveness of planned water management changes and water conservation measures. The difference between the 508,000 acre-feet per year diversion authorized by the Act of June 13, 1962, for the flood irrigation project that was originally planned and the estimated average diversion required for the sprinkler irrigation project that is actually constructed is not separable from the consumptive use right for the Project, and therefore, is not transferable by itself to other uses. Under the proposed settlement, the Navajo Nation may change the purpose or place of use of its rights for the Project on Navajo trust lands so long as the total average diversion for all uses under said rights in the aggregate does not exceed 353,000 acre-feet per year, and any such changes to other uses must not impair other water rights. This amount of diversion assumes that either: (1) planned water conservation measures on the Project are about half as effective as anticipated; or (2) water conservation measures either do not occur or realize any benefits, and about 5 percent of the Project acreage, on average, is fallow. If the rights under the Project are not used solely for irrigation, the Navajo Nation would have to file application with the State Engineer to increase the total average diversion by all uses under the water rights associated with the Project above 353,000 acre-feet per year.

Also, the Bureau of Indian Affairs in 1999 pursuant to section 7 of the Endangered Species Act consulted with the Fish and Wildlife Service on completion of the Navajo Indian Irrigation Project. The consultation was for an average annual diversion of 337,500 acre-feet per year for the Project, with a near-term average annual depletion of the San Juan River of 280,600 acre-feet per year until return flows from deep percolation reach equilibrium conditions, after which the long-term average annual depletion would be 270,000 acre-feet per year. The Bureau of Indian Affairs or Bureau of Reclamation would have to consult with the Fish and Wildlife Service under section 7 of the Endangered Species Act prior to making an increase in diversions under the rights for the Project. Under the proposed settlement, the Navajo Nation must schedule bringing lands into production and cropping patterns on the Project in a manner so as to not exceed a maximum depletion of the San Juan River of 310,500 acre-feet in any one year or 270,000 acre-feet per year, on average, in any period of ten consecutive years. Any transfer of rights for the Project to other uses is subject to not causing depletions to exceed these annual maximum and ten-year average amounts.

The maximum diversion rate for the project is increased to 1,800 cfs in the revised Partial Final Decree, which amounts to about 1 cfs per 61.5 acres of irrigation rights. This is the existing physical diversion capacity of the Navajo Indian Irrigation Project main canal. Historically, the diversion rate of the Project has been as much as about 900 cfs, and the acreage irrigated by the Project has been as much as about 55,000 acres.

**7. Navajo Indian Irrigation Project water rights should be leasable and transferable for municipal, industrial and other purposes on and off Navajo lands.**

The intent of the proposed settlement is not to prohibit transfers of use of water under the Navajo Nation's contract rights with the Secretary of the Interior for water from

the Navajo Reservoir water supply. The revised proposed settlement allows for lease and transfer of the Navajo Nation's contract rights for the Navajo Indian Irrigation Project for other uses within New Mexico on or off Navajo lands, subject to non-impairment of other water rights in New Mexico. Under the proposed settlement, interstate marketing or leasing of the Navajo Nation's water rights would require the consent of the State of New Mexico and compliance with applicable law. The State of New Mexico at this time does not support interstate marketing or leasing of water.

**8. The settlement agreement should include water rights for the Navajo Nation in the amount of 24,000 acre-feet for savings in depletions of water due to conversion of the Navajo Indian Irrigation Project from flood irrigation to sprinkler irrigation and consolidating the Project acreage.**

The Deputy Secretary of the Office of the Solicitor in a 1974 opinion concluded that the Navajo Nation is entitled to the use of water for purposes other than irrigation on the Navajo Indian Irrigation Project in an amount corresponding to a net savings of 24,000 acre-feet per year of depletion which was anticipated to result from redesigning the Project for sprinkler irrigation. Based on the opinion, it has been suggested that the settlement should include 24,000 acre-feet of depletion right for the Navajo Nation to be served from Navajo Reservoir storage, of which about 20,000 acre-feet might be for use at a thermal electric power plant to be constructed near the BHP-Billiton coal lease area.

Under the proposed settlement, the Navajo Nation's rights to water from the Navajo Reservoir water supply include rights for the Navajo Indian Irrigation Project and rights for the depletion of up to 20,780 acre-feet per year from the San Juan River for uses in New Mexico under the Navajo-Gallup Water Supply Project. If rights are obtained within the State of Arizona for the use of 6,410 acre-feet per year of water as would be authorized under the proposed Settlement Act, then the total depletion from the San Juan River for Navajo Nation uses under the Navajo-Gallup Water Supply Project would be 27,190 acre-feet per year. Planning documents for the Project indicate that of

this amount, about 4,000 acre-feet would be diverted directly from Navajo Reservoir, and the remainder would be diverted at the Project's San Juan River diversion near Kirtland and supplied by a combination of inflow arising below Navajo Dam and releases from Navajo Reservoir. Because inflows below Navajo Dam in most years will be available much of the year to meet the diversion needs of the Project at the San Juan River diversion near Kirtland, the demand for water from Navajo Reservoir for Navajo Nation uses under the Project may average approximately one-half the total demand for water for such uses.

The Navajo Nation may consider using its ground water rights or transferring a portion of its Navajo Indian Irrigation Project rights or other surface water rights for consumptive use at a new power plant consistent with the provisions of the Settlement Agreement.

**9. The Navajo Nation should not be allowed to reuse return flows from the Navajo Indian Irrigation Project.**

The Navajo Nation under the Settlement Agreement would be able to reuse irrigation tail water or other waste water to the extent that: (1) it recaptures the water before it escapes control and returns to the ground-water aquifer underlying the Navajo Indian Irrigation Project or natural surface water channels in the San Juan River Basin; or (2) it pumps ground water underlying the Project for the express purpose of maintaining the water table at a level below the root zone to prevent waterlogging damage to Project fields, as an alternative to the installation of tile drains and collection of tail water. Otherwise, once control of the water after use is lost and the water returns to a natural stream channel or aquifer via surface water discharge or seepage, the return flow is direct flow available for appropriation and diversion within priority. Under New Mexico State Engineer File No. 3215, the Secretary of the Interior appropriated 500 cfs of direct flow with a priority date of 1968 to supplement storage from Navajo Reservoir to meet water



deliveries under Navajo Reservoir water supply contracts, the source of the direct flow being natural flow of the San Juan River and its tributaries downstream from Navajo Dam plus seepage and return flows. To the extent that the Navajo Nation may reuse irrigation tail water or waste water on the Navajo Indian Irrigation Project, the entitlement of the Navajo Nation to divert water from Navajo Reservoir to supply the current beneficial use needs of the Project would be reduced accordingly, and any depletion of water resulting from reuse on the Project would be chargeable against the depletion right of the Project. Any diversion by the Navajo Nation from the groundwater aquifer underlying the Project that cannot be classified as reuse would be chargeable against the Nation's rights to divert ground water. The revised Partial Final Decree clarifies this matter.

## NAVAJO-GALLUP WATER SUPPLY PROJECT

- 10. The amount of water delivered outside the San Juan River Basin under the Navajo-Gallup Water Supply Project may be too large or increase later, and there is no return flow of exported water.**

The proposed Settlement Act would authorize deliveries of San Juan River Basin water to users in the Little Colorado River and the Rio Grande basins under the Navajo-Gallup Water Supply Project. The deliveries authorized are the water use demands of the Project participants projected to occur by 2040 based on the Project planning studies prepared by the Navajo Nation and the Bureau of Reclamation. Under the proposed settlement, the Navajo Nation would not be able to transfer its New Mexico consumptive use rights for the Project into Arizona, or vice-versa, but would be able to distribute and redistribute its New Mexico consumptive use rights for the Project within and between the San Juan River Basin and the other basins in New Mexico, and within and between the Navajo Reservoir and San Juan River diversion points for the Project. This provides flexibility in water management that the Navajo Nation may need in the future if the actual future population growth and community development patterns differ from the growth and development patterns assumed in the planning studies for the Project.

For example, actual population and economic growth on Navajo lands may concentrate in the Gallup and Shiprock regions, as opposed to being more uniformly distributed throughout the rural and urban areas of the Navajo reservation. For planning purposes, diversions for the uses under the Navajo-Gallup Water Supply Project that are not made within the local area of the San Juan River valley are considered to be full depletions of flow of the San Juan River whether the uses occur in the San Juan River Basin or other basins. This is why the diversion amount for Navajo Nation uses under the Project is not much greater than the proposed Navajo Nation depletion right for the Project. If more use is made of the Navajo Nation's rights for the Project in the vicinity

of Shiprock and the San Juan River valley, then more return flows will accrue to the river, likely below Shiprock, than is anticipated in the planning studies. Flexibility to divert more water from the San Juan River Basin than is planned would be limited, however, because the pipelines to be installed for the Project are to be sized for the amounts of water to be distributed to various locations in accordance with the Project planning studies.

Under the Project planning studies, the Navajo Nation's year 2040 water demands in the San Juan River Basin in New Mexico to be served by the Navajo-Gallup Water Supply Project are estimated to total about 13,230 acre-feet, and the Nation's water demands in the Little Colorado and Rio Grande basins in New Mexico to be served by the Project are estimated to total about 7,550 acre-feet. The proposed Settlement Agreement does not attempt to quantify or adjudicate reserved or other rights that the Navajo Nation may have for the diversion and use of water in the latter two basins for its uses in those basins. Rather, the proposed Settlement Agreement and Settlement Act provide for servicing from the San Juan River water demands that may be associated with such rights, as opposed to serving them from sources in the Little Colorado or Rio Grande basins. To the extent that the Navajo Nation uses its water rights under the Navajo-Gallup Water Supply Project to supply uses in other basins in New Mexico, some measure of protection may be afforded water uses in those basins, including uses made by the City of Gallup, against curtailment that might otherwise result from Navajo Nation reserved rights in those basins.

Questions arise as to the basis for claiming a reserved right from the San Juan River to service water rights that the Navajo Nation may have in the other basins. However, the Navajo Nation could claim reserved rights for municipal, domestic and other purposes for estimated water demands in the San Juan River Basin beyond the year

2040 as may be needed to provide for a permanent homeland, and the proposed settlement provides for the Navajo Nation to transfer the purposes and places of use of its water rights in New Mexico. Adjudicating a reserved right to the Navajo Nation for all its uses in New Mexico under the Navajo-Gallup Water Supply Project, however the Nation decides to distribute its Project water supply between the San Juan River Basin and other basins, is part of the negotiated settlement of the Nation's claims.

The uses of water under the Navajo-Gallup Water Supply Project by the Jicarilla Apache Nation and the City of Gallup would be made pursuant to the rights of the Jicarilla Apache Nation under the settlement contract approved by Congress as part of its water rights settlement. The City of Gallup would be required to obtain State Engineer and Interstate Stream Commission approval to supply its uses under the Project using any source other than a subcontract with the Jicarilla Apache Nation. The proposed Settlement Act would limit the authorizations for participation in the Project by the Jicarilla Apache Nation and Gallup such that delivery by the Project of water outside the San Juan River Basin to these two entities cannot exceed 1,200 acre-feet per year and 7,500 acre-feet per year, respectively. Any transfers of use of the Navajo Nation's contract rights must be consistent with the authorizations of the Settlement Act and the proposed Settlement Agreement.

**11. Sufficient analysis has not been made to indicate whether sufficient water is available for the proposed settlement, and primarily for the Navajo-Gallup Water Supply Project.**

The New Mexico Interstate Stream Commission prepared a schedule of anticipated depletions of water from the San Juan River Basin in New Mexico through 2060. The depletion schedule is for planning purposes only and indicates average annual depletions anticipated to occur over time at future levels of development. The depletion schedule includes future municipal water development under the Animas-La Plata Project

and the Navajo-Gallup Water Supply Project, but does not speculate on the rates of transfer of irrigation uses to municipal uses over time in the Basin. Speculation on how much irrigation water rights will be converted and used for municipal purposes over time will not affect the total depletion in New Mexico, and hence, the conclusion that sufficient water is reasonably likely to be available to service the Navajo-Gallup Water Supply Project within New Mexico's Upper Colorado River Basin Compact apportionment. Nor does the depletion schedule anticipate how much water rights previously adjudicated under the Echo Ditch Decree will be found by the San Juan River Adjudication to be forfeited, abandoned or transferred to municipal uses. The depletions in the schedule in several instances represent less than full water rights depletions because irrigation practices and physical supplies may limit full use. For example, the Commission reasonably anticipates that lands with irrigation water rights within a geographic area or project will not be fully irrigated each and every year for various reasons, including crop rotations, failures in distribution systems and, in some instances, shortages.

The depletion schedule indicates that under a conservatively low estimate of New Mexico's Upper Colorado River Basin Compact apportionment, sufficient water is reasonably likely to be available to supply the Navajo-Gallup Water Supply Project uses in New Mexico. The Upper Basin apportionment is made of flow available at Lee Ferry, and the amounts of depletion shown in the depletion schedule are estimates at the places of use in New Mexico, which estimates exceed the depletions of flow at Lee Ferry caused by the uses. The depletions and New Mexico's apportionment shown in the depletion schedule do not factor in salvage by use, which is the salvage or savings of river loss between the places of use and Lee Ferry. The apportionment shown in the schedule reflects the critical drought period of the 1950s and a conservatively high estimate of the

amount of water to be delivered by the Upper Basin to assist in meeting the Mexican Treaty delivery requirement on the Colorado River.

Also, the total amount of diversion demand from the Navajo Reservoir water supply under existing long-term contracts is expected to be up to about 394,550 acre-feet per year, which is substantially less than the total diversion demand from the Navajo Reservoir supply originally contemplated by the Interstate Stream Commission and the Secretary of the Interior. The breakdown of the diversion demand is as follows: (1) up to about 337,500 acre-feet per year average for the Navajo Indian Irrigation Project as redesigned since passage of the Act for sprinkler irrigation, assuming each project acre is irrigated each year and the anticipated water conservation measures are implemented and effective; (2) 23,000 acre-feet for the Hammond Irrigation Project; (3) 33,500 acre-feet for the Jicarilla Apache Nation under its Settlement Contract approved by Congress, which amount may be diverted above, at or below Navajo Reservoir; and (4) 50 acre-feet for Williams Gas Processing. The proposed Navajo-Gallup Water Supply Project diversion demand of 29,060 acre-feet per year, including 6,410 acre-feet for use in Arizona but excluding 8,700 acre-feet per year for uses to be supplied under the Jicarilla Apache Nation settlement contract (including for the City of Gallup), would bring the total anticipated demand from the Navajo Reservoir water supply to up to 423,610 acre-feet per year maximum; except, that this amount may be more nearly 405,000 acre-feet per year because roughly half the Navajo-Gallup Water Supply Project demand will likely be met from inflows arising below Navajo Dam. The total amount could increase by as much as 34,500 acre-feet per year if no water management improvements and no water conservation measures were implemented or realized on the Navajo Indian Irrigation Project, though this would require re-consultation with the Fish and Wildlife

Service under section 7 of the Endangered Species Act regarding the potential impacts of the Project on endangered fish populations and their critical habitat in the San Juan River.

The Public Service Company of New Mexico has a contract for water from the Navajo Reservoir Supply that expires at the end of 2005, after which the Company will receive water through 2027 under subcontract with the Jicarilla Apache Nation under its Settlement Contract. The City of Gallup also would subcontract for its share of Navajo-Gallup Water Supply Project water from the Jicarilla Apache Nation. The long-term average annual inflow to Navajo Reservoir, after San Juan-Chama Project diversions, is approximately 900,000 acre-feet per year, and Navajo Reservoir evaporation is expected to average about 26,500 acre-feet per year. A small portion of the diversion demand for the Hammond Irrigation Project and large portions of the uses to be served by subcontracts with the Jicarilla Apache Nation and the Navajo-Gallup Water Supply Project will be met from inflows to the San Juan River arising below Navajo Dam.

The proposed settlement actually reduces risk of shortage to the San Juan-Chama Project and its contractors to a level lower than originally authorized because the total delivery demand on Navajo Reservoir storage would not be expected to exceed approximately 410,000 to 440,000 acre-feet per year under the settlement, as compared to 630,000 acre-feet per year permitted under New Mexico State Engineer File No. 2849 and to 508,000 acre-feet per year authorized by the Act of June 13, 1962, for diversion by the Navajo Indian Irrigation Project. Transfers of rights from irrigation on the Navajo Indian Irrigation Project to other purposes, including transfers that would result in an increased diversion demand under the Project, would be subject to not impairing other water rights in New Mexico, including the San Juan-Chama Project. Further, when physical conditions are such that shortages are anticipated and allocated under section 11 of the Act of June 13, 1962, and the proposed Settlement Act, to the San Juan-Chama

Project and the Navajo Reservoir water supply contractors, it is likely that in most, if not all, years the flows physically available at the San Juan-Chama Project points of diversion will be less than the water allocated to the Project under the legislation anyway.

**12. The schedule of anticipated depletions in the Upper Colorado River Basin in New Mexico is flawed because it does not include or consider full water rights, and because only diversions, not depletions, can be determined.**

The New Mexico Interstate Stream Commission developed the depletion schedule for planning purposes only based on realistic assumptions of anticipated use within the water rights in the San Juan River Basin, and the schedule indicates that sufficient water is reasonably likely to be available to supply the Navajo-Gallup Water Supply Project uses in New Mexico under New Mexico's Upper Colorado River Basin Compact apportionment through at least 2060. The depletion schedule provides information for the Secretary of the Interior's consideration, and is not a part of the settlement documents. Neither the Commission nor the State Engineer propose use of the depletion schedule for water rights administration or other purposes, and the schedule is not binding on any party. The depletion schedule does not define, adjudicate or otherwise limit the water rights in the Basin.

Water users may fully exercise their water rights as conditions warrant. For example, while reasonable planning would consider that irrigation ditches and projects typically do not irrigate each water right acre each and every year, this does not suggest that fields fallow one year do not retain their water rights or that the water users on a ditch do not have the right to irrigate every water right acre in a given year if they so choose to do so consistent with their rights and water is physically available. But, it is common for some amount of acreage to be not irrigated for all or portions of an irrigation season due to failures in water delivery systems, planned crop rotations or fallowing, conservation reserve programs, hail damage, shortages or other reasons. Also, for



example, while over 60 years of hydrology data at the points of diversions for the San Juan-Chama Project and operational limitations indicate that the Project over the long-term will be able to divert approximately 107,500 acre-feet of water per year, on average, the Project may divert less or more than this amount in any one year or over any specific ten-year period, up to an average of 135,000 acre-feet per year over ten years. Stock pond evaporation depletions in the schedule are estimated assuming that existing ponds are not 100 percent full all the time, but pond owners may refill their ponds as often as water is available in accordance with their rights.

The compact apportionment to New Mexico is of beneficial consumptive use computed or measured at Lee Ferry, not diversions or paper water rights. Consumptive uses, or depletions, can be determined reliably from diversion and return flow data or empirical techniques, such as may be used to compute consumptive irrigation requirements for hydrographic surveys and water rights adjudications. Because water rights are often not fully utilized, water rights may exceed actual uses. If the full water rights were used to project average annual depletions, it would guarantee that some of New Mexico's Upper Basin apportionment would remain unused and that the unused water will continue to flow downstream for use in the Lower Basin.

If the direct flow available at any time is insufficient to supply current beneficial use demands of all rights on the San Juan River stream system, the water that is available will be distributed in accordance with priority dates. Under the proposed settlement, the Navajo Indian Irrigation Project and the Navajo-Gallup Water Supply Project will be allowed to divert direct flow supplied under New Mexico State Engineer File No. 2849 with a priority date of June 17, 1955, for water originating in the drainage of the San Juan River above Navajo Dam and File No. 3215 with a priority date of December 16, 1968, for inflow to the San Juan River arising below Navajo Dam, as available, and will be

allowed to receive supplemental water from Navajo Reservoir storage as available. A determination that sufficient water is reasonably likely to be available to service the Navajo-Gallup Water Supply Project is not a guarantee that water will be physically available each and every year to meet all the Project demands without any shortages. The proposed subordination of Navajo Nation reserved rights claims to the indicated junior priority dates would protect water users with more senior priority dates.

**13. The depletion schedule should itemize the 8,900 acre-feet identified for current municipal and industrial uses, and should provide consideration to a water supply to meet non-Navajo future uses.**

It is not necessary for purposes of the depletion schedule to identify the components of the average annual municipal and industrial depletions in the San Juan River Basin as of 1990 conditions. Nevertheless, based on records of the Office of the State Engineer, including meter readings submitted by municipalities in the Basin, component amounts of depletion for the year 1990 are estimated as: (1) 7,200 acre-feet by the City of Farmington; (2) 750 acre-feet by the City of Aztec; (3) 500 acre-feet by Lower Valley Water Users Association; (4) 300 acre-feet by the City of Bloomfield; (5) 300 acre-feet by the Navajo Tribal Utility Authority-Shiprock; (6) 150 acre-feet by Dulce; and (7) 500 acre-feet in the aggregate by other water user associations. The total of the municipal and industrial depletions in the Basin based on the above 1990 data tabulation is about 9,700 acre-feet, which includes some amount of transfer of irrigation uses to municipal uses after 1965 that was not intended to be reflected in the depletion schedule. Also, the 1990 data suggest that some incorporation of scattered rural domestic uses into public water supply systems has occurred since 1965 with urbanization.

The depletion schedule has been revised to increase the 1990 municipal and industrial depletion amount from 8,900 acre-feet to 9,700 acre-feet, and to reduce the rural domestic uses from 1,400 acre-feet to 1,000 acre-feet. The net effect of the

revisions is to increase the total depletion by 400 acre-feet per year. The previous depletion estimate was based on 1965 uses in the San Juan River Basin in New Mexico and a projected increase in average municipal water demand of 5,000 acre-feet per year of depletion for the Farmington area after 1965, and was generally confirmed by the Office of the State Engineer data for 1990. Additional municipal and domestic uses will be supplied under the Animas-La Plata Project, the Navajo-Gallup Water Supply Project, and transfers of water rights from irrigation uses.

## SHARING OF NAVAJO RESERVOIR SUPPLY

- 14. The shortage sharing provisions of the Act of June 13, 1962, provide only for sharing of the available supply with the San Juan-Chama Project and the Navajo Indian Irrigation Project.**

Section 11 of the Act of June 13, 1962, provides a formula for allocating the supply available above Navajo Dam to the San Juan-Chama Project and contractors of the Navajo Reservoir water supply. The formula allocates to the San Juan-Chama Project and all Navajo Reservoir water supply contracts in New Mexico the direct flow available at Navajo Dam based on pro-rata shares. In addition, the formula allocates to the Navajo Reservoir water supply contracts that take delivery at or below the dam for uses in New Mexico the water previously stored in the reservoir and then available for use. Similarly, the contractors of the San Juan-Chama Project supply have exclusive use of water stored in Heron Reservoir.

Section 11 of the Act of June 13, 1962, also explicitly authorizes the Secretary of the Interior to enter into long-term contracts for the delivery of water from the Navajo Reservoir water supply in addition to providing water for the San Juan-Chama Project and the Navajo Indian Irrigation Project; provided, that the Secretary has determined by hydrologic investigation that sufficient water is reasonably likely to be available for use within the Upper Colorado River Basin Compact apportionments to fulfill the contract and that Congress approves the contract. The Act requires that the Secretary not enter into contracts for a total amount of water beyond that which, in his judgment, in the event of shortage, will result in a reasonable amount being available for the diversion requirements of the two projects as specified in the Act. Section 11 of the Act of June 13, 1962, thus provides for sharing of the available supply at Navajo Dam with the San Juan-Chama Project, the Navajo Indian Irrigation Project and other contract uses from the Navajo Reservoir water supply. In addition, a shortage to the diversion of water from the

San Juan River Basin by the San Juan-Chama Project does not necessarily result in a shortage to deliveries to Project contractors below the Project's regulating storage at Heron Reservoir.

The proposed Settlement Act has been amended to clarify how the Navajo-Gallup Water Supply Project uses would be treated under shortage conditions. Section 11 of the Act of June 13, 1962, provides for allocations of the Navajo Reservoir water supply when the supply is anticipated to be insufficient to meet the demands on the supply. Some of Navajo-Gallup Water Supply Project demands in both New Mexico and Arizona can be met from inflows to the San Juan River arising below Navajo Dam under New Mexico File No. 3215; and to that extent, such demands do not constitute demands on the Navajo Reservoir water supply, would not be included in the normal diversion requirements under section 11 of the Act, would not be allocated portions of the shortages, and would not be allocated water from the Navajo Reservoir water supply. If the Secretary determines an amount of shortage in the reservoir water supply in any year, the uses in the State of Arizona to be supplied from the reservoir supply would be shorted either in part or in full up to the amount of shortage, and the remaining shortage, if any, would be allocated to the San Juan-Chama Project and other Navajo Reservoir water supply uses in accordance with section 11.

In addition, the proposed Settlement Act has been amended to provide approval for the Navajo Nation, during times of shortage in the Navajo Reservoir water supply, to forbear the delivery of water from the reservoir under the Navajo Indian Irrigation Project to allow the delivery of an equivalent amount of water for the Navajo-Gallup Water Supply Project uses in Arizona. The purpose of the forbearance is to protect the Nation's municipal and domestic water supply authorized by the Settlement Act for use in and near its capital city against substantial curtailment during times of drought. Water

delivered into Arizona for uses under this provision cannot be leased to third parties or used for other purposes. All uses in Arizona under the Navajo-Gallup Water Supply Project, including under this provision, must be accounted against the State of Arizona's compact apportionment. This provision allows the Navajo Nation to protect Project uses in Arizona without affecting rights of other water users in New Mexico to receive and use water, and therefore, maintains consistency with Article IX of the Upper Colorado River Basin Compact.

**15. The San Juan-Chama Project is sufficiently shorted by the bypass requirements at the points of diversion under section 8 of the Act of June 13, 1962, and should be excluded from the shortage sharing requirements of section 11 of the Act.**

The formula for allocating anticipated shortages in water supply under section 11 of the Act of June 13, 1962, reflects the fact that New Mexico State Engineer File No. 2847 for the diversion of water by the San Juan-Chama Project and State Engineer File No. 2849 to provide for storage at Navajo Reservoir to make water available for the diversion of up to 630,000 acre-feet of water per year for irrigation, power and domestic purposes have an equal priority date of June 17, 1955. Because the uses in New Mexico share the same priority date, they share in the direct flow available to that priority date. Also, the Hammond Irrigation Project (File No. 2848) has an equal June 17, 1955, priority date. The Jicarilla Apache Nation's settlement contract is serviced under File No. 2849. Section 11 of the Act provides for a sharing in the water supply available above Navajo Dam based on the anticipated annual supply, as opposed to a sharing of the available direct flow on a daily basis as would need otherwise occur under state water rights administration. The revised proposed settlement reiterates that any shortages determined pursuant to section 11 of the Act would not be imposed on the San Juan-Chama Project on a daily basis, and provides that the authorized average annual diversion demand of 135,000 acre-feet per year for the Project would be used as the normal

diversion demand in the formula for allocating anticipated shortages under section 11 of the Act.

The San Juan-Chama Project is required by section 8 of the Act of June 13, 1962, to maintain minimum bypass flows at the points of diversion to protect downstream rights and fish habitats in Colorado. Because the direct flow physically available for diversion at the Project's headworks fluctuates each year, it is not meaningful to argue that there is a shortage or a surplus in any year in which the actual diversion by the Project is less than or greater than the average annual diversion that may be expected for the Project based on long-term hydrology. Rather, the Project is designed to divert direct flow when available into storage at Heron Reservoir in the Rio Grande Basin, where the stored water, less reservoir losses, then becomes available for release from Heron Dam to meet an annual yield of 96,200 acre-feet for delivery to Project uses.

The San Juan-Chama Project contractors in the Rio Grande Basin have not experienced a delivery shortage under their contracts to date because Heron Reservoir has filled during periods of excess diversions by the Project into reservoir storage, and has been drawn down to meet contract deliveries during the recent drought. Similarly, the Navajo Reservoir water supply contractors in the San Juan River Basin have not experienced a delivery shortage under their contracts to date because Navajo Reservoir has filled during periods of excess direct flow available for diversion into storage, and has been drawn down to meet contract deliveries during the recent drought. The capture of water for storage during times of plenty and the operation of reservoirs to meet contracts in both instances are as designed.

## SAN JUAN RIVER IRRIGATION PROJECTS

- 16. Both Navajo and non-Navajo irrigation ditches on the San Juan River, and non-Navajo communities and water users in the Basin, should be allowed to store water in Navajo Reservoir and receive delivery of stored water.**

Pursuant to section 11 of the Act of June 13, 1962, a water user must have a contract for the delivery of water from the Navajo Reservoir water supply to have access to storage in the reservoir, and such a contract must be approved by Congress and comply with federal environmental laws. With the proposed settlement, there is no identified yield available within New Mexico's Upper Colorado River Basin Compact apportionment for additional long-term water supply contracts. Also, it is not clear as to what capability there might be for irrigators to pay for water from the Navajo Reservoir supply. In any event, the Navajo Nation and the Jicarilla Apache Nation both would have the right to enter long-term or short-term subcontracts for the transfer and delivery of their Navajo Reservoir supply water to irrigators on San Juan River ditches or other users, pending approval of any water rights transfer by the State Engineer. In addition to the two Indian nations, the Hammond Conservancy District and Williams Gas Processing have long-term contracts.

The only new contractual allocation of Navajo Reservoir water supply that is made by the proposed settlement is for Navajo Nation uses under the Navajo-Gallup Water Supply Project. Other uses under the Project are provided through the Jicarilla Apache Nation's settlement contract already approved by Congress. The new contractual allocation for Navajo Nation uses under the Project does not impact or impair the rights of the San Juan River irrigation ditches or other water users to divert the direct flow in priority.

A suggestion has been made that ditches or other water users might store water in Navajo Reservoir during the winter months in leased storage capacity space that might



temporarily be made available so as to create storage reserves for the upcoming irrigation season. Rights to divert the direct flow of the San Juan River for irrigation during the irrigation season would need to be transferred to storage for irrigation or other uses with a different seasonal pattern of direct flow depletions that would result from diverting water into reservoir storage for later use, subject to not impairing the storage right of the United States for Navajo Reservoir or other water rights in New Mexico. The recent drought makes clear that the United States needs to divert into storage as much water as possible using the entire existing active storage capacity to be able to meet water delivery demands during extended periods of drought before direct flow could be allocated to a storage space of a non-contractor.

Nevertheless, the revised Settlement Act provides for establishment of a top water bank within vacant storage space in Navajo Reservoir, subject to the Bureau of Reclamation and the New Mexico Interstate Stream Commission developing conditions, parameters and procedures governing the storage, accounting and release of water in the top water bank in a manner that does not impair the Secretary of the Interior's ability to deliver water under Navajo Reservoir water supply contracts. The opportunities for placing water in the water bank may be limited, however, because water rights with priority dates senior to the Navajo Dam priority under New Mexico State Engineer File No. 2849 must be transferred to the bank in sufficient quantities to effectuate a reduction in releases from the reservoir, thus providing actual reductions in the downstream demand for direct flow at the dam which then can be stored in priority.

The desires of San Juan River direct flow users for access to storage in Navajo Reservoir stem from their desires to have an alternate water supply in the event of curtailment of their direct flow water rights under a priority administration on the river. Under the revised settlement, the Navajo Nation would agree to not request priority calls

to satisfy the reserved rights for the Hogback-Cudei and Fruitland-Cambridge irrigation projects when the direct flow is insufficient to meet all water demands on the river from the direct flow. Rather, the Navajo Nation alternatively would provide water to meet the Hogback and Fruitland project demands from its contract rights for water from the Navajo Reservoir supply for the Navajo Indian Irrigation Project. The revised settlement thus provides for storage water to be delivered directly to the Navajo ditches on the San Juan River when needed, and for non-Navajo uses on the river to receive indirectly and without cost the benefits of continued use of the direct flow with a substantial reduction in the risk of shortage. The proposed top water bank could be used to provide storage in the event of shortage for those users willing and able to pay for the costs of water rights acquisition and storage.

17. **Priorities of reserved rights for the Navajo irrigation projects should not all be 1868; rather, the priority dates for irrigation uses should reflect the actual dates that lands were reserved for the Navajo people or that irrigation uses were historically made.**

The Navajo Nation argues that it may be able to make aboriginal claims to the use of water in the San Juan River Basin based on pre-historic and historic irrigation predating any Navajo treaties or reservations of land. Also, it could be argued that the date used to establish priorities for reserved rights would be when the United States first promised the Navajos a permanent homeland, with all rights relating back to the Treaty of 1849 between the United States and the Navajos. The 1868 Treaty established the Navajo Indian Reservation as a permanent homeland.

Some of the agricultural lands within the Fruitland-Cambridge Irrigation Project were set aside in 1868 as part of the original reservation, and some were set aside in 1884 or later. Construction of the Fruitland project canal to replace and consolidate smaller irrigation ditches on Navajo lands began in 1937. Construction of the Hogback project canal began in 1903, and New Mexico State Engineer File No. 758, filed in 1913,

provides for a diversion of 110 cfs for irrigation on the project. Some of the acreage under the Hogback project canal likely was not irrigated prior to construction of the canal beginning 1903 or prior to extension of the canal in the early 1960s, but all lands under the Hogback project were part of the original reservation. The Cudei project, which is entirely on lands on the original reservation, was constructed in 1900, and was connected to the Hogback project canal in 2002. The amounts of acreage in the proposed settlement for the Fruitland-Cambridge and Hogback-Cudei irrigation projects, 3,335 acres and 8,830 acres, respectively, are the amounts of acreage under each project that currently are allotted by the Navajo Nation to its members for farming purposes.

The existing acreage under both irrigation projects may be considered to be practicably irrigable. The US Supreme Court in *Arizona v. California* established practicably irrigable acreage as a standard for determining reserved water rights for lands set aside as permanent homelands for Indian tribes. Both projects are gravity flow systems within the San Juan River valley, with acres specified in the proposed settlement having been irrigated historically at one time or another. Under the proposed settlement, the Navajo Nation would waive practicably irrigable acreage reserved right claims from the San Juan River outside the current service areas of the projects. Subsection 11(c) of the Act of June 13, 1962, could otherwise allow direct flow of the San Juan River at Navajo Dam to be made available to the Navajo Nation for irrigation of at least an additional 11,000 acres on the Fruitland-Cambridge and Hogback-Cudei irrigation projects over and above the project acreage then existing, and the Congressional record on the Act makes reference to a total combined acreage for the projects of 26,000 acres after possible expansion (see Senate Report No. 2198). The Navajo Nation staff reports that a consultant to the Nation identified up to about 37,000 acres of land, in addition to the 12,165 acres existing under the Fruitland-Cambridge and Hogback-Cudei irrigation

projects included in the settlement, which might be irrigable in the vicinity of the San Juan River and in the area of New Mexico near and between Shiprock and Four Corners; but, a copy of the consultant report for legal reasons has not been released to Interstate Stream Commission staff for review.

The proposed settlement considers the water rights for the Fruitland-Cambridge and Hogback-Cudei irrigation projects as federal reserved rights, and settles the rights for the projects based on current project lands without practicably irrigable acreage claims. As reserved rights, the amounts and priorities of the water rights for the projects are not subject to the same historic beneficial use standards applied to the adjudication of non-reserved rights under state law. Nevertheless, a compromise was negotiated for the reserved rights of each project wherein the maximum rates of diversion for each project would be less than the reported historic diversion rates. The rights of the Navajo Nation to divert water for the two projects at any time would be further limited to the amounts of water needed for current beneficial use. Additional water could be diverted for carriage water for the projects, if needed because of maintenance or efficiency problems, at such times as the State Engineer determines that direct flow is available for diversion without impairment to non-Navajo Nation water rights in New Mexico.

**18. The Fruitland and Hogback irrigation projects should be hydrosurveyed and have the same per acre consumptive irrigation requirements and farm duties as non-Navajo irrigation ditches.**

The proposed settlement would resolve the reserved water rights claims of the Navajo Nation for practicably irrigable acreage from the San Juan River. Reserved rights are not subject to abandonment or forfeiture for non-use, so a hydrographic survey of historic and existing irrigated acreage on the Fruitland-Cambridge and Hogback-Cudei irrigation projects is not needed or appropriate for defining the water right acreages for the projects. Still, the lands included in the proposed settlement for the two projects have

been irrigated historically at one time or another and currently are allotted by the Navajo Nation to members for farming purposes.

The proposed annual diversion and depletion rights for the Fruitland-Cambridge and Hogback-Cudei irrigation projects have been revised to reflect consistency with the annual irrigation demands determined in the 1938 Hydrographic Survey conducted by the State Engineer preparatory to the 1948 Echo Ditch Decree. The 1938 Survey computed for the Farmers Mutual and Jewett Valley ditches a consumptive irrigation requirement of about 2.0 acre-feet per acre per year based on the Lowery-Johnson method (which yields results similar to the original Blaney-Criddle method), a farm duty of about 3.2 acre-feet per acre per year (which was adjudicated by the Echo Ditch Decree), and a diversion requirement of about 5.3 acre-feet per acre per year. The consumptive irrigation requirement in 1938 was found to be about 1.8 acre-feet per acre per year near Archuleta, 1.9 acre-feet per acre per year near Bloomfield, and 2.0 acre-feet per acre per year near Kirtland. Extrapolating the three requirements based on a downstream progression of distance to Shiprock suggests a consumptive irrigation requirement of about 2.0 acre-feet per acre per year for the Fruitland-Cambridge Irrigation Project and about 2.1 acre-feet per acre per year for the Hogback-Cudei Irrigation Project. Applying an irrigation efficiency of 63 percent and a canal efficiency of 60 percent, as used for the Farmers Mutual and Jewett Valley ditches in the 1938 Hydrographic Survey, yields diversion requirements of 5.3 and 5.6 acre-feet per acre per year for the Fruitland-Cambridge and Hogback-Cudei irrigation projects, respectively. The per annum reserved 1868 priority diversion rights for the two projects have been increased in the revised proposed settlement to reflect these per acre diversion requirements.

Under the proposed settlement, the Navajo Nation would be adjudicated rights computed based on the total depletions under the Fruitland-Cambridge and Hogback-

Cudei irrigation projects. Total depletion includes both the consumptive irrigation requirement and incidental depletions. Unlike non-Navajo ditches where individual irrigators have water rights for application of water on their fields and the ditches have carriage water to cover canal losses, including incidental depletions in the delivery of water to the irrigators, the Navajo Nation, not individual Navajos doing the farming, is the water right owner on behalf of its members. Therefore, the proposed settlement provides that the Navajo Nation would be entitled to the full amounts of depletion by the two projects as part of its water budget. This is consistent with the Jicarilla Apache Nation's rights in its water rights settlement in the San Juan River Basin, and with rights of BHP-Billiton and other parties that have rights for all the consumptive use or depletion under one diversion.

Using consumptive irrigation requirements of 2.0 and 2.1 acre-feet per acre per year for the Fruitland-Cambridge and Hogback-Cudei irrigation projects, respectively, and an incidental depletion factor of 16 percent, the computed total depletions for the projects are about 2.32 and 2.44 acre-feet per acre per year, respectively. If the per annum depletion rights for the two projects are revised in the proposed settlement to reflect these per acre depletion rates, the Fruitland-Cambridge project depletion would decrease by about 230 acre-feet per year (3% decrease) and the Hogback-Cudei project depletion would increase by about 410 acre-feet per year (2% increase) compared to the December 5, 2003, draft settlement. Instead, the Fruitland-Cambridge project depletion was not revised and the net increase of 180 acre-feet per year in the aggregate depletion for the two projects combined was applied to the Hogback-Cudei project, resulting in average annual depletions of 2.39 and 2.41 acre-feet per acre per year for the two projects, respectively. No farm duty is negotiated in this instance because the Navajo Nation, not individual Navajos doing the farming, is the water right owner on behalf of

its members. However, for comparison purposes, the computed farm duties required would amount to about 3.3 acre-feet per acre per year for both projects.

The proposed settlement would permit the Navajo Nation to transfer depletions from the Fruitland-Cambridge and Hogback-Cudei irrigation projects to other uses. While not explicit in the proposed settlement, if the Navajo Nation fallows land under the projects to effectuate a transfer, the Nation would be limited to transferring the consumptive irrigation requirement and possibly some amount of on or below farm incidental depletion because transferring rights to a limited amount of acreage on a ditch does not effectively reduce the incidental depletions on the ditch associated with the distribution of water through the canal system and the discharge of water through wasteways. Also, the Navajo Nation would be responsible for monitoring and managing its crop patterns and its irrigation systems and deliveries to stay within the depletions adjudicated to the Nation. On the other hand, irrigators on a non-Indian community ditch, irrigation district or irrigation project may apply their farm duty regardless of actual depletion, and are limited in the transfer of fallowed water rights acreage to the transfer of the consumptive irrigation requirement.

The revised proposed settlement also provides that the depletion and diversion rights of the Navajo Nation for the Fruitland-Cambridge and Hogback-Cudei irrigation projects may be increased by the San Juan River Adjudication Court if the Court determines annual per acre consumptive irrigation requirements, farm duties and diversion requirements for non-Navajo ditches that exceed those determined by the 1938 Hydrographic Survey and adjudicated by the Echo Ditch Decree. The Court might do so if it adopts a different methodology for determining non-Navajo irrigation rights (for example, based on application of the modified Blaney-Criddle method or more recent cropping patterns). However, if the Court does so, the Navajo Nation's agreement to not

request priority calls to satisfy the reserved rights for the Hogback-Cudei and Fruitland-Cambridge irrigation projects and to provide an alternate water source for the two projects from the Navajo Indian Irrigation Project rights under the Settlement Contract would be nullified. Based on past hydrology and assuming that the Fruitland-Cambridge and Hogback-Cudei irrigation project rights are being fully utilized, the alternate water source provisions would reduce the occurrences of shortages to direct flow users from approximately one year in two, on average, to about one year in twenty.

A decision by the Court to not revise the annual per acre amounts for non-Navajo ditches adjudicated in the Echo Ditch Decree will expedite the San Juan River Adjudication and result in increased protection of Echo Ditch Decree rights and the Navajo Reservoir water supply. The certainty of firming up the supply for the direct flow irrigation rights that would be afforded by the proposed alternate water source provisions of the settlement should outweigh whatever value that might otherwise be obtained if direct flow irrigators got the Court to adjudicate to them a slightly enlarged consumptive irrigation requirement and there is little certainty of direct flow supply being physically available to satisfy the right throughout the duration of the summer months.

**19. The Fruitland and Hogback irrigation projects should have a maximum instantaneous diversion rate of 1 cfs per 40 acres of water right consistent with the maximum instantaneous diversion rates adjudicated in the Echo Ditch Decree for non-Navajo irrigation ditches.**

The Navajo Nation was not a party to the Echo Ditch Decree. The Bureau of Indian Affairs estimates that current canal conditions require a diversion of 100 cfs for the Fruitland-Cambridge Irrigation Project for the currently irrigated acreage, and that a diversion of up to 225 cfs for the full Hogback-Cudei Irrigation Project acreage would be needed to meet peak irrigation demands after rehabilitation of the Project. Historic diversion rates for each project are reported or estimated to have exceeded the Bureau of Indian Affairs' estimates. The proposed settlement provides for reserved 1868 priority



rights for the diversions by both projects. Alternatives proposed by non-Navajo irrigators include a diversion rate for the Fruitland-Cambridge Irrigation Project of 83 cfs with an 1868 priority and diversion rates for the Hogback-Cudei Irrigation Project of 115 cfs with an 1868 priority plus 110 cfs with a 1909 priority.

Using a standard of 1 cfs per 40 acres of water right, the diversion rate to irrigate 3,335 acres on the Fruitland-Cambridge Irrigation Project would be 83.4 cfs and the diversion rate to irrigate 8,830 acres on the Hogback-Cudei Irrigation Project would be 220.8 cfs. While the Echo Ditch Decree adjudicated 1 cfs per 40 acres to most non-Indian ditches in the Basin, principally on the Animas and San Juan rivers, many of the ditches for operational reasons have historically diverted at rates greater than those adjudicated even though the amount of acreage actually irrigated has typically been less than the full acreage decreed under the ditch. Some non-Navajo ditches have cited current canal conditions and hydraulics as a reason for needing to maintain their historic diversions. It is not clear that the San Juan River Adjudication Court will adjudicate maximum diversion rates on the same basis as the Echo Ditch Decree. Nevertheless, both the Navajo Nation and other irrigation ditch owners or operators in the San Juan River Basin have a responsibility to maintain diversion and canal facilities in good and efficient operating condition.

The revised proposed settlement includes a diversion of 100 cfs for the Fruitland-Cambridge Irrigation Project with a reserved 1868 priority, but also provides that the Navajo Nation would forgo use of a portion of that amount, down to a diversion of 83.4 cfs, if it can be shown that the rehabilitation of the Project has resulted in less diversion demand. The revised proposed settlement includes a diversion of 221 cfs for the Hogback-Cudei Irrigation Project with a reserved 1868 priority. The proposed settlement provides for federal appropriations in the amount of \$17.7 million to rehabilitate main

canal facilities for the two projects, and another \$5.4 million to implement additional water conservation improvements on laterals. Additional water could be diverted for the projects, if needed because of maintenance or efficiency problems, at such times as the State Engineer determines that direct flow is available for diversion without impairment to non-Navajo Nation water rights in New Mexico.

**20. There should be a depletion limit associated with the Navajo Nation's supplemental carriage water diversions.**

The proposed Partial Final Decree has been revised to not quantify any amount of diversion or depletion for the Navajo Nation's supplemental carriage water diversions. Rather, the Navajo Nation simply would be able to divert additional carriage water, but only if needed for the Nation to fully make use of its depletion rights and only at such times and in such amounts as the State Engineer may determine that water is available for such diversion without impairing water rights in New Mexico. Dewatering of a section of stream that causes Endangered Species Act compliance requirements for a project or use in New Mexico to not be met may result in impairment. Such additional carriage water may be helpful to the Fruitland-Cambridge and Hogback-Cudei irrigation projects until they are rehabilitated pursuant to the Settlement Act. The Navajo Nation's supplemental carriage water diversions, as revised, would not prevent the State Engineer from approving water rights transfers or approving increased use allocations from the Navajo Reservoir or Animas-La Plata Project water supply permits.

**21. Dates should be added to define the beginning and end of the irrigation season in the San Juan River Basin.**

The Navajo Indian Irrigation Project typically diverts water as early as mid-February and as late as mid-November. The Hogback-Cudei Irrigation Project may begin diversions in mid to late March and run water into the first of November. Most ditches in the San Juan River Basin, however, divert water for irrigation beginning on or after April

1 and continuing until about November 1 each year. Several ditches also carry water both during and outside the irrigation season for non-irrigation purposes such as municipal, domestic, industrial and stock uses.

Specifying an irrigation season limitation for the Navajo Nation's irrigation uses is not a part of the proposed settlement. If the Court in the San Juan River Adjudication desires to define irrigation seasons for all Navajo and non-Navajo irrigation uses in the San Juan River Basin, the Court would have to consider the differences in season between projects and geographic areas in the Basin. For the Navajo Indian Irrigation Project, consideration also must be given to the need to fill and refill re-regulation storage facilities on the Project distribution system. Nonetheless, under the Settlement Agreement and the Partial Final Decree, the Navajo Nation is limited to diverting the amount of water necessary to meet its current beneficial uses. When crops are not growing during the winter, the Nation has no entitlement to exercise its diversion rights for applying irrigation water. This limitation applies to all irrigation water rights in the San Juan River Basin, including Navajo and non-Navajo rights.

## FUTURE ALLOCATIONS

- 22. The Navajo Nation should not receive additional water rights if the yield available to the Upper Basin exceeds 6.0 million acre-feet because the proposed settlement would already provide sufficient amounts of water for a permanent homeland and because a settlement should be final.**

The Navajo Nation was not a party to the Upper Colorado River Basin Compact and maintains its position that the apportionments made to the Upper Basin States by the compact do not bind the Navajo Nation or its water rights claims. As part of the negotiated settlement, the Navajo Nation would agree to subject its claims to compact restrictions that the State of New Mexico must observe and waive claims to waters of the San Juan River Basin in New Mexico that otherwise, when combined with existing uses, would exceed New Mexico's compact apportionment. Also as part of the negotiated settlement package, the water rights of the Navajo Nation would be increased if the apportionment to New Mexico is increased due to a determination that the yield available to the Upper Basin is greater than 6.0 million acre-feet and if the Interstate Stream Commission determines after consideration of relevant factors, including uses under rights adjudicated in the San Juan River Adjudication, that water is available to service additional rights within the increased apportionment. Under such a circumstance, half of the additional amount of water that could be made available would be allocated to the Navajo Nation, and half would be reserved for the Interstate Stream Commission to allocate for non-Navajo uses. The use of water under the additional allocations would be subject to not impairing existing water rights. The finality of the bargain was increased relative to the December 5, 2003, draft settlement, and a potential for future controversy was removed, by deleting the provision that would have allowed any party in the future to argue to the San Juan River Adjudication Court that such an allocation is inequitable.

The proposed settlement also has been revised to include provisions that the Navajo Nation would not exercise a portion of its water rights to be adjudicated by the

proposed Partial Final Decree in an amount equal to the amount of over-allocation, if any, that might occur in the future relative to New Mexico's Upper Basin apportionment. An over-allocation could occur, for example, if a critical drought causes a reduction in the yield available to the Upper Basin, and consequently, a reduction in the apportionment to New Mexico. The determination of any occurrence of over-allocation under such circumstances would take into account also uses of water under rights adjudicated in the San Juan River Adjudication, salvage of river losses by use, and other relevant factors. The amount of forbearance under these provisions would be limited to the amount of depletion sufficient to protect against curtailment for compact administration purposes the current beneficial use needs under the Animas-La Plata Project depletions in New Mexico authorized or allocated by the Colorado Ute Settlement Act Amendments of 2000, which depletions total to 13,520 acre-feet of depletion for Project contractors in New Mexico plus the New Mexico share of Ridges Basin Reservoir evaporation. Project contractors include the Navajo Nation. Also, the Navajo Nation would not forbear use to provide for a greater percentage supply for the Animas-La Plata Project uses than the percentage supply available to Navajo-Gallup Water Supply Project uses in New Mexico in a given year. One-third of the protection that the Navajo Nation agrees to provide to Animas-La Plata Project uses against an over-allocation under the compacts is conditioned upon an equivalent amount of consumptive use rights being abandoned, forfeited or retired.

**23. The Navajo Nation has agreed to withdraw its protest of the San Juan Water Commission's pending application for water associated with State Engineer File No. 2883 in exchange for the Commission's support for the proposed water rights settlement.**

Pursuant to the Colorado Ute Settlement Act Amendments of 2000, the Navajo Nation is allocated water from the Animas-La Plata Project under New Mexico State Engineer File No. 2883 in the amount of 4,680 acre-feet per year of diversion, or 2,340

acre-feet per year of depletion. If additional allocations can be made for water supply under File No. 2883 that are over and above the allocations made by the Colorado Ute Settlement Act Amendments of 2000, the Navajo Nation under the revised proposed settlement would receive 50 percent of the additional allocations. The remainder of the water supply under File No. 2883 would be reserved for uses by the San Juan Water Commission.

The San Juan Water Commission has filed application to appropriate water supply associated with File No. 2883 that is over and above the amount allocated by the Colorado Ute Settlement Act Amendments of 2000. However, the application may be premature because the remainder of the Animas-La Plata Project, over and above the version of the Project authorized for construction by the Colorado Ute Settlement Act Amendments of 2000, has not been deauthorized by Congress; and because issues surrounding the size and extent of the Animas-La Plata Project, including future water allocations under the Project, may not be fully and finally resolved until the conditions to effectuate the Colorado Ute settlement and the proposed Navajo Nation water rights settlement are met. The Navajo Nation has not agreed to withdraw or withhold protests to the San Juan Water Commission's application because approval of the application at this time might result in impairment of the Navajo Nation's water rights or interests.

The proposed settlement also has been revised to include provisions that, if a call is made in a given year pursuant to Article IV of the Upper Colorado River Basin Compact to reduce uses for the purpose of meeting the Upper Basin delivery obligation at Lee Ferry, the Navajo Nation would not exercise a portion of its water rights to be adjudicated by the proposed Partial Final Decree so as to allow the continuance of Animas-La Plata Project uses in New Mexico authorized or allocated by the Colorado Ute Settlement Act Amendments of 2000 that otherwise would be curtailed that year as a

result of the call. The amount of forbearance to be provided by the Navajo Nation under this agreement is limited to the current beneficial use needs under the Project uses in New Mexico allocated by the Colorado Ute Settlement Act Amendments of 2000, which uses total 13,520 acre-feet of depletion for Project contractors in New Mexico plus the New Mexico share of Ridges Basin Reservoir evaporation. Also, the Navajo Nation would not forbear use to provide for a greater percentage supply for the Animas-La Plata Project uses than the percentage supply available to Navajo-Gallup Water Supply Project uses in New Mexico in any year. One-third of the protection that the Navajo Nation agrees to provide to Animas-La Plata Project uses against an Article IV call under the Compact is conditioned upon an equivalent amount of consumptive use rights being abandoned, forfeited or retired.

**24. A settlement should not include waivers by the Navajo Nation.**

A settlement should provide for the final settlement of the Navajo Nation's claims to waters in and from the San Juan River Basin in New Mexico, and also should remove possibilities that Navajo claims in other states could result in claims or demands for delivery of water from New Mexico to downstream states to supply Navajo water rights elsewhere.

## GROUND WATER RIGHTS

### **25. Settlement of the Navajo Nation's ground water rights is not clear.**

The proposed settlement would provide reserved 1868 priority rights for the Navajo Nation to divert and consume up to 2,000 acre-feet of ground water in any year within the physical drainage of the San Juan River Basin in New Mexico, which amount is to include historic and existing ground water withdrawals for domestic use purposes served by public water systems or supplies and is in addition to *de minimus* uses and to the historic and existing uses for other purposes that are to be determined by hydrographic survey. The revised proposed settlement also provides the Navajo Nation with the right to divert additional amounts of ground water for use in New Mexico subject to non-impairment of non-Navajo Nation water rights and subject to the Navajo Nation forbearing the use of a portion of its surface water rights as necessary to offset any amount of reduction in flow of the San Juan River that exceeds 2,000 acre-feet in any year as a result of the aggregate or cumulative effect of its ground water diversions that are made in excess of *de minimus* uses and the historic and existing uses that are to be determined by hydrographic survey. The additional diversions of ground water would not commence until a model of ground water flow for the Basin is available to account river flow impacts. The State of New Mexico and the United States, in consultation with the Navajo Nation, would cooperate in the development of a ground water model for this purpose and also for use in evaluating possible impairment.

The revisions provide the Navajo Nation with flexibility in managing the available water resources while protecting the flow of the San Juan River and non-Navajo uses. Prior to making additional diversions of ground water on lands held in trust by the United States for the Navajo Nation, the Nation would provide to the State Engineer and to the public notice of intent for development of ground water, provide a process for



receiving and hearing any protests, and consult with the State Engineer. For additional diversions of ground water on lands held in fee by the Navajo Nation or other lands not held in trust for the Navajo Nation, the Nation would file application with the State Engineer to appropriate ground water under state law. The San Juan River Adjudication Court would retain jurisdiction to resolve disputes over the implementation of the proposed Partial Final Decree, including disputes as to whether a proposed development of ground water may be permitted under the decree; except, that another court may have competent jurisdiction over issues of impairment to water rights in other basins that might result from pumping wells from ground water formations near the physical boundaries of the San Juan River Basin in New Mexico. The additional diversions of ground water would have priority dates as of the dates of notice or application, respectively. The amounts of additional ground water uses that the Navajo Nation might practicably develop is expected to be limited by the physical availability and quality of ground water, well yields, and costs of development.

The Navajo Nation currently uses ground water developed by the Navajo Tribal Utility Authority or the Indian Health Service to supply domestic and sanitary needs of communities scattered throughout the Basin in New Mexico, and these existing ground water uses would be included within the reserved 1868 priority rights of the Navajo Nation to divert ground water. Also, some existing domestic water supply distribution systems in the San Juan River Basin straddle the New Mexico-Arizona state line, and the revised proposed settlement would allow for up to 400 acre-feet of ground water diversions in one state for Navajo Nation domestic and sanitary uses in the other state so long as the depletions of the flow of the Colorado River at Lee Ferry resulting from such uses are accounted against the Upper Basin apportionment of the state in which the use is made and the water is used by the Navajo Nation and not marketed to another party. This

would allow the Navajo Nation to continue current uses and meet future growth needs in the Basin along the state line, subject to the Nation's rights to divert and use water in Arizona. Any diversion of ground water in New Mexico for Navajo Nation domestic and sanitary uses in Arizona, and any use in New Mexico by the Navajo Nation of ground water diverted in Arizona, also would be charged against the Nation's ground water rights under the proposed Partial Final Decree. The Navajo Nation would not otherwise be restricted as to locations of ground water wells in the Basin in New Mexico, although wells that would be funded as part of the proposed settlement generally would be situated in accordance with a conjunctive use water development plan developed by the Navajo Nation pursuant to its planning for the Navajo-Gallup Water Supply Project. Any ground water diversions by the Navajo Nation of return flows would be accounted against the Nation's ground water rights. The proposed settlement does not settle any claims to ground water that the Navajo Nation may have in the Rio Grande or Little Colorado River basins or in the State of Arizona.

## NAVAJO RIGHTS WITHOUT SETTLEMENT

- 26. It has not been established what the Navajo Nation's water rights and uses would be without the proposed settlement, and therefore, the impact of settlement cannot be evaluated.**

Without a settlement, it is reasonable to anticipate that: (1) the Navajo Indian Irrigation Project would be completed to a service area of 110,630 acres as already authorized by Congress within the next approximately 20 years; (2) the Navajo Nation Municipal Pipeline already authorized by Congress along with the Animas-La Plata Project would be completed within the next several years; (3) the Bureau of Indian Affairs would continue to maintain and rehabilitate the Fruitland-Cambridge and Hogback-Cudei irrigation projects for the current service area acreages; (4) the Navajo Nation might assert reserved rights claims for the Fruitland-Cambridge and Hogback-Cudei irrigation projects for practicably irrigable acreage in an aggregate amount of as much as 26,000 acres or more if the Congressional record on the Act of June 13, 1962, is any indication (see Senate Report No. 2198), or up to about 49,000 acres of land if a consultant report prepared for the Navajo Nation (but not shared with New Mexico) is any indication, either of which amounts would exceed the 12,165 acres of water rights for both projects combined that is proposed in the settlement based on the current service area acreages of the projects; (5) existing Navajo Nation tributary irrigation uses would continue, and the Navajo Nation would have reserved rights claims for historic and existing tributary irrigation uses and possibly additional practicably irrigable acreage; (6) existing municipal, industrial, commercial and domestic water needs would continue to be met from surface water and ground water through the City of Farmington, the Indian Health Service and the Navajo Tribal Utility Authority; and (7) the Navajo Nation would make reserved rights claims for indefinite future municipal, industrial, commercial and domestic water uses in the San Juan River Basin for purposes of a permanent homeland.

The Navajo Nation also might claim reserved rights to use water from the San Juan River for municipal and domestic uses in other basins or other states. Under the planning studies for the Navajo-Gallup Water Supply Project, the Navajo Nation's year 2040 water demands in the San Juan River Basin in New Mexico to be served by the Project are estimated to total about 13,230 acre-feet, and the Nation's water demands in the Little Colorado and Rio Grande basins in New Mexico to be served by the Project are estimated to total about 7,550 acre-feet. Nevertheless, without settlement, the Navajo Nation's claims for reserved rights from the San Juan River for municipal, domestic and other water uses in the San Juan River Basin in New Mexico to provide for a homeland to the year 2040 and beyond might exceed the total amount of use in New Mexico to be served by the Project, and the purpose and place of use of the Nation's reserved rights might be transferred to other basins within New Mexico to accomplish the same purpose as the Project if facilities to do so could be constructed. Congressional authorization for the Navajo-Gallup Water Supply Project likely would be sought by the Project participants even without a settlement.

The amounts of water that would be adjudicated to the Navajo Nation without settlement cannot be known at this time. However, the proposed settlement provides some assurance and protection against possible reductions in non-Navajo water uses that otherwise could result if Navajo Nation claims cause priority administration on the San Juan River stream system in New Mexico or an over-allocation with respect to current conservative estimates of New Mexico's Upper Colorado River Basin Compact apportionment. The proposed settlement recognizes administration consistent with the Colorado River and Upper Colorado River Basin compacts, federal project authorizations and applicable law.

With the proposed settlement: (1) the Navajo-Gallup Water Supply Project would be authorized and constructed to provide for municipal and domestic water needs of the Navajo Nation that are projected to occur by the year 2040 based on project planning studies prepared by the Navajo Nation and the Bureau of Reclamation; (2) additional future needs in the San Juan River Basin in New Mexico that arise after 2040 would be met by transfers of water rights from irrigation uses to municipal and domestic uses; (3) no practicably irrigable acreage claims would be asserted by the Navajo Nation; and (4) risks of reserved rights claims being adjudicated to the Navajo Nation that would cause a reduction in non-Navajo uses in the San Juan River Basin in New Mexico would be removed. The Navajo Nation would agree to subordinate rights for existing and future municipal, industrial, commercial and domestic uses associated with the Navajo-Gallup Water Supply Project to the priority dates of the New Mexico State Engineer filings held by the Secretary of the Interior for the Navajo Reservoir water supply, which is June 17, 1955, and for inflows arising below Navajo Dam, which is December 16, 1968.

Under the proposed settlement, the Navajo Nation's rights to divert water from the San Juan River, including diversions from the Animas River but not from drainages of intermittent tributaries such as the Chaco River or from ground water, would be administered in accordance with the following priorities: (1) 66,730 acre-feet per year at a maximum rate of 321 cfs for irrigation on the Fruitland-Cambridge and Hogback-Cudei irrigation projects with an 1868 priority; (2) 2,000 acre-feet per year at a maximum rate of 3 cfs for municipal and domestic uses with an 1868 priority; (3) up to 508,000 acre-feet per year at a maximum rate of 1,800 cfs for the Navajo Indian Irrigation Project with a June 1955 priority, though the actual diversion required is anticipated to be less than 337,500 acre-feet per year based on the Biological Assessment for the Project unless transfers of use occur without impairment to other water rights in New Mexico; (4)

22,650 acre-feet per year at a maximum rate of 48 cfs for municipal and domestic uses under the Navajo-Gallup Water Supply Project with priority dates ranging from 1955 to 1968; (5) 4,680 acre-feet per year at a maximum rate of 13 cfs for municipal and domestic uses under the Animas-La Plata Project with a priority date of 1956; and (6) additional carriage water if needed and at such times as the State Engineer determines that direct flow is available for diversion without impairment to non-Navajo Nation water rights in New Mexico. In addition, if the Navajo Nation's ground water uses result in an aggregate depletion of the flow of the San Juan River in excess of 2,000 acre-feet per year, the Navajo Nation would reduce surface water uses as necessary to offset impacts of the excess depletion.

The proposed settlement would resolve by negotiation the senior rights claims for the Fruitland-Cambridge and Hogback-Cudei irrigation projects and provide subordinated junior priorities for the Navajo Indian Irrigation Project and almost all of the future municipal, industrial and domestic uses of the Navajo Nation from the San Juan River Basin. Moreover, revisions to the proposed settlement include agreement of the Navajo Nation to: (1) provide under the proposed Settlement Contract an alternate water source for the Fruitland-Cambridge and Hogback-Cudei irrigation projects so as to avoid or substantially reduce the occurrences of priority calls to satisfy the rights under the latter projects; and (2) forgo uses as necessary to protect the Animas-La Plata Project in the event of over-allocation of New Mexico's Upper Basin apportionment or curtailment during drought to meet the Colorado River Compact Article III delivery requirement at Lee Ferry. The significant amount of subordination to junior priorities, the alternate water source provisions for the Fruitland-Cambridge and Hogback-Cudei irrigation projects, the protection afforded the Animas-La Plata Project, the protection afforded San Juan River flows from increased ground water uses, and a release of further reserved

water rights claims of the Navajo Nation would substantially protect existing water uses in and from the San Juan River Basin in New Mexico against curtailment from priority call during times when the direct flow is otherwise insufficient to meet demands, against shortages in stored water supplies, and against curtailment for compact purposes. In return, the Navajo Nation would have its water rights adjudicated, get the Navajo-Gallup Water Supply Project authorized and developed, get an associated contract for water from the Navajo Reservoir water supply to source the Project, secure funding to ensure rehabilitation and completion of irrigation projects, and gain authority to transfer, lease or subcontract its water.

**27. The Navajo Nation should not be allowed to revoke the Partial Final Decree in the year 2020 if significant or substantial compliance with settlement terms has been made prior to then.**

Under the Settlement Agreement, the Partial Final Decree could be revoked if the Navajo Nation shows to the Court that the water development and trust funding terms of section 309 of the Settlement Agreement have not been substantially satisfied. The date for revocation has been revised to 2025 to reflect the additional amount of time it will take to obtain the increased amount of appropriations now estimated to be needed to fund construction of the Navajo-Gallup Water Supply Project and implement the Settlement Act. If substantial progress has been made but completion dates are missed for completing the milestones identified in section 309 of the Settlement Act, then the Navajo Nation, the United States and the State of New Mexico may agree to extend the milestone dates.

The Navajo Nation is settling its claims to waters of the San Juan River Basin in New Mexico in exchange for considerations received in the form of wet water development. Should the wet water development not occur, the Nation would request the Court to proceed with a determination of its rights in the San Juan River Adjudication.

However, if the decrees are revoked, the parties would not be bound by the Settlement Agreement, the Settlement Act or the Settlement Contract, all of which would be nullified, and the authorizations provided by the Act to complete and operate the water projects would be revoked also. The Navajo Nation has an interest in making the Settlement Agreement work, not in revoking the Partial Final Decree.



## WATER RIGHTS ADMINISTRATION

- 28. Diversion rights for Navajo Nation irrigation uses should be annual limits, not ten-year running averages, because there is no basis for averaging diversions over ten years and the Nation could lease huge amounts of senior or contract water rights in the tenth year to the detriment of other water users.**

The Act of June 13, 1962, authorizes the diversion of an average of 508,000 acre-feet per year for the Navajo Indian Irrigation Project, but does not specify the averaging period. The averaging period proposed for the Project as part of the settlement is ten years, which is the same period of time used to account deliveries from the Upper Basin to the Lower Basin under the Colorado River Compact, to account consumptive uses in the Gila River Basin in New Mexico under the 1964 US Supreme Court decree in *Arizona v. California*, and to account diversions for the San Juan-Chama Project under section 8 of the Act. Regardless of averaging, storage of water in Navajo Reservoir must occur in priority and cannot impair senior direct flow rights.

Irrigation depletion rights proposed for the Navajo Indian Irrigation Project are based on the average consumptive irrigation requirement for the Project area, considering an average cropping pattern and average meteorologic conditions. Annual fluctuations in conditions may result in an irrigation requirement somewhat lower or higher than the average due to persistence of wet or dry conditions that may occur from year to year. If the irrigation diversion rights in any year are limited in volumetric amount to the average consumptive irrigation requirement adjusted for irrigation and canal efficiencies, the amount of diversion that may be made, in theory, would fall short of the actual amount of water needed to fully irrigate a crop in roughly half the years. In the case of the Navajo Indian Irrigation Project, storage is relied on to supply a fluctuating amount of diversion demand. Alternatively, the irrigation diversion right could be limited in volumetric amount each year to the maximum consumptive irrigation requirement anticipated to

occur in any year, with no multi-year averaging of diversions, as is the description given in New Mexico State Engineer File No. 2848 for the Hammond Irrigation Project.

A concern has been raised that if there is no annual quantity limit to the diversion by the Navajo Indian Irrigation Project, the Navajo Nation might be able to forbear use of much of the Project water rights during a period of nine years and place a huge demand on the river system for water in the tenth year to recoup all the use forgone. If a diversion limit is imposed as a running ten-year average limitation, the previous nine years of diversion and the amount of acreage that can be fallowed in the tenth year as part of a transfer of the beneficial use right for that year effectively limit the amount of use that can be made or transferred under the rights for the Project in the tenth year. Further, the diversion in one year effectively constrains the amount of diversion that can be made by the Project in the following nine years. In addition, the proposed settlement does not permit changes in use under the rights for the Project if the changes would impair other water rights in New Mexico. Reasonable and realistic management of the Navajo Nation's water resources effectively prevent the scenario of concern from occurring. Nevertheless, the proposed settlement has been revised to include annual depletion and diversion amounts for the Navajo Indian Irrigation Project in addition to the ten-year average depletion and diversion amounts, with the annual amounts being 15 percent greater than the ten-year average amounts. Use of one-year diversion and depletion limits in addition to ten-year limits is consistent with the rights of the State of New Mexico to use waters of the Gila River Basin and the administration of those rights under the 1964 decree in *Arizona v. California*, and with the authorizations for San Juan-Chama Project diversions provided in the Act of June 13, 1962.

The ten-year averaging of the depletion and diversion rights for the Navajo Indian Irrigation Project makes it possible for the Navajo Nation to provide under the proposed

Settlement Contract an alternate water source for the Fruitland-Cambridge and Hogback-Cudei irrigation projects so as to avoid the occurrences of priority calls to satisfy the rights under the latter projects. Without the alternate water source provisions of the proposed settlement, a priority call would be in effect for the two projects for some period of time during approximately one year in two based on historic hydrology and assuming full utilization of the rights for the projects. The amount of water needed to implement the alternate water source provisions of the proposed settlement in any year cannot be known in advance because it is a function of when and by how much the direct flow during the summer and fall is insufficient to meet demands on the San Juan River stream system, and, based on historic hydrology, the amount will vary significantly from year to year. If the Navajo Nation is unable to smooth the annual amounts of water moved from the Navajo Indian Irrigation Project to service the demands under the Fruitland-Cambridge and Hogback-Cudei irrigation project rights under the alternate water source provisions of the proposed settlement, the Navajo Nation would be unable to manage the impact of implementing the provisions without significant detrimental effect to crop production and farm economics on the Navajo Indian Irrigation Project. With ten-year averaging, the Navajo Nation knows about what to expect for planning and accounting its uses under the rights for the Navajo Indian Irrigation Project based on the previous nine years and would be able to make minor mid-season adjustments to its operations, if necessary.

The administration of direct flow irrigation diversions, as opposed to irrigation uses that rely on Navajo Reservoir storage, would be more difficult to achieve using multi-year averaging. The proposed settlement has been revised to not include ten-year averaging for the annual depletions and diversions under the rights for the Fruitland-Cambridge and Hogback-Cudei irrigation projects. However, while annual depletion and

diversion limits for the two projects are included in the revised proposed settlement, the Echo Ditch Decree did not impose annual diversion amount limitations on non-Indian ditches in the San Juan River Basin. Therefore, the annual diversion limits for the two projects for irrigation uses would not be enforced unless and until volumetric diversion limits are adjudicated and enforced for non-Navajo irrigation ditches. If depletion and associated diversion rights for the two projects are transferred to non-irrigation uses, then the portion of the annual diversion right that is transferred would be enforced regardless of the status of enforcement of annual diversion limits on other irrigation ditches in the Basin.

If the San Juan River Adjudication Court should adjudicate annual diversion rights for non-Navajo ditches that are based on the maximum consumptive irrigation use in any year, as opposed to the average annual consumptive irrigation use, the annual diversion rights of the Fruitland-Cambridge and Hogback-Cudei irrigation projects would need to be revised accordingly. In addition, if the Court provides multi-year averaging of direct flow irrigation diversions in the Basin, then equity would require that the annual diversion rights of the two projects would need to be averaged over the same duration.

**29. There are two opposite extremes to who should have jurisdiction over the use of water under the Navajo Nation's water rights: (1) the State Engineer should have jurisdiction over all Navajo Nation uses of water in the San Juan River Basin; or (2) the Navajo Nation should be able to do whatever it wishes with its water rights without state oversight.**

A compromise on matters of jurisdiction was negotiated. Under the revised proposed settlement, the Navajo Nation would have authority to administer the distribution and use of water beyond its points of diversion in accordance with its water rights and subject to non-impairment of non-Navajo Nation water rights in New Mexico. Any changes in use would require advance notice to the New Mexico State Engineer and the public in the San Juan River Basin. Transfers of water uses by the Navajo Nation to

locations off Navajo lands, or to locations outside New Mexico if found to be permissible under applicable law, would require approval of the New Mexico State Engineer. Under the proposed settlement, the Navajo Nation may change the place or purpose of use of its rights for the Navajo Indian Irrigation Project on Navajo trust lands in New Mexico so long as the total average diversion for all uses under said rights in the aggregate does not exceed 353,000 acre-feet per year, and any such changes to other uses must not impair other water rights. This amount of diversion assumes that either: (1) planned water conservation measures on the Project are about half as effective as anticipated; or (2) water conservation measures either do not occur or realize any benefits, and about 5 percent of the Project acreage, on average, is fallow. If the rights under the Project are not used solely for irrigation, the Navajo Nation would have to file application with the State Engineer to increase the total average diversion by all uses under the water rights associated with the Project above 353,000 acre-feet per year.

The Navajo Nation would be responsible for measuring and reporting its diversions and consumptive uses each year to the San Juan River Adjudication Court and the State Engineer, and for adjusting its diversions as necessary to comply with the rights adjudicated to it by the proposed Partial Final Decree. The Navajo Nation also would be responsible for reducing its total use of water to offset any future use water rights that may be awarded individual members of the Navajo Nation that have been allotted lands within the San Juan River Basin in New Mexico by the United States.

The State Engineer would have authority to monitor the Navajo Nation's diversions and uses of water for compliance with the Nation's rights adjudicated by the proposed Partial Final Decree, and to direct the Navajo Nation to adjust its diversions as necessary to comply with such rights. The State Engineer would be permitted to make inspections on Navajo lands, in cooperation with the Navajo Nation, as necessary to

determine the adequacy of diversion measurements, compliance with the decree and the proposed Settlement Agreement, and the current beneficial use needs of the Nation. In any priority administration on the San Juan River stream system, the State Engineer may direct the Navajo Nation to adjust its diversions in accordance with priorities and current beneficial use requirements. The San Juan River Adjudication Court would retain ultimate jurisdiction over all Navajo Nation water uses in and from the San Juan River Basin in New Mexico and any water rights or decree administration or compliance disputes between the State Engineer, the Navajo Nation and other parties to the Adjudication.

**30. Clarity is needed with respect to the water rights of the Navajo Nation and the rights or claims of individual members of the Navajo Nation.**

The Navajo Nation has responsibility and control over the use of lands, and rights associated with lands, held by the United States in trust for the benefit of the Navajo Nation or held in fee status by the Navajo Nation. In addition to reserving lands for the Navajo Nation, the United States has set aside allotments for use by individual members of the Navajo Nation that are separate from lands held in trust for the Navajo Nation. The United States has separate trust responsibilities to the allottees. The proposed settlement is with the Navajo Nation to settle the claims of the Nation to the use of waters of the San Juan River Basin in New Mexico. The claims of allottees for uses on lands that are not held in trust for the Navajo Nation or are not held in fee by the Navajo Nation will be settled or litigated through the San Juan River Adjudication as is the case with other individual water users in the Basin. Under the proposed settlement, however, the Navajo Nation would be responsible for reducing its total use of water to offset any future use water rights that may be awarded individual members of the Navajo Nation that have been allotted lands outside of lands held in trust for the Navajo Nation or held in fee by the Navajo Nation.

31. **A Navajo Nation water rights settlement should include a waiver that the Navajo Nation would not challenge in the San Juan River Adjudication rights adjudicated by the Echo Ditch Decree or other previous decrees unless upon a claim of forfeiture subsequent to the decrees.**

The proposed settlement is not between the Navajo Nation and the thousands of other parties to the San Juan River Adjudication, and the other parties are not being required to execute a settlement with the Navajo Nation. It would be difficult to arrange for the Navajo Nation to waive certain objections it may have to rights adjudicated in previous suits in the Basin, and for the owners of previously decreed water rights to similarly waive any objections they may have to the proposed Partial Final Decree. The proposed Partial Final Decree would be submitted to the Adjudication Court for its consideration, and all parties to the adjudication would be allowed to file objections to the water rights described in the proposed decree through *inter se* proceedings. If the Court does not adopt a partial final decree that is substantially the same as the proposed decree, then the settlement and water project authorizations would be nullified.

But while practical considerations realistically prevent a comprehensive settlement between all parties, the State Engineer's approach in the San Juan River Adjudication has been that the State of New Mexico would not go back in time prior to the Echo Ditch Decree to re-adjudicate uses prior to 1948, and that a water right previously adjudicated will not be lost due to forfeiture or abandonment if the water user has been using the right since the time it was adjudicated in accordance with the conditions of the decreed right or the conditions of a subsequent transfer of the decreed right approved by the State Engineer. Revisions have been made to the proposed settlement that provide for the Navajo Nation to largely agree to the State Engineer's approach in the adjudication. The Navajo Nation would agree to the priority dates of rights adjudicated under and incorporated into the Echo Ditch Decree, the per acre farm duties adjudicated by the decree, and the per acre diversion rates adjudicated for non-

Indian ditches by the decree; but, the Nation may object to proposed water rights determinations for irrigation or non-irrigation uses in the San Juan River Adjudication on the basis of forfeiture, abandonment or unauthorized use since entry of the Echo Ditch Decree. This approach provides continuity with the water rights market transactions that have occurred in the San Juan River Basin since 1948, provides for expediting the Adjudication, and meets a condition for the Navajo Nation's agreement to provide under the proposed Settlement Contract an alternate water source for the Fruitland-Cambridge and Hogback-Cudei irrigation projects so as to avoid or substantially reduce the occurrences of priority calls against non-Navajo water users to satisfy the rights under the two projects.

**32. The Secretary of the Interior filings for federal water development projects in New Mexico need clarification, and water users, not the United States, own water rights.**

Language modifications to the proposed settlement documents reflect that New Mexico State Engineer File No. 2848 for the Hammond Irrigation Project was not included as part of the combined permit nos. 2847, 2849, 2873 and 2917 combined for water originating in the drainage of the San Juan River above Navajo Dam. The priority date for 23,000 acre-feet of diversion by the Project is June 17, 1955, the same as the priority date under State Engineer File No. 2847 for the San Juan-Chama Project and File No. 2849 for storage in Navajo Reservoir sufficient to supply an average annual diversion of 630,000 acre-feet per year. The Hammond Irrigation Project receives water from the direct flow of the San Juan River and Navajo Reservoir storage, and is subject to sharing of shortages with the San Juan-Chama Project, the Navajo Indian Irrigation Project and other contract uses from the Navajo Reservoir water supply pursuant to section 11 of the Act of June 13, 1962. In addition, the Project has additional adjudicated or permitted direct flow water rights. The proposed Settlement Contract will not cause the aggregate



delivery demand for water from the Navajo Reservoir water supply to exceed an average of 630,000 acre-feet per year.

New Mexico State Engineer File No. 2883 for Animas-La Plata Project uses in New Mexico has a priority date of May 1, 1956. State Engineer File No. 3215 for inflow to the San Juan River arising below Navajo Dam has a priority date of December 16, 1968, and can be used to supply significant portions of the diversion demands of the Navajo-Gallup Water Supply Project and the Public Service Company of New Mexico's uses under subcontract with the Jicarilla Apache Nation.

Language modifications to the proposed settlement documents also make it clear that the United States has storage rights for Navajo Dam and Reservoir, but that the Navajo Nation as a water user would have the water rights associated with their uses under the Navajo Indian Irrigation Project, the Navajo-Gallup Water Supply Project and the Animas-La Plata Project. The Navajo Nation under its laws retains property rights, and it issues permits to individual members of the Navajo Nation to farm particular allotments of land or to use water on its lands.

**33. The proposed Navajo Nation water rights settlement would not leave sufficient water available for dealing with the Ute Mountain Ute Tribe's water rights claims in the San Juan River Basin in New Mexico, and the Tribe should receive consideration because the Navajo Nation received an allocation of Animas-La Plata Project water under the Colorado Ute Settlement Act Amendments of 2000.**

The Colorado Ute Settlement Act Amendments of 2000 settled the water rights claims of the Ute Mountain Ute Tribe to waters of the San Juan River Basin in Colorado, and provided sufficient water to the Ute Mountain Ute Tribe for a permanent homeland. As a part of the Ute Mountain Ute Tribe's settlement in Colorado, the Tribe received an allocation of 16,525 acre-feet of water from the Animas-La Plata Project in Colorado. The Final Supplemental Environmental Impact Statement for the Animas-La Plata

Project identified as uses of the Tribe's Project water a gas-fired thermal electric power plant, a visitor center and housing development.

The Ute Mountain Ute Tribe has had initial discussions with the State of New Mexico regarding a possible claim for water from the Basin in New Mexico for future use. The Tribe has no resident population, little existing stock use, no geographic connection to the San Juan River, and little, if any, practicably irrigable acreage on its lands that are located within the State of New Mexico. The Interstate Stream Commission and the Office of the State Engineer are scrutinizing the Ute Mountain Ute Tribe's claim, and will determine whether it would be fruitful to attempt to negotiate a settlement with the Tribe.

The State of New Mexico already has provided significant consideration to the Ute Mountain Ute Tribe, as well as the Southern Ute Tribe, by agreeing to the San Juan River Basin Recovery Implementation Program and to the operation of Navajo Dam to benefit the endangered fish species in the San Juan River. These measures arose out of a need to provide Endangered Species Act compliance for the Animas-La Plata Project, and the Colorado Ute tribes have an aggregate allocation under the Project for hypothetical future uses that amounts to over 60 percent of the total allocations under the Project made by the Colorado Ute Settlement Act Amendments of 2000, split equally between them. The Navajo Nation received an allocation under the Project for existing and future domestic uses in New Mexico that amounts to 4 percent of the total allocations under the Project authorized in 2000.

The operation of Navajo Dam to benefit endangered fish species: (1) reduces the reservoir storage water supply available for water uses in New Mexico; (2) threatens the ability of the Secretary of the Interior during periods of drought to fully meet contract deliveries from the San Juan-Chama Project and from Navajo Reservoir for uses by the

Navajo Nation, the Jicarilla Apache Nation and others, all of which are for uses within the State of New Mexico's Upper Basin apportionment; (3) may restrict the flexibility of the Navajo Nation to transfer its Navajo Indian Irrigation Project rights to other uses; and (4) hinders the Secretary's flexibility to manage the reservoir for incidental recreation and fishery benefits that have been important locally for socio-economic reasons. No other commitment has been made to store and release water from other reservoirs or to reduce actual uses in Colorado to make water physically available to help meet the flow and habitat needs of endangered fish populations in the San Juan River; rather, New Mexico storage is used to meet these needs even if using such storage threatens or causes shortages to New Mexico water uses, including uses by the Navajo Nation under its reserved or contract rights. The Colorado Ute Settlement Act Amendments of 2000 allocated a total depletion of 40,880 acre-feet per year for Animas-La Plata Project uses within the State of Colorado, not including the associated evaporation from Ridges Basin Reservoir for the uses in Colorado, and the effect of such uses by the Ute Mountain Ute Tribe and others on endangered fish habitat in the San Juan River is offset by Navajo Dam operations.

## FLOW DEMANDS FOR ENDANGERED FISH

**34. The demands on Navajo Reservoir for endangered fish habitat purposes are not quantified and may impair existing rights.**

The San Juan River Basin Recovery Implementation Program adopted flow recommendations for the San Juan River between Farmington and Lake Powell that are intended to provide for the habitat needs of Colorado pikeminnow and razorback sucker, both listed as endangered under the Endangered Species Act and with critical habitat in the San Juan River. An environmental impact statement is expected to be issued during the summer or fall of 2004 analyzing the impact of operating Navajo Dam to meet the flow recommendations, or a reasonable alternative, while also not impairing senior water rights and providing water pursuant to Navajo Reservoir water supply contracts. Such operation of the dam, in concert with the Implementation Program, provides reasonable and prudent alternatives and reasonable and prudent measures for Endangered Species Act compliance for federal water development and management activities in the San Juan River Basin, including for Navajo Reservoir water supply contracts, operation of the San Juan-Chama Project and operation of the Animas-La Plata Project. The amount of water necessary in any year to be released from Navajo Reservoir to meet the flow recommendations, or a reasonable alternative, depends on availability of water and flow statistics. Also, the flow recommendations are subject to change through adaptive management. Included in the benefits of the Implementation Program and operating Navajo Dam to meet the flow recommendations is coverage for water uses in the San Juan River Basin in New Mexico, both federal and non-federal, against incidental take under section 9 of the Endangered Species Act.

The Bureau of Reclamation developed a San Juan River Basin hydrology model that the Bureau of Indian Affairs used in its recent Endangered Species Act section 7 consultation on completion of the Navajo Indian Irrigation Project. The baseline

modeling analysis included the historic long-term hydrology of the Basin and diversion demands for existing uses, future uses that could reasonably occur without further federal action, and proposed uses that already have been consulted on (including the Animas-La Plata Project). The modeling analysis indicated that, based on historic hydrology, the flow recommendations could be met through operation of Navajo Dam without causing shortages to Navajo Reservoir supply contractors or other water users, including the San Juan-Chama Project. A similar analysis will be conducted for the Navajo-Gallup Water Supply Project as part of the ongoing work on the environmental impact statement for the Project and the section 7 consultation for the Project. Implementation of the Navajo-Gallup Water Supply Project under the proposed settlement remains subject to National Environmental Policy Act and Endangered Species Act compliance. The Navajo Nation may forbear use of a portion of its rights under the Navajo Indian Irrigation Project if necessary to allow its uses under the proposed Navajo-Gallup Water Supply Project to proceed without impinging upon the flow recommendations or a reasonable alternative.

**35. The proposed settlement legislation should be amended so that it will not be in conflict with or inadvertently repeal section 208 of Public Law 108-137 (117 Stat. 1827).**

The provisions of section 208 of Public Law 108-137 are specific to the annual delivery of water in the Rio Grande Basin out of Heron Reservoir for satisfaction of water delivery and repayment contracts entered into under the San Juan-Chama Project. The proposed Settlement Agreement deals with diversions on the San Juan River stream system, not contract releases from Heron Dam. Nevertheless, provision has been added to the disclaimers in the revised proposed Settlement Act that nothing in the Act is to be construed to interpret, modify, repeal or be in conflict with section 208 of Public Law 108-137 (117 Stat. 1827).

## LIST OF COMMENTORS

<u>Commentor</u>	<u>Summary of Issues Identified from Comments</u>
<b>Municipal and Domestic Water Users:</b>	
Albuquerque	1, 2, 11, 12, 14, 15, 34, 35
Aztec	1, 12, 13
Aztec, Bloomfield and Farmington	1, 2, 3, 6, 7, 8, 9, 10, 11, 13, 26, 29, 31, 32, 34
Espanola	1, 2, 11, 12, 14, 15, 34, 35
Farmington	1, 6, 10, 12, 13, 26
Gallup (1)	
Santa Fe	1, 2, 11, 12, 14, 15, 34, 35
San Juan Water Commission	1, 3, 9, 10, 11, 12, 13, 17, 20, 22, 25, 26, 27, 28, 29, 30, 32
Taos	1, 11, 15, 34, 35
West Hammond Domestic Water Assoc.	1, 17, 19, 28, 29, 32
<b>Agricultural Water Users:</b>	
Bloomfield Irrigation District	3, 9, 17, 19, 28, 29, 31, 32
Hammond Conservancy District	28, 29, 32
San Juan Agricultural Water Users	1, 12, 18, 19, 28, 29, 32
<b>Industrial Water Users:</b>	
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<b>New Mexico State Legislators:</b>	
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<b>Government Entities:</b>	
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<u>Commentor</u>	<u>Summary of Issues Identified from Comments</u>
<b>Citizens Groups:</b>	
Citizens Progressive Alliance	1, 4, 7, 11, 26, 33
Electors Concerned re: Animas Water	1, 2, 4, 6, 9, 12, 18, 23, 26, 28, 33
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Smith, Douglas	11, 17
Velasquez, Chris	12
Wood, Zang	6
Young, Jim	11, 26, 29
Miscellaneous oral comments	1-35

**Notes:**

- (1) Statement supporting settlement and Navajo-Gallup Water Supply Project.
- (2) Comments supported by Arizona Public Service Company and Public Service Company of New Mexico.
- (3) Statement critical of settlement.
- (4) Statement questioning settlement generally.
- (5) Submitted technical comments on the proposed Settlement Act relating to the Navajo-Gallup Water Supply Project.
- (6) Letter from President Joe Shirley to the Secretary of the Interior regarding completion and transfer of Navajo Indian Irrigation Project facilities.
- (7) Statement expressing a need to develop and hook up local water supply systems to Navajo-Gallup Water Supply Project facilities.