

STATE OF NEW MEXICO
COUNTY OF SAN JUAN
ELEVENTH JUDICIAL DISTRICT COURT

STATE OF NEW MEXICO, *ex rel.*
STATE ENGINEER,

Plaintiff,

v.

THE UNITED STATES OF AMERICA,
et al.,

Defendants.

CV-75-184

HON. JAMES J. WECHSLER
Presiding Judge

SAN JUAN RIVER
ADJUDICATION

Claims of Navajo Nation
Case No. AB-07-1

STATE OF NEW MEXICO'S RESPONSES
TO GARY L. HORNER'S FIRST SET OF INTERROGATORIES
AND FIRST REQUESTS FOR PRODUCTION OF DOCUMENTS TO THE STATE OF
NEW MEXICO

Pursuant to Rules 1-026, 1-033, and 1-034 NMRA, the State of New Mexico, by and through its counsel, responds to Defendant *Gary L. Horner's First Set of Interrogatories and First Requests for Production of Documents to the State of New Mexico*, and reserves and restates any objections not previously ruled upon by the Court, as follows:

ANSWERS TO INTERROGATORIES

INTERROGATORY NO. 1: Please identify all persons who provided responses herein, including the names, current addresses, current telephone numbers, occupation, employer, and relationship to the Navajo Nation and/or the Settling Parties.

ANSWER: John Whipple provided information used to prepare answers to Interrogatories Nos. 8, 11, 14, 15, 17, 18, 21, 25, 28, 30, 31, 32 and 34. Mr. Whipple is a subcontractor to the Office of the State Engineer, and is under contract with the Sheehan & Sheehan Law Firm.

INTERROGATORY NO. 2: Please list the name, address, contact information and title, if any, of all fact witnesses who may be called upon to testify in support of your positions in

this action, including the nature and substance of the expected testimony and a description of any documents which would possibly be used by each witness to support any testimony that he/she may give.

ANSWER: The State of New Mexico identified Jim McNees and John Whipple as potential expert and factual witnesses in its Initial Disclosures. The State will supplement its answer as information is available.

The State of New Mexico identifies the following experts who may testify at trial in this case:

1.A. John Whipple may testify in this case as both an expert and fact witness. He is a subcontractor to the Office of the State Engineer, and is under contract with the Sheehan & Sheehan Law Firm. Mr. Whipple worked for the New Mexico Office of the State Engineer/Interstate Stream Commission from 1985-2010 and retired from the Interstate Stream Commission at the end of December 2010 as the Basin Manager, Colorado/San Juan Basin. Mr. Whipple directly participated in the negotiation of the San Juan River Basin in New Mexico Navajo Nation Water Rights Settlement Agreement. He has not authored any publications, but has prepared numerous letters, memoranda, reports and other documents, some relating to the Settlement Agreement and some not, over the course of the past ten years. Mr. Whipple in 2010 and 2011 testified by deposition as a fact witness in *San Juan Water Commission v. John R. D'Antonio, Jr., New Mexico State Engineer*, No. CV-2008-1699, District Court of San Juan County.

1.B. It is anticipated that Mr. Whipple will testify as to technical matters associated with the Settlement Agreement, including as to information and analyses that he presented, prepared or directly participated in developing in furtherance of the Settlement Agreement. Such matters include the bases for the proposed Partial Final Judgment and Decree of the Water Rights of the Navajo Nation and the proposed Supplemental Partial Final Judgment and Decree of the Water Rights of the Navajo Nation. He also may testify as to the process for developing portions of the Settlement Agreement.

1.C. The State of New Mexico is producing unprivileged documents which were prepared by Mr. Whipple and that are relevant to the Settlement Agreement and this case. It is anticipated that the documents produced will provide the substance of the facts and opinions to which he may testify.

1.D. The reports prepared by Mr. Whipple for this litigation are being produced pursuant to the procedures required by the Court.

2.A. Jim McNees may testify in this case as both an expert and fact witness. He is the current Bureau Chief, Hydrographic Survey Bureau, Litigation and Adjudication Program, Office of the State Engineer.

2.B. It is anticipated that Mr. McNees will testify as to certain information and analyses that he prepared for inclusion in the "Quantification Analysis for the Proposed Supplemental Partial Final Judgment and Decree of the Water Rights of the Navajo Nation," prepared by John Whipple and filed with the Court on April 2, 2012.

2.C. The State of New Mexico is producing unprivileged documents which were prepared by Mr. McNees and that are relevant to the proposed Supplemental Partial Final Judgment and Decree of the Water Rights of the Navajo Nation. It is anticipated that the documents produced will provide the substance of the facts and opinions to which he may testify.

2.D. The reports prepared by Mr. McNees for this litigation are being produced pursuant to the procedures required by the Court.

INTERROGATORY NO. 3: Please identify all exhibits you may seek to introduce into evidence at the trial of this matter, including exhibits for demonstrative purposes.

ANSWER: The State of New Mexico has not yet identified its exhibits and will supplement its answer as information is available.

INTERROGATORY NO. 4: Please state the name, address and telephone number of each expert witness whom you intend to call, or may call, to testify at trial in this matter, and, as to each such expert witness, please state the subject matter on which the expert is expected to testify, the substance of the facts and opinions to which the expert is expected to testify, and a summary of the grounds for each opinion.

ANSWER: See State of New Mexico's Answer to Interrogatory No. 2 above. The State will supplement its answer as information is available.

INTERROGATORY NO. 5: Please state the amount of surface water supply available within the State of New Mexico in the San Juan River Basin, and the source of such water supply. Regarding the availability and source of such water, please state with specificity:

- A. The amount of precipitation and water flowing in the rivers and streams.
- B. The limitations or restrictions placed upon the use of such water in New Mexico (in particular with respect to the use of water from the Animas River, and the San Juan River below Navajo Dam) pursuant to:
 1. The Colorado River Compact;
 2. Upper Colorado River Basin Compact;
 3. The Arizona v. California U.S. Supreme Court decisions;
 4. The Colorado River Interim Surplus Criteria;
 5. The Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead, and agreements related thereto;
 6. All Bureau of Reclamation Hydrologic Determinations prepared with respect to the San Juan River Basin in New Mexico;
 7. All Depletion Schedules prepared with respect to the San Juan River Basin in New Mexico;
 8. Any requirements that New Mexico's share of the use of water in the San Juan River Basin is reduced or limited to provide for a portion of the evaporation losses at Lake Powell;
 9. Other Law of the Colorado River considerations;

10. The La Plata River Compact (New Mexico/Colorado);
11. Federal Project Operating limitations or considerations;
 - a. Navajo Reservoir Operations - (Re-operation of Navajo Dam);
 - b. Animas-La Plata Operations;
 - c. San Juan-Chama Project;
 - d. Navajo Indian Irrigation Project;
12. In-stream/conservation/environmental flow limitations/considerations;
 - a. Endangered species limitations/considerations.

ANSWER: Pursuant to the Court's July 24, 2012 Order, the State of New Mexico answers that in addition to any responsive documents in the State's Initial Disclosures, the State has investigated whether other summary water supply records exist at the Office of the State Engineer and Interstate Stream Commission and is producing such records, and is providing the following list identifying persons in the Office of the State Engineer or Interstate Stream Commission with knowledge of surface water supply and the limitations or restrictions upon use of surface water in the San Juan Basin in New Mexico.

John Whipple, former Basin Manager, Colorado/San Juan Basin, Interstate Stream Commission, and currently a subcontractor to the Office of the State Engineer under contract with the Sheehan & Sheehan Law Firm.

Kevin Flanigan, current Basin Manager, Colorado/San Juan Basin, Interstate Stream Commission.

INTERROGATORY NO. 6: Please state the amount of surface water supply available within the State of New Mexico in the San Juan River Basin that is not included within the flows of the major streams (the precipitation amounts, or spring flows that are intercepted and used before flowing into major streams), and the source and location of such surface water supply. Further, please state whether the use of such surface water supply in New Mexico is included within the calculation of water supply available for use within New Mexico pursuant to the applicable interstate Compacts (counted against New Mexico's Compact share), or otherwise subject to the limitations and/or restrictions described above.

ANSWER: Pursuant to the Court's July 24, 2012 Order, the State of New Mexico answers that in addition to any responsive documents in the State's Initial Disclosures, the State has investigated whether other summary water supply records exist at the Office of the State Engineer and Interstate Stream Commission and is producing such records, and is providing the following list identifying persons in the Office of the State Engineer or Interstate Stream Commission with knowledge of surface water supply and the limitations or restrictions upon use of surface water in the San Juan Basin in New Mexico.

John Whipple, former Basin Manager, Colorado/San Juan Basin, Interstate Stream Commission, and currently a subcontractor to the Office of the State Engineer under contract with the Sheehan & Sheehan Law Firm.

Kevin Flanigan, current Basin Manager, Colorado/San Juan Basin, Interstate Stream Commission.

INTERROGATORY NO. 7: Please state the amount of ground water supply available within the State of New Mexico in the San Juan River Basin, and the source and location of such ground water supply. Further, please state whether the use of such ground water supply in New Mexico is included within the calculation of water supply available for use within New Mexico pursuant to the applicable interstate Compacts (counted against New Mexico's Compact share), or otherwise subject to the limitations and/or restrictions described above.

ANSWER: Pursuant to the Court's July 24, 2012 Order, the State of New Mexico is producing responsive studies and records within its control.

INTERROGATORY NO. 8: Please state the amount of water currently being used in the San Juan River Basin in the State of New Mexico, in terms of both diversion amounts and depletion (consumptive use) amounts. Regarding such water use, please provide a breakdown by: type of use (municipal, industrial, irrigation, domestic, etc.); and source of water supply. Further, please state which water uses are associated with specific federal projects and/or federal contracts. Further, please state which water uses are Indian uses, in particular water uses associated with the Navajo Nation, and/or Navajo Indians.

ANSWER: Pursuant to the Court's July 24, 2012 Order, the State of New Mexico is producing the "State of New Mexico Schedule of Anticipated Upper Basin Depletions," prepared by the Interstate Stream Commission and dated May 2006 (2006 Depletion Schedule), and other summaries concerning the water supply. In addition, the State is producing:

(1) an Interstate Stream Commission staff Memorandum to File from Pat Turney and John Whipple on "Consumptive Uses in the San Juan River Basin in New Mexico, 2001 through 2005 – revised from the November 20, 2006 report to correct Navajo Reservoir evaporation," dated December 5, 2007;

(2) a report entitled "Water Use by Categories in New Mexico Counties and River Basins, and Irrigated Acreage in 2000," New Mexico Office of the State Engineer Technical Report 51, prepared by Brian Wilson, Anthony Lucero, John Romero and Patrick Romero, and dated February 2003; and

(3) a report entitled "New Mexico Water Use by Categories 2005," New Mexico Office of the State Engineer Technical Report 52, prepared by John Longworth, Julie Valdez, Molly Magnuson, Elisa Sims Albury and Jerry Keller, and dated June 2008.

Of the water uses currently being made from the San Juan River Basin in New Mexico, the following are made under federal water projects or federal contracts: (1) San Juan-Chama

Project diversions from tributaries to the San Juan River in Colorado for delivery to project contractors in the Rio Grande Basin in New Mexico for Indian and non-Indian municipal, industrial, domestic and irrigation uses; (2) diversions of water from the Navajo Reservoir supply for the Navajo Indian Irrigation Project, for approximately 86 percent of the water use on the Hammond Irrigation Project, for Williams Gas, for approximately two-thirds of the water use at the San Juan Generating Station for thermal-electric power generation, and for small water supply contracts (the latter two uses are supplied to non-Indian water users under subcontract with the Jicarilla Apache Nation); (3) diversions of water from the Animas River for uses under OSE File No. 2883 and the Animas-La Plata Project for uses by the San Juan Water Commission, the La Plata Conservancy District and the Navajo Nation; and (4) diversions of water from the Pine River in Colorado for non-Indian use on Pine River Project lands within New Mexico. Other current Indian water uses include Navajo Nation irrigation on the Hogback-Cudei and Fruitland-Cambridge irrigation projects from the San Juan River as well as on tributary irrigation projects and non-project lands in the drainages of ephemeral tributaries to the San Juan River (many of which were designed, funded, constructed or operated with assistance from the US Bureau of Indian Affairs), Jicarilla Apache Nation irrigation on its reservation, and scattered small reservoir evaporation, stock pond evaporation and livestock watering uses on both Navajo Nation lands and Jicarilla Apache Nation lands.

INTERROGATORY NO. 9: Please identify all current existing water uses of the Navajo Nation, and/or the Navajo people within the San Juan River Basin in New Mexico. Regarding such water use, please provide a breakdown by: type of use (municipal, industrial, irrigation, domestic, etc.); and source of water supply. Further, please state which water uses are associated with specific federal projects and/or federal contracts.

ANSWER: Pursuant to the Court's July 24, 2012 Order, the State of New Mexico is producing the 2006 depletion schedule prepared by the Interstate Stream Commission and other summaries concerning the water supply. Also see the State's Answer to Interrogatory No. 8 above.

INTERROGATORY NO. 10: Pursuant to the UNITED STATES' HYDROGRAPHIC SURVEY OF NAVAJO LANDS WITHIN THE SAN JUAN RIVER BASIN, filed in the present matter on January 3, 2011, ("Hydrographic Survey"), the United States stated that:

"As more fully described below, this hydrographic survey is the United States' description of existing and historic water uses. This description is based exclusively of information assembled by the United States, reflects the sole work of the United States, and is not the hydrographic survey referenced in paragraph 4.2.1 of the Navajo Settlement Agreement." Hydrographic Survey, p. 3.

Regarding said Hydrographic Survey:

A. Do you concur with the results of said Hydrographic Survey? If you do not concur with the results of said Hydrographic Survey, please explain with specificity with which parts

you do not concur, why you do not concur, and what you believe the results of such Hydrographic Survey should have been;

B. Said Hydrographic Survey was purported to represent a description of “existing and historic” water uses. Please explain with specificity the distinction between “existing and historic water uses” and “actual current existing water uses.”

C. Please explain with specificity how the subject Hydrographic Survey differs from the hydrographic survey contemplated in paragraph 4.2.1 of the Navajo Settlement Agreement.

E. Please explain with specificity which water uses of the subject Hydrographic survey represent “historic” water uses as opposed to “existing” water uses.

1. Please explain with specificity the bases for each and every “historic” water use of the Navajo Nation and/or Navajo people.

2. Please explain with specificity the basis for granting a water right to the Navajo Nation and/or the Navajo people for each and every such “historic” water use.

F. Please state the date each use of water represented in the subject Hydrographic Survey was first put to beneficial use.

G. Please state with specificity any authority to be considered with respect to the establishment of a priority date for each use of water represented in the subject Hydrographic Survey.

ANSWER: The State of New Mexico answers this Interrogatory as follows:

A-F: The United States’ Hydrographic Survey of Navajo Lands within the San Juan River Basin was prepared by the United States pursuant to an order of the Court. The State of New Mexico’s positions on the Hydrographic Survey, with respect to the water rights in the proposed Supplemental Partial Final Judgment and Decree of the Water Rights of the Navajo Nation, are set forth with specificity in the “Quantification Analysis for the Proposed Supplemental Partial Final Judgment and Decree of the Water Rights of the Navajo Nation,” prepared by John Whipple and dated April 2, 2012. The State’s positions regarding the water rights in the proposed Partial Final Judgment and Decree of the Water Rights of the Navajo Nation is described in the “State of New Mexico’s Statement of Legal and Factual Bases for Settlement,” which was filed with the Court on April 12, 2012, and will also be provided in the State’s “Technical Assessment of the San Juan River Basin in New Mexico Navajo Nation Water Rights Settlement Agreement” (Technical Assessment).

G: For federal reserved water rights on Navajo Nation lands held in trust by the United States, see the following:

Winters v. U.S., 07 U.S. 564 (1908);

Arizona v. California, 373 U.S. 546 (1963)

Beck, *Waters and Water Rights*, § 37.01(c)

New Mexico v. Lewis, 861 P.2d 235, 238 (Ct. App. 1993).

In re General Adjudication of Gila River System, 35 P.3d 68 (Ariz. 2001)

For water rights on Navajo fee lands owned in fee, see: (1) N.M. Constitution NMSA 1978, Chapter 72 and related case law.

INTERROGATORY NO. 11: Said Hydrographic Survey apparently intended four categories of land to be surveyed, specifically:

“1) lands held in trust for the Navajo Nation by the United States; 2) lands held in trust for members of the Navajo Nation by the United States; 3) lands owned by members of the Navajo Nation subject to restraint on alienation imposed pursuant to federal law; and 4) lands held in fee ownership by the Navajo Nation.” Hydrographic Survey, pp. 3-4. Footnotes omitted.

A. Please identify with specificity which lands should be considered:

- 1) Lands held in trust for the Navajo Nation by the United States;
- 2) Lands held in trust for members of the Navajo Nation by the United States;
- 3) Lands owned by members of the Navajo Nation subject to restraint on alienation imposed pursuant to federal law;
- 4) Lands held in fee ownership by the Navajo Nation;
- 5) Navajo Reservation; and
- 6) Any other lands with respect to which water uses should be considered with respect to the Navajo Nation and/or the Navajo people.

ANSWER: The State of New Mexico did not prepare the United States’ Hydrographic Survey, but notes that maps provided in Appendices B and E of the Hydrographic Survey indicate land ownership status.

INTERROGATORY NO. 12: Please identify with specificity each and every authority by which each separate parcel of property represented in the subject Hydrographic Survey, should be considered “Navajo Lands.”

ANSWER: Pursuant to the Court’s July 24, 2012 Order, the Navajo Nation will respond to this Interrogatory with information within its control.

INTERROGATORY NO. 14: Please state the amount of water rights currently in existence within the San Juan River Basin in the State of New Mexico. Regarding such water rights, please provide a breakdown by: type of use (municipal, industrial, irrigation, domestic, etc.); bases for such water rights (adjudicated right, licences [*sic*] issued by the State Engineer, permits issued by the State Engineer, federal contracts, federal reserved water rights, Indian contracts, etc.); source of water supply; priority date; and that portion of such water rights that are

currently not being used. Further, please state what water rights are associated with specific federal projects and/or federal contracts. Further, please state what water rights are Indian rights, in particular water rights associated with the Navajo Nation, or Navajo Indians.

ANSWER: Water rights records for the San Juan River Basin in New Mexico, including copies of licenses, permits, permit applications, notices of intent to appropriate, and related documents are available to the public through the New Mexico Water Rights Reporting System at the Office of the State Engineer web site. The Echo Ditch Decree also is available at the Office of the State Engineer web site, and was filed with the Court in the San Juan River Adjudication. Also, records of water rights in this adjudication, including consent orders entered in the La Plata Section and the the Partial Final Judgment and Decree of the Jicarilla Apache Tribe, can be found in the court records. In addition, the State of New Mexico is producing a tabulation entitled: "San Juan Basin, Water Right Applications and Notices of Intention Since San Juan Decree No. 0169, Updated 12/9/98." Regarding current uses and federal project uses, see the State of New Mexico's answer to Interrogatory No. 8 above.

INTERROGATORY NO. 15: Please state the amount of water currently being used within the San Juan River Basin in the State of New Mexico. Regarding such water uses, please provide a breakdown by: type of use (municipal, industrial, irrigation, domestic, etc.); source of water supply. Further, please state which of such water uses are associated with specific federal projects and/or federal contracts. Further, please state which of such water uses are Indian uses, in particular water uses associated with the Navajo Nation, or Navajo Indians. Further, please state which water is currently being used without a currently recognized water right. Regarding such water uses with respect to which no currently recognized right exists, which of such uses should be afforded a recognized water right, and the bases upon which such water right should be recognized.

ANSWER: See the State of New Mexico's answer to Interrogatory No. 8 above.

INTERROGATORY NO. 16: Please state whether you consider the waters of the San Juan River Basin in the State of New Mexico to be fully appropriated. If so:

- A. Since when have such waters been fully appropriated;
- B. What are the bases for the determination that the waters of the San Juan Basin have been fully appropriated;

ANSWER: The State of New Mexico takes the position that the basin is fully appropriated. This determination is based upon the existing water rights in the basin, including the filings of the Bureau of Reclamation for federal projects in the basin, most recently in 1968.

INTERROGATORY NO. 17: Regarding: the Navajo Indian Irrigation Project (“NIIP”) and/or Navajo Agricultural Products Industry (“NAPI”); the Fruitland/Cambridge Irrigation Project ; and the Hogback/Cudei Irrigation Project , please state:

- A. The total amount of acres planned to be irrigated for each Project;
- B. The total amount of acres irrigated each year for [sic]each Project since the inception of each Project;
- C. The total acreage for each specific crop grown each year for each Project since the inception of each Project;
- D. The total amount of each specific crop harvested each year for each Project since the inception of each Project;
- E. The total amount of water diverted each year for each Project since the inception of each Project;
- F. The total amount of water consumed each year for each [sic] Project since the inception of each Project; and
- G. The total amount of water spilled each year by each Project since the inception of each Project.

ANSWER: The State of New Mexico answers this Interrogatory as follows:

Navajo Indian Irrigation Project: Keller-Bliesner Engineering, LLC, prepared analyses of historic annual water use by the Navajo Indian Irrigation Project for the years 1976-2010, including acres irrigated by crop type and conservation reserve acres irrigated only to maintain natural grass cover, as described in the following reports:

1. “Navajo Indian Irrigation Project Biological Assessment,” prepared by Keller-Bliesner Engineering and Ecosystems Research Institute, Inc., and dated June 11, 1999 ;
2. “Navajo Indian Irrigation Project 2006 Irrigation and Drainage Analysis,” dated September 12, 2008;
3. “Final Water Use Numbers for NIIP, 2007-2008,” undated but received via email about October 2009; and
4. “Navajo Indian Irrigation Project Irrigation and Drainage 2009-2010 Analysis,” dated November 9, 2011.
5. See also the State’s “Technical Assessment of the San Juan River Basin in New Mexico Navajo Nation Water Rights Settlement Agreement” (Technical Assessment).

Hogback-Cudei Irrigation Project: The US Bureau of Indian Affairs has issued Land Use Permits for farming of 8,830 acres of land under the Hogback-Cudei Irrigation Project, and. Data on the amount of acres irrigated on the Hogback and Cudei projects are available in:

- (1) a report by Herbert V. Clotts, dated June 30, 1943, indicating the amount of acres under the Hogback Project irrigated in 1908;
- (2) annual crop reports for the Hogback and Cudei projects that were prepared by the US Bureau of Indian Affairs for many of the years within the period 1936-1959, which include acres irrigated by crop type for the years indicated;

(3) annual Irrigation Land Data reports prepared by the US Bureau of Indian Affairs for the years 1963-1968, which include acres used or presently irrigated under the Hogback and Cudei projects;

(4) a field survey of irrigated crops under the Hogback and Cudei projects made in 1994, which survey was conducted by the Interstate Stream Commission in cooperation with the US Bureau of Reclamation for Reclamation's 1994 San Juan Basin Water-Related Land Use Inventory for New Mexico and provides data on irrigated acreage by crop type; and

(5) field surveys of irrigated crops under the Hogback and Cudei projects made in 2000 and 2003-2010, conducted by the Interstate Stream Commission with cooperation from the Navajo Nation which provide data on the amount of irrigated acres by crop type as reported by Interstate Stream Commission (memoranda describing the field surveys and survey results are available for those surveys conducted prior to 2008).

Fruitland-Cambridge Irrigation Project: The US Bureau of Indian Affairs has issued Land Use Permits for farming of 3,335 acres of land under the Fruitland-Cambridge Irrigation Project. Data on the amount of acres irrigated on the Fruitland and Cambridge projects are available in the following documents:

(1) annual crop reports for the Fruitland and Cambridge projects that were prepared by the US Bureau of Indian Affairs for many of the years within the period 1936-1959, which reports include acres irrigated by crop type for the years indicated;

(2) annual Irrigation Land Data reports prepared by the US Bureau of Indian Affairs for the years 1963-1968, which reports include acres used or presently irrigated under the Fruitland and Cambridge projects;

(3) a field survey of irrigated crops under the Fruitland and Cambridge projects made in 1994, which survey was conducted by the Interstate Stream Commission in cooperation with the US Bureau of Reclamation for Reclamation's 1994 San Juan Basin Water-Related Land Use Inventory for New Mexico and provides data on irrigated acreage by crop type; and

(4) field surveys of irrigated crops under the Fruitland and Cambridge projects made in 2000 and 2003-2010, conducted by the Interstate Stream Commission with cooperation from the Navajo Nation which provide data on the amount of irrigated acres by crop type as reported by Interstate Stream Commission.

No records are available for the amount of water diverted or spilled each year from the Hogback, Cudei, Fruitland or Cambridge projects, or for historic yearly depletions by the projects prior to 1970. In addition to the documents that the State is producing in answer to Interrogatories Nos. 8 and 15 above, the State of New Mexico is producing the following reports:

(1) "Water Use by Categories in New Mexico Counties and River Basins, and Irrigated and Dry Cropland Acreage in 1975," New Mexico State Engineer Technical Report 41, prepared by Earl F. Sorenson and dated 1977;

(2) "Water Use by Categories in New Mexico Counties and River Basins, and Irrigated Acreage in 1980," New Mexico State Engineer Technical Report 44, prepared by Earl F. Sorenson in cooperation with the US Geological Survey and dated 1982;

(3) "Water Use in New Mexico in 1985," New Mexico State Engineer Technical

Report 46, prepared by Brian Wilson and dated November 1986;

(4) "Water Use by Categories in New Mexico Counties and River Basins, and Irrigated Acreage in 1990," New Mexico State Engineer Technical Report 47, prepared by Brian Wilson and dated July 1992; and

(5) "Water Use by Categories in New Mexico Counties and River Basins, and Irrigated Acreage in 1995," New Mexico State Engineer Technical Report 49, prepared by Brian Wilson and Anthony Lucero, and dated September 1997.

The State also is producing the following Interstate Stream Commission memoranda, along with associated backup data:

(1) "Upper Colorado River System – Consumptive Uses and Losses Report (New Mexico), 1986-90," prepared by Patricia Turney and dated October 28, 1992;

(2) "Upper Colorado River System – Consumptive Uses and Losses Report (New Mexico), 1991-95," prepared by John Whipple and Patricia Turney, and dated March 23, 1998; and

(3) "Upper Colorado River System – Consumptive Uses and Losses Report (New Mexico), 1996-2000," prepared by Clare Bernero, Jay Groseclose, Pat Turney and John Whipple, and dated September 17, 2003.

INTERROGATORY NO. 18: Please identify each and every past, present, and/or proposed federal and/or Indian water contract relating to the waters of the San Juan River Basin in New Mexico. Regarding each such contract, please state: the title (including any identifying numbers or nomenclature); the parties; the date of execution; the term; whether such contract is currently in effect, or has been terminated; any associations with any federal and/or Indian projects; the purpose (storage of water, delivery of water, sale or lease of water, etc.); the amount of water involved; who owns the water rights associated with the water involved; how such water rights were acquired; and how and when such contract was authorized by the federal government, State of New Mexico and/or Indian tribe.

ANSWER: Contracts for water from federal reclamation projects are between the United States and the party contracting for the water. The authorities of the United States to enter into contracts for reclamation project water supplies are provided by federal law, and the State of New Mexico, while it may provide review or input into such contracts through the Interstate Stream Commission, does not approve or authorize such contracts. In response to this request, the United States is providing information regarding past and present federal water project contracts.

In addition to federal legislation authorizing the US Bureau of Reclamation or the US Bureau of Indian Affairs to construct water projects in the basin for uses in New Mexico, the United States has certain rights to develop reclamation projects in the San Juan River Basin to supply water for uses in New Mexico pursuant to: (1) OSE File No. 2847 for the San Juan-Chama Project, under which water is diverted from the basin for Indian and non-Indian water uses in the Rio Grande Basin; (2) OSE File No. 2848 for uses on the Hammond Irrigation Project; (3) OSE File No. 2849 for the Navajo Project; (4) OSE File No. 2873 for Navajo Reservoir evaporation; (5) OSE File No. 2883 for uses under the Animas-La Plata Project; (6) OSE File No. 2917 for municipal, industrial

and domestic uses from Navajo Reservoir; and (7) OSE File No. 3215 for water originating below Navajo Reservoir to supplement the delivery of water from Navajo Reservoir to contractors diverting below the dam. The contractors for water from these reclamation projects generally need State Engineer approval of permits to establish or change points of diversion from which they take delivery of project water. Copies of permits, permit applications, notices of intent to appropriate, and related documents are available to the public through the New Mexico Water Rights Reporting System at the Office of the State Engineer web site. In addition, the United States acquired decreed water rights in New Mexico for irrigation from the San Juan River and the Pine River in connection with the construction of Navajo Reservoir, and has constructed works for irrigation on lands held by the United States in trust on behalf of the Navajo Nation.

INTERROGATORY NO. 19: Please identify with specificity the standard by which you contend federal reserved water rights for Indian Tribes should be determined (Practically Irrigable Acreage, minimal needs, etc.), and the bases for such standard. Specifically, please state whether you contend that the concept of federal reserved rights includes water for future uses, and whether federal reserved water rights can be lost by nonuse, and the bases for such contentions.

ANSWER: The State of New Mexico's position on this matter, along with the bases for its position, is set forth in the "State of New Mexico's Statement of Legal and Factual Bases for Settlement," filed with the Court in the San Juan River Adjudication on April 12, 2012. See also the State's answer to Interrogatory No. 10(G) above.

INTERROGATORY NO. 20: Please identify with specificity those portions of the water uses of the Navajo Settlement and Proposed Decrees that you contend should be regarded as federal reserved water rights, and the bases for such contention.

ANSWER: Federal reserved water rights for Navajo Nation uses in New Mexico that are proposed by the San Juan River Basin in New Mexico Navajo Nation Water Rights Settlement Agreement include the rights described by paragraphs 3 and 7(a) of the proposed Partial Final Judgment and Decree of the Water Rights of the Navajo Nation and paragraph 3 of the proposed Supplemental Partial Final Judgment and Decree of the Water Rights of the Navajo Nation. See the State of New Mexico's answer to Interrogatory No. 19 above.

INTERROGATORY NO. 21: Regarding the existing, historic and/or future water uses of the Navajo Nation and/or the Navajo people, please identify any water rights associated with such uses and how and when such water rights were acquired (other than by virtue of the subject Navajo Settlement and/or Proposed Decrees). If you contend that any of such uses were authorized in some manner other than by the acquisition of water rights for such uses; please identify how and when such water uses were authorized.

ANSWER: The Navajo Nation's historic and future uses of water for the Navajo

Indian Irrigation Project were authorized pursuant to OSE File No. 2849 and the Act of June 13, 1962 (Public Law 87-483). The Navajo Nation's future uses of water from its Animas-La Plata Project water allocation were authorized pursuant to OSE File No. 2883 and the Colorado Ute Settlement Act Amendments of 2000 (Public Law 106-554, Appendix D, Title III). See also "State of New Mexico's Statement of Legal and Factual Bases for Settlement," filed with the Court in the San Juan River Adjudication on April 12, 2012. The State will also produce the Technical Assessment.

Some of the historic water uses from the San Juan River were associated with State Engineer permits or licenses as follows: (1) OSE File No. 758 for diversion of water for the Hogback Irrigation Project; (2) OSE File No. 2472, 2807 and 2875 for industrial uses; and (3) OSE File No. 2838 for thermal electric power generation, including related coal mining, at the Four Corners Power Plant. Under the San Juan River Basin in New Mexico Navajo Nation Water Rights Settlement Agreement, any rights associated with Permit Nos. 758, 2472, 2807 and 2875 will be cancelled. Under the Settlement Agreement, the Navajo Nation will have no water rights associated with uses at the Four Corners Power Plant or Navajo Mine, as BHP-Navajo Coal Company retains full ownership interest in OSE File No. 2838.

INTERROGATORY NO. 24: Please state with specificity, and explain, any agreements or understandings between the Navajo Nation and the State of New Mexico, or any agency or subdivision of the State of New Mexico, whereby any water rights transfers between third parties would be opposed, or in any manner impeded or discouraged, by the State of New Mexico, or any agency or subdivision of the State, in order to protect any interests of the Navajo Nation.

ANSWER: The State of New Mexico is not aware of any such agreements between the Navajo Nation and any State agency or political subdivision.

INTERROGATORY NO. 25: Please state the amount by which the water rights to be granted to the Navajo Nation pursuant to the subject Navajo Settlement Agreement and Proposed Decrees exceeds the actual current water uses of the Navajo Nation ("excess water"). Regarding such excess water, please state how the Navajo Nation intends to use such water, and the anticipated timetable for putting such water to use in the future. Further, please state with specificity the anticipated purpose and amount of each such use of such excess water.

ANSWER: For current amounts of water use by the Navajo Nation, see the documents that the State of New Mexico is providing in its answer to Interrogatories Nos. 8 and 15 above. A comparison of the water rights described by the proposed Partial Final Judgment and Decree of the Water Rights of the Navajo Nation to historic water uses by the Navajo Nation is provided in the Technical Assessment. A comparison of the water rights described by the proposed Supplemental Partial Final Judgment and Decree of the Water Rights of the Navajo Nation to historic water uses

by the Navajo Nation is provided in “Quantification Analysis for the Proposed Supplemental Partial Final Judgment and Decree of the Water Rights of the Navajo Nation,” prepared by John Whipple and dated April 2, 2012. The purposes and amounts of the water rights are described by the proposed decrees.

INTERROGATORY NO. 26: Please state whether, the Navajo Nation intends to market such excess water to third parties (either within or without the San Juan River Basin in New Mexico). If so, please state with specificity the Navajo Nation’s intentions regarding the marketing of such water, including, but not limited to: to whom does the Navajo Nation intend to market such water; the amounts anticipated to be marketed to each such water user; the anticipated timing of the marketing of such water; and the terms anticipated to be sought by the Navajo Nation regarding the marketing of such water.

ANSWER: The State of New Mexico has no knowledge of the Navajo Nation’s intentions at this time to subcontract water or lease water rights to other parties.

INTERROGATORY NO. 28: I understand that Settling Parties have contended that the Navajo Settlement and/or Proposed Decrees reduce the likelihood of water shortages within the San Juan River Basin in New Mexico from once in every two years to once in every 25 years. If I have misstated such contention, please explain what your contention actually is in that regard. Further, please explain your bases for such contention. In particular, please explain the bases for your contention that (with or without the Navajo Settlement) a shortage is likely once in every two years.

ANSWER: The Settling Parties have contended that the provisions of subparagraphs 9.1 and 9.2 of the San Juan River Basin in New Mexico Navajo Nation Water Rights Settlement Agreement may reduce the likelihood of priority calls by the Navajo Nation, not the likelihood of shortages, from once in every two years potentially to once in every 20 years, on average. The Interstate Stream Commission conducted a study, based on historic hydrology, of the potential effects of these provisions on the frequency of possible priority calls in the basin if: (1) the Navajo Nation in the future has a need to divert 325 cfs on each day during the irrigation season to meet its beneficial use demands under the reserved water rights described in subparagraphs 3(d), 3(e) and 3(f) of the proposed Partial Final Judgment and Decree of the Water Rights of the Navajo Nation; and (2) the State Engineer in the future administers water rights on the San Juan River system in New Mexico in accordance with State law and the provisions of section 11 of the Act of June 13, 1962 (Public Law 87-483). The assumptions and results of this study are summarized in the following document which was released to the public in 2004: “Responses to Public Comments Received on Drafts of the San Juan River Basin in New Mexico Navajo Nation Water Rights Settlement,” prepared by John Whipple and dated December 10, 2004, Appendix D). See also the Technical Assessment.

The results of this study suggest that if all water rights were fully exercised on the river there may be a priority call for some period of time, most likely in late summer to early fall, ranging from a few weeks to months, in approximately 50 percent of the years. In most of these years, the amount of water that would be required to be provided to the Hogback and Fruitland projects from the Navajo Indian Irrigation Project water supply in accordance with the alternate water supply provisions of subparagraph 9.2 of the Settlement Agreement would be sufficient to avoid the occurrence of a priority call during the year. With the alternate water supply provision, it was estimated that if all water rights were fully exercised on the river there may be a priority call in about 5 percent of the years.

The potential for priority calls also would be reduced if project diversion requirements were enforced on all irrigation ditches on the San Juan River stream system,. It is anticipated that the State Engineer will use a public process to promulgate rules and regulations for active water resource administration in the San Juan River Basin in New Mexico that will address matters relating to priority administration on the river. Also, provision 9.4 of the Settlement Agreement provides that nothing in the Settlement Agreement prohibits the Navajo Nation from participating with water users in cooperative agreements for the sharing of water supplies in the San Juan River Basin.

INTERROGATORY NO. 30: Please identify with specificity any agreements whereby any individual or entity has agreed to support the Navajo Settlement. Regarding each such agreement, please state: the title (including any identifying numbers or nomenclature); the parties; the date of execution; the term; whether such agreement is currently in effect, or has been terminated; the purpose; the remuneration or other consideration involved; and how and when such agreement was authorized by the federal government, State of New Mexico and/or Indian tribe.

ANSWER: Under the “Agreement Among the State of New Mexico, the City of Farmington and the Navajo Nation,” executed by the State Engineer on March 11, 2005 (hereafter, the “Farmington Agreement”), the State Engineer agreed to terms for a proposed consent order that will be filed with the Court in the San Juan River Adjudication to determine certain of the City of Farmington’s water rights from the Animas River and the San Juan River. Under the Farmington Agreement, the Navajo Nation agreed not to challenge the terms of said consent order, and the City of Farmington agreed to support the San Juan River Basin in New Mexico Navajo Nation Water Rights Settlement Agreement. The Farmington Agreement remains in effect, and the State is producing the agreement.

Also, the Resolution of the Upper Colorado River Commission Regarding the Availability of Water from Navajo Reservoir for Navajo Nation Uses within the State of New Mexico," adopted by the Upper Colorado River Commission on June 5, 2006, expressed the Upper Colorado River Commission's support for Congressional action to: (1) approve the Settlement Agreement; (2) authorize the NGWSP; and (3) approve the Navajo Nation's

settlement contract. The resolution also expressed the Commission's support for a determination by the Secretary of the Interior that at least 5.76 million acre-feet of water is available annually for consumptive use by the Upper Basin exclusive of shared CRSP reservoir evaporation. The resolution is attached to the 2007 Hydrologic Determination as Appendix E.

INTERROGATORY NO. 31: It appears that the Navajo Settlement and Proposed Decrees incorporate, or assume, that the concept of "Direct Flow" will be utilized with respect to the administration of the waters of the San Juan River Basin in New Mexico. Please explain the concept of "Direct Flow," and the bases for such concept.

ANSWER: Direct flow water is all the flow of a stream, including storage reservoir inflows that are legally bypassed through that reservoir, but excluding sources of flow augmentation such as storage water releases or imported water. See the Active Water Resource Management Rules and Regulations, available at the Office of the State Engineer website at <http://www.ose.state.nm.us/doing-business/ActiveWaterMgt/ActiveWaterMgt-2004-12-28.pdf>

INTERROGATORY NO. 32: Please identify with specificity any existing and/or historic agreements to share water shortages between and/or among water users within the San Juan River Basin in New Mexico. Regarding each such agreement, please state: the title (including any identifying numbers or nomenclature); the parties; the date of execution; the term; whether such agreement is currently in effect, or has been terminated; any associations with any federal and/or Indian projects; the purpose; the amount of water involved; the remuneration or other consideration involved; and how and when such agreement was authorized by the federal government, State of New Mexico and/or Indian tribe.

ANSWER: The sharing of shortages in the Navajo Reservoir water supply between and among the San Juan-Chama Project, the Navajo Indian Irrigation Project and other Navajo Reservoir water supply contractors is required by section 11 of the Act of June 13, 1962 (Public Law 87-483). Beginning in 2003, major water users on the San Juan River have entered into cooperative agreements to share in the water supplies available to them, which agreements include diversion limits agreed to by the parties for the term of each agreement and a process for sharing in any shortages to the San Juan River stream system among themselves. The purpose of the agreements essentially was to avoid possible litigation over water rights and water rights administration during an occurrence of a water shortage, if any, to the San Juan River system while allowing other processes to move forward for determining water rights on the river system and for developing Active Water Resources Administration in the basin. The terms of each agreement, including conditions and disclaimers, are as described in each of the following agreements: (1) Recommendations for San Juan River Operations and Administration for 2003; (2) Recommendations for San Juan River Operations and Administration for 2004; (3) Recommendations for San Juan River Operations and

Administration for 2005; (4) Recommendations for San Juan River Operations and Administration for 2006; (5) Recommendations for San Juan River Operations and Administration for 2007 and 2008; and (6) Recommendations for San Juan River Operations and Administration for 2009 through 2012. Each of these agreements include the recommendations document listed herein, associated “Endorsement and Agreement” documents for each endorsing party to the agreement, and letters from the Bureau of Reclamation and the State Engineer accepting the recommendations. The State of New Mexico is producing these agreements.

INTERROGATORY NO. 34: Please identify the federal storage facilities relating to the San Juan River Basin in New Mexico. Regarding each such facility, please state: the maximum capacity of each such storage facility; the specific contracts (and amounts of water) for the storage of water in, and the delivery of water from such facility. In particular, please state that maximum storage capacity of Navajo Reservoir, the elevation of the spillway, the elevation of the NIIP diversion structure, the capacity of Navajo Reservoir below the NIIP diversion structure, the minimum elevation of the water level of Navajo Reservoir below which it is not possible to release water from the reservoir; and the capacity of water in Navajo Reservoir below the minimum elevation below which it is not possible to release water from the Reservoir (dead pool).

ANSWER: The federal storage facilities that store and regulate San Juan River Basin water for reclamation projects in New Mexico are: (1) Navajo Reservoir on the San Juan River near Archuleta, New Mexico, which stores water for delivery and use on the Navajo Indian Irrigation Project and other Navajo Reservoir supply contract uses; (2) Cutter Reservoir on the NIIP canal, which stores water for delivery to the NIIP and the Navajo Gallup Water Supply Project; (3) Lake Nighthorse in Colorado which stores water diverted from the Animas River near Durango for delivery and use by Animas-La Plata Project contractors in Colorado and New Mexico; and (4) Heron Reservoir on Willow Creek in the Rio Grande Basin in New Mexico, which stores San Juan-Chama Project water exported from the San Juan River Basin for delivery and use by project contractors. Based on the area-capacity table for Navajo Reservoir used by Reclamation in its reservoir operations studies, the live storage capacity of Navajo Reservoir exclusive of dead storage is approximately 1,701,300 acre-feet at the spillway crest elevation of 6085 feet. The sill elevation for the Navajo Indian Irrigation Project Canal is 5975 feet, and the top of the operational inactive pool needed for making project diversions into the canal is at elevation 5990 feet, which corresponds to a live capacity of about 661,800 acre-feet. The Navajo Dam outlet works to the San Juan River are at elevation 5775 feet, below which there is no live storage and other area-capacity tables for Navajo Reservoir indicate dead storage in the amount of approximately 10,000 acre-feet. The United States has information regarding (1) reservoir statistics for Lake Nighthorse and Heron Reservoir; and (2) a listing of all water contracts, including subcontracts, entered in relation to the Navajo Reservoir water supply, the San Juan-Chama Project, and the Animas La-Plata Project.

Other storage facilities storing water from ephemeral tributaries on Navajo Nation trust lands are described in the Quantification Analysis.

REQUESTS FOR PRODUCTION OF DOCUMENTS

REQUEST NO. 1: Please provide all documents or tangible things that you intend to introduce at the trial of this matter.

RESPONSE: The State of New Mexico has not yet identified its exhibits and will supplement its answer as information is available.

REQUEST NO. 2: With respect to each expert witness whom you intend to call, or may call, to testify at trial in this matter, please provide a curriculum vitae, and please provide all information, documents and/or data that relate to the facts and opinions to which each expert is expected to testify.

RESPONSE: The State of New Mexico identifies the following experts who may testify at trial in this case:

1. John Whipple may testify in this case as both an expert and fact witness. He is a subcontractor to the Office of the State Engineer, and is under contract with the Sheehan & Sheehan Law Firm. Mr. Whipple worked for the New Mexico Office of the State Engineer/Interstate Stream Commission from 1985-2010 and retired from the Interstate Stream Commission at the end of December 2010 as the Basin Manager, Colorado/San Juan Basin. Mr. Whipple directly participated in the negotiation of the San Juan River Basin in New Mexico Navajo Nation Water Rights Settlement Agreement. He has not authored any publications, but has prepared numerous letters, memoranda, reports and other documents, some relating to the Settlement Agreement and some not, over the course of the past ten years.

It is anticipated that Mr. Whipple will testify as to technical matters associated with the Settlement Agreement, including as to information and analyses that he presented, prepared or directly participated in developing in furtherance of the Settlement Agreement. Such matters include the bases for the proposed Partial Final Judgment and Decree of the Water Rights of the Navajo Nation and the proposed Supplemental Partial Final Judgment and Decree of the Water Rights of the Navajo Nation. He also may testify as to the process for developing portions of the Settlement Agreement.

The State of New Mexico is producing unprivileged documents which were prepared by Mr. Whipple and that are relevant to the Settlement Agreement and this case. It is anticipated that the documents produced will provide the substance of the facts and opinions to which he may testify.

The reports prepared by Mr. Whipple for this litigation are being produced pursuant to the procedures required by the Court.

2. Jim McNees may testify in this case as both an expert and fact witness. He is the current Bureau Chief, Hydrographic Survey Bureau, Litigation and Adjudication

Program, Office of the State Engineer.

It is anticipated that Mr. McNees will testify as to certain information and analyses that he prepared for inclusion in the "Quantification Analysis for the Proposed Supplemental Partial Final Judgment and Decree of the Water Rights of the Navajo Nation," prepared by John Whipple and filed with the Court on April 2, 2012.

The State of New Mexico is producing unprivileged documents which were prepared by Mr. McNees and that are relevant to the proposed Supplemental Partial Final Judgment and Decree of the Water Rights of the Navajo Nation. It is anticipated that the documents produced will provide the substance of the facts and opinions to which he may testify.

The reports prepared by Mr. McNees for this litigation are being produced pursuant to the procedures required by the Court.

REQUEST NO. 3: Please provide all information, documents and/or data that relate to the amount of surface water supply available within the State of New Mexico in the San Juan River Basin, and the source of such water supply. Specifically, regarding the availability and source of such water, please provide all information, documents and/or data that relate to:

- A. The amount of precipitation and water flowing in the rivers and streams.
- B. The limitations or restrictions placed upon the use of such water in New Mexico (in particular with respect to the use of water from the Animas River, and the San Juan River below Navajo Dam) pursuant to:
 1. The Colorado River Compact;
 2. Upper Colorado River Basin Compact;
 3. The Arizona v. California U.S. Supreme Court decisions;
 4. The Colorado River Interim Surplus Criteria;
 5. The Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead, and agreements related thereto;
 6. All Bureau of Reclamation Hydrologic Determinations prepared with respect to the San Juan River Basin in New Mexico;
 7. All Depletion Schedules prepared with respect to the San Juan River Basin in New Mexico;
 8. Any requirements that New Mexico's share of the use of water in the San Juan River Basin is reduced or limited to provide for a portion of the evaporation losses at Lake Powell;
 9. Other Law of the Colorado River considerations;
 10. The La Plata River Compact (New Mexico/Colorado);
 11. Federal Project Operating limitations or considerations;
 - a. Navajo Reservoir Operations - (Re-operation of Navajo Dam);
 - b. Animas-La Plata Operations;
 - c. San Juan-Chama Project;
 - d. Navajo Indian Irrigation Project;
 12. In-stream/conservation/environmental flow limitations/considerations;

a. Endangered species limitations/considerations.

RESPONSE: In addition to any responsive documents in the State's Initial Disclosures, the State is producing other summary water supply records that may exist at the Office of the State Engineer and Interstate Stream Commission.

REQUEST NO. 4: Please provide all information, documents and/or data that relate to the amount of surface water supply available within the State of New Mexico in the San Juan River Basin that is not included within the flows of the major streams (the precipitation amounts, or spring flows that are intercepted and used before flowing into major streams), and the source and location of such surface water supply. Further, please provide all information, documents and/or data that relate to the issue of whether the use of such surface water supply in New Mexico is included within the calculation of water supply available for use within New Mexico pursuant to the applicable interstate Compacts (counted against New Mexico's Compact share), or otherwise subject to the limitations and/or restrictions described above.

RESPONSE: In addition to any responsive documents in the State's Initial Disclosures, the State is producing other summary water supply records that may exist at the Office of the State Engineer and Interstate Stream Commission.

REQUEST NO. 5: Please provide all information, documents and/or data that relate to the amount of ground water supply available within the State of New Mexico in the San Juan River Basin, and the source and location of such ground water supply. Further, please provide all information, documents and/or data that relate to the issue of whether the use of such ground water supply in New Mexico is included within the calculation of water supply available for use within New Mexico pursuant to the applicable interstate Compacts (counted against New Mexico's Compact share), or otherwise subject to the limitations and/or restrictions described above.

RESPONSE: Pursuant to the Court's July 24, 2012 Order, the State of New Mexico is producing responsive studies and records within its control.

REQUEST NO. 6: Please provide all information, documents and/or data that relate to the amount of water currently being used in the San Juan River Basin in the State of New Mexico, in terms of both diversion amounts and depletion (consumptive use) amounts. Regarding such water use, please provide a breakdown by: type of use (municipal, industrial, irrigation, domestic, etc.); and source of water supply. Further, please provide all information, documents and/or data that relate to which water uses are associated with specific federal projects and/or federal contracts. Further, please provide all information, documents and/or data that relate to which water uses are Indian uses, in particular water uses associated with the Navajo Nation, or Navajo Indians.

RESPONSE: Pursuant to the Court’s July 24, 2012 Order, the State of New Mexico is producing the “State of New Mexico Schedule of Anticipated Upper Basin Depletions,” prepared by the Interstate Stream Commission and dated May 2006 (2006 Depletion Schedule), and other summaries concerning the water supply. In addition, the State is producing:

(1) an Interstate Stream Commission staff Memorandum to File from Pat Turney and John Whipple on “Consumptive Uses in the San Juan River Basin in New Mexico, 2001 through 2005 – revised from the November 20, 2006 report to correct Navajo Reservoir evaporation,” dated December 5, 2007;

(2) a report entitled “Water Use by Categories in New Mexico Counties and River Basins, and Irrigated Acreage in 2000,” New Mexico Office of the State Engineer Technical Report 51, prepared by Brian Wilson, Anthony Lucero, John Romero and Patrick Romero, and dated February 2003; and

(3) a report entitled “New Mexico Water Use by Categories 2005,” New Mexico Office of the State Engineer Technical Report 52, prepared by John Longworth, Julie Valdez, Molly Magnuson, Elisa Sims Albury and Jerry Keller, and dated June 2008.

REQUEST NO. 7: The UNITED STATES’ HYDROGRAPHIC SURVEY OF NAVAJO LANDS WITHIN THE SAN JUAN RIVER BASIN, filed in the present matter on January 3, 2011, (“Hydrographic Survey”), was purported to represent a description of “existing and historic” water uses. Please provide all information, documents and/or data that relate to and/or tend to explain which water uses represented in the subject Hydrographic survey should be considered “existing” water uses, and which should be considered “historic” water uses. Further, please provide all information, documents and/or data that relate to and/or tend to demonstrate the date each use of water represented in the subject Hydrographic Survey was first put to beneficial use. Further, please provide all information, documents and/or data that relate to any authority that should be considered with respect to the establishment of a priority date for each use of water represented in the subject Hydrographic Survey.

RESPONSE: The State is producing the “Technical Assessment of the San Juan River Basin in New Mexico Navajo Nation Water Rights Settlement.

REQUEST NO. 8: Regarding the subject Hydrographic Survey, please provide all information, documents and/or data that relate to the identification of which lands should be considered:

- 1) Lands held in trust for the Navajo Nation by the United States;
- 2) Lands held in trust for members of the Navajo Nation by the United States;
- 3) Lands owned by members of the Navajo Nation subject to restraint on alienation imposed pursuant to federal law;
- 4) Lands held in fee ownership by the Navajo Nation;
- 5) Navajo Reservation; and
- 6) Any other lands with respect to which water uses should be considered with

respect to the Navajo Nation and/or the Navajo people.

RESPONSE: The State of New Mexico did not prepare the United States' Hydrographic Survey, but notes that maps provided in Appendices B and E of the Hydrographic Survey indicate land ownership status.

REQUEST NO. 9: Please provide all information, documents and/or data that relate to the evolution (expansion and/or contraction, and time line) of the Navajo Reservation and/or the designation in the present matter of lands identified as "Navajo Lands." Specifically, please provide maps depicting the boundaries and acreage of the original Navajo Reservation, and each expansion and/or contraction of the Navajo Reservation and/or Navajo Lands, and the authority for each such expansion and/or contraction and/or designation of lands as Navajo Reservation and/or Navajo Lands.

RESPONSE: Pursuant to the Court's July 24, 2012 Order, the Navajo Nation will respond to this Request with information within its control.

REQUEST NO. 11: Please provide all information, documents and/or data that relate to:

A. The determination that the waters of the San Juan Basin in New Mexico have been fully appropriated;

B. The bases for the determination that the waters of the San Juan Basin have been fully appropriated;

RESPONSE: Water rights records for the San Juan River Basin in New Mexico, including copies of licenses, permits, permit applications, notices of intent to appropriate, and related documents are available to the public through the New Mexico Water Rights Reporting System at the Office of the State Engineer web site at <http://nmwrrs.ose.state.nm.us/nmwrrs/index.html>. The Echo Ditch Decree also is available at the Office of the State Engineer web site at http://www.ose.state.nm.us/legal_ose_hydro_san-juan_adjudication.html, and was filed with the Court in the San Juan River Adjudication. Also, records of water rights in this adjudication, including consent orders entered in the La Plata Section and the the Partial Final Judgment and Decree of the Jicarilla Apache Tribe, can be found in the court records. In addition, the State of New Mexico is producing a tabulation entitled: "San Juan Basin, Water Right Applications and Notices of Intention Since San Juan Decree No. 0169, Updated 12/9/98." Regarding current uses and federal project uses, see the State of New Mexico's answer to Interrogatory No. 8 above.

REQUEST NO. 12: Regarding: the Navajo Indian Irrigation Project ("NIIP") and/or Navajo Agricultural Products Industry ("NAPI"); the Fruitland/Cambridge Irrigation Project; and the Hogback/Cudei Irrigation Project, please provide all information, documents and/or data that

relate to:

- A. The total amount of acres planned to be irrigated for each Project;
- B. The total amount of acres irrigated each year for each Project since the inception of each Project;
- C. The total acreage for each specific crop grown each year for each Project since the inception of each Project;
- D. The total amount of each specific crop harvested each year for each Project since the inception of each Project;
- E. The total amount of water diverted each year for each Project since the inception of each Project;
- F. The total amount of water consumed each year for each Project since the inception of each Project; and
- G. The total amount of water spilled each year by each Project since the inception of each Project.

RESPONSE:

Navajo Indian Irrigation Project: Keller-Bliesner Engineering, LLC, prepared analyses of historic annual water use by the Navajo Indian Irrigation Project for the years 1976-2010, including acres irrigated by crop type and conservation reserve acres irrigated only to maintain natural grass cover, as described in the following reports:

- (1) "Navajo Indian Irrigation Project Biological Assessment," prepared by Keller-Bliesner Engineering and Ecosystems Research Institute, Inc., and dated June 11, 1999 ;
- (2) "Navajo Indian Irrigation Project 2006 Irrigation and Drainage Analysis," dated September 12, 2008;
- (3) "Final Water Use Numbers for NIIP, 2007-2008," undated; and
- (4) "Navajo Indian Irrigation Project Irrigation and Drainage 2009-2010 Analysis," dated November 9, 2011.

Hogback-Cudei Irrigation Project:

- (1) a report by Herbert V. Clotts, dated June 30, 1943;
- (2) annual crop reports for the Hogback and Cudei projects that were prepared by the US Bureau of Indian Affairs for many of the years within the period 1936-1959,;
- (3) annual Irrigation Land Data reports prepared by the US Bureau of Indian Affairs for the years 1963-1968;
- (4) a field survey of irrigated crops under the Hogback and Cudei projects made in 1994, conducted by the Interstate Stream Commission in cooperation with the US Bureau of Reclamation for Reclamation's 1994 San Juan Basin Water-Related Land Use Inventory for New Mexico; and
- (5) field surveys of irrigated crops under the Hogback and Cudei projects made in 2000 and 2003-2010, conducted by the Interstate Stream Commission with cooperation from the Navajo Nation.

Fruitland-Cambridge Irrigation Project:

- (1) annual crop reports for the Fruitland and Cambridge projects that were prepared

by the US Bureau of Indian Affairs for many of the years within the period 1936-1959;

(2) annual Irrigation Land Data reports prepared by the US Bureau of Indian Affairs for the years 1963-1968;

(3) a field survey of irrigated crops under the Fruitland and Cambridge projects made in 1994, conducted by the Interstate Stream Commission in cooperation with the US Bureau of Reclamation for Reclamation's 1994 San Juan Basin Water-Related Land Use Inventory for New Mexico; and

(4) field surveys of irrigated crops under the Fruitland and Cambridge projects made in 2000 and 2003-2010, conducted by the Interstate Stream Commission with cooperation from the Navajo Nation.

In addition to the documents that the State is producing in response to Request No. 6 above, the State of New Mexico is producing the following reports:

(1) "Water Use by Categories in New Mexico Counties and River Basins, and Irrigated and Dry Cropland Acreage in 1975," New Mexico State Engineer Technical Report 41, prepared by Earl F. Sorenson and dated 1977;

(2) "Water Use by Categories in New Mexico Counties and River Basins, and Irrigated Acreage in 1980," New Mexico State Engineer Technical Report 44, prepared by Earl F. Sorenson in cooperation with the US Geological Survey and dated 1982;

(3) "Water Use in New Mexico in 1985," New Mexico State Engineer Technical Report 46, prepared by Brian Wilson and dated November 1986;

(4) "Water Use by Categories in New Mexico Counties and River Basins, and Irrigated Acreage in 1990," New Mexico State Engineer Technical Report 47, prepared by Brian Wilson and dated July 1992; and

(5) "Water Use by Categories in New Mexico Counties and River Basins, and Irrigated Acreage in 1995," New Mexico State Engineer Technical Report 49, prepared by Brian Wilson and Anthony Lucero, and dated September 1997.

The State also is producing the following Interstate Stream Commission memoranda, along with associated backup data:

(1) "Upper Colorado River System – Consumptive Uses and Losses Report (New Mexico), 1986-90," prepared by Patricia Turney and dated October 28, 1992;

(2) "Upper Colorado River System – Consumptive Uses and Losses Report (New Mexico), 1991-95," prepared by John Whipple and Patricia Turney, and dated March 23, 1998; and

(3) "Upper Colorado River System – Consumptive Uses and Losses Report (New Mexico), 1996-2000," prepared by Clare Bernero, Jay Groseclose, Pat Turney and John Whipple, and dated September 17, 2003.

REQUEST NO. 13: Please provide all information, documents and/or data that relate to each and every past, present, and/or proposed federal and/or Indian water contract relating to the waters of the San Juan River Basin in New Mexico. Regarding each such contract, please provide all information, documents and/or data that relate to: the title (including any identifying numbers or nomenclature); the parties; the date of execution; the term; whether such contract is currently in effect, or has been terminated; any associations with any federal and/or Indian

projects; the purpose (storage of water, delivery of water, sale or lease of water, etc.); the amount of water involved; who owns the water rights associated with the water involved; how such water rights were acquired; and how and when such contract was authorized by the federal government, State of New Mexico and/or Indian tribe.

RESPONSE:Information regarding past and present federal water project contracts is within the custody and control of the United States.

REQUEST NO. 14: Please provide all information, documents and/or data that relate to the standard by which you contend federal reserved water rights should be determined (Practically Irrigable Acreage, minimal needs, etc.), and the bases for such standard. Further, please provide all information, documents and/or data that relate to the bases for any contention you may have that the concept of federal reserved rights includes water for future uses, and the concept that federal reserved water rights can be lost by nonuse.

RESPONSE:The State of New Mexico has produced the “State of New Mexico’s Statement of Legal and Factual Bases for Settlement,” filed with the Court in the San Juan River Adjudication on April 12, 2012, and is producing the “Technical Assessment of the San Juan River Basin in New Mexico Navajo Nation Water Rights Settlement. See also the State’s answer to Interrogatory No. 10(G) above.

In addition, the standard for determining federal reserved water rights has been established in *Winters v. U.S.*, 07 U.S. 564 (1908) and its progeny, including *Arizona v. California*, 373 U.S. 546 (1963). See also Beck, *Waters and Water Rights*, § 37.01(c); *New Mexico v. Lewis*, 861 P.2d 235, 238 (Ct. App. 1993); *In re General Adjudication of Gila River System*, 35 P.3d 68 (Ariz. 2001).

REQUEST NO. 15: Please provide all information, documents and/or data that relate to the bases for your contention that any portion of the water uses of the Navajo Settlement and Proposed Decrees should be regarded as federal reserved water rights.

RESPONSE: In addition to the Treaty between the United States of America and the Navajo Tribe of Indians concluded June 1, 1868 and subsequent laws regarding the Navajo Reservation, please see the State’s response to Request No. 14, above.

REQUEST NO. 16: Please provide all information, documents and/or data that relate to the acquisition of water rights with respect to any existing, historic and/or future water uses of the Navajo Nation and/or the Navajo people. If you contend that any of such uses were authorized in some manner other than by the acquisition of water rights for such uses; please provide all information, documents and/or data that relate to how and when such water uses were authorized.

RESPONSE: The State of New Mexico has produced the “State of New Mexico’s Statement of Legal and Factual Bases for Settlement,” filed with the Court in the San Juan River Adjudication on April 12, 2012. The State will also produce the Technical Assessment.

In addition, OSE File Nos. 2849, 2883, 758, 2472, 2807, 2838, 2807, and 2875 are available to the public through the New Mexico Water Rights Reporting System at the Office of the State Engineer web site at <http://nmwrrs.ose.state.nm.us/nmwrrs/index.html>.

REQUEST NO. 19: Please provide all information, documents, communications and/or data that relate to: any agreements or understandings between the Navajo Nation and the State of New Mexico, or any agency or subdivision of the State of New Mexico, whereby any water rights transfers between third parties would be opposed, or in any manner impeded or discouraged, by the State of New Mexico, or any agency or subdivision of the State, in order to protect any interests of the Navajo Nation.

RESPONSE: The State of New Mexico has no documents responsive to this request.

REQUEST NO. 20: Please provide all information, communications, documents and/or data that relate to: how the Navajo Nation intends to use its excess water; the anticipated timetable for putting such water to use in the future; and the anticipated purpose and amount of each such use of such excess water.

RESPONSE: The State of New Mexico has produced the “State of New Mexico’s Statement of Legal and Factual Bases for Settlement,” filed with the Court in the San Juan River Adjudication on April 12, 2012. The State will also produce the Technical Assessment.

REQUEST NO. 21: Please provide all information, communications, documents and/or data that relate to the consideration of the marketing of, and/or any attempts to market, the Navajo Nation’s excess water to third parties.

RESPONSE: The State of New Mexico has no documents responsive to this request.

REQUEST NO. 24: Please provide all information, documents and/or data that relate to the historic (since the creation of the Navajo Reservation, or before if available), currently existing, and estimated future populations of:

- A. Navajo Tribal members living:
 - 1. On the Navajo Reservation;

2. On Navajo Lands other than the Navajo Reservation;
 3. Elsewhere (other than the Navajo Reservation or Navajo Lands);
- B. Navajo allottees;
1. The total number of such allotments;
 2. The total acreage of such allotments;
 3. The total irrigated acreage associated with such allotments;
 4. The total water use associated with such allotments;
- C. Non-Navajo Tribal members living:
1. On the Navajo Reservation;
 2. On Navajo Lands other than the Navajo Reservation;
- D. The total number of people living within the San Juan River Basin in New Mexico -
by county;
- E. The total number of people using water from New Mexico's share of the waters of the San Juan River Basin.

RESPONSE: Pursuant to the Court's July 24, 2012 Order, the United States will respond to this Request with non-privileged information within its control.

REQUEST NO. 25: Please provide all information, documents and/or data that relate to your contention that the Navajo Settlement and/or Proposed Decrees reduce the likelihood of water shortages within the San Juan River Basin in New Mexico from once in every two years to once in every 25 years, and the bases for such contention. Further, please provide all information, documents and/or data that relate to your contention that (with or without the Navajo Settlement) a shortage is likely once in every two years.

RESPONSE: The State of New Mexico is producing the "Responses to Public Comments Received on Drafts of the San Juan River Basin in New Mexico Navajo Nation Water Rights Settlement," prepared by John Whipple and dated December 10, 2004, Appendix D), and the Technical Assessment.

REQUEST NO. 27: Please provide all information, documents and/or data that relate to any agreements whereby any individual or entity has agreed to support the Navajo Settlement.

RESPONSE: The State of New Mexico is producing the "Agreement Among the State of New Mexico, the City of Farmington and the Navajo Nation," executed by the State Engineer on March 11, 2005 and the "Resolution of the Upper Colorado River Commission Regarding the Availability of Water from Navajo Reservoir for Navajo Nation Uses within the State of New Mexico," adopted by the Upper Colorado River Commission on June 5, 2006

REQUEST NO. 28: Please provide all information, documents and/or data that relate to the concept of "Direct Flow," and the bases for such concept.

RESPONSE: The State of New Mexico is producing the Active Water Resource Management Rules and Regulations, available at the Office of the State Engineer website at <http://www.ose.state.nm.us/doing-business/ActiveWaterMgt/ActiveWaterMgt-2004-12-28.pdf>.

REQUEST NO. 29: Please provide all information, documents and/or data that relate to any existing and/or historic agreements to share water shortages, and/or to avoid potential water shortages, between and/or among water users within the San Juan River Basin in New Mexico. Further, please provide all information, documents and/or data that relate to the necessity for, and the bases of, such agreements. Further, please provide all information, documents and/or data that relate to the water use and/or irrigated acreage amounts used as the bases for such agreements, and/or the allocation of monetary compensation paid and/or to be paid for the forbearance of the use of water in an effort to avoid water shortages.

RESPONSE: The State of New Mexico is producing the following agreements:

- (1) Recommendations for San Juan River Operations and Administration for 2003;
- (2) Recommendations for San Juan River Operations and Administration for 2004;
- (3) Recommendations for San Juan River Operations and Administration for 2005;
- (4) Recommendations for San Juan River Operations and Administration for 2006;
- (5) Recommendations for San Juan River Operations and Administration for 2007 and 2008; and
- (6) Recommendations for San Juan River Operations and Administration for 2009 through 2012.

REQUEST NO. 31: Please provide all information, documents and/or data that relate to criteria, guidelines, goals, priorities, intent or schemes for the operation of each federal water storage and/or delivery facility relating to the waters of the San Juan River Basin in New Mexico (including the Animas-La Plat [*sic*] Project). (Including Environmental Impact Statements, Records of Decisions, Biological Opinions and agreements between government entities, water users, and/or environmental interest groups.) Further, please provide all information, documents and/or data that relate to how such federal facilities have actually been operated since the construction of Navajo Dam.

RESPONSE: Information, documents and/or data regarding criteria, guidelines, goals, priorities, intent or schemes for the operation of each federal water storage and/or delivery facility relating to the waters of the San Juan River Basin in New Mexico should be available at the Bureau of Reclamation Upper Colorado Region website at <http://www.usbr.gov/uc/>, including the Environmental Impact Statements, Records of Decisions, Biological Opinions, and operational data. Further information is available at the Fish and Wildlife Service San Juan Recovery Implementation Program website at <http://www.fws.gov/southwest/sjrip/>, including the program's flow recommendations for the San Juan River.

REQUEST NO. 33: Please provide all information, documents and/or data that relate to the

documents and/or information referred to in the [SETTLING PARTIES'] INITIAL DISCLOSURES, filed in the present matter on April 2, 2012. Further, please provide all information, documents and/or data that relate to the present and historic water use on the Navajo Nation.

RESPONSE: The State of New Mexico is producing the documents identified in its Initial Disclosures. See also all documents posted at the Document E-Repository.

Dated August 17, 2012

STATE OF NEW MEXICO

Handwritten signature of Arienne Singer, consisting of a stylized 'A' followed by a horizontal line.

Arienne Singer
Special Assistant Attorney General
New Mexico Office of the State Engineer
P.O. Box 25102
Santa Fe, NM 87504-5102
(505) 827-6150

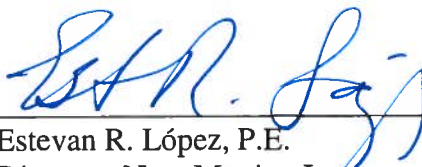
Handwritten signature of John W. Utton, written in cursive.

John W. Utton
Special Assistant Attorney General
Sheehan & Sheehan, P.A
Post Office Box 271
Albuquerque, New Mexico 87103
(505)247-0411

VERIFICATION BY CERTIFICATION

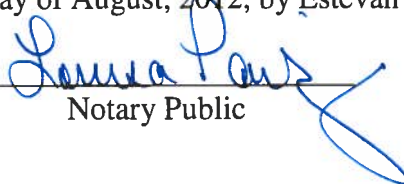
Estevan R. López, P.E. states that he is the Director of the New Mexico Interstate Stream Commission and Deputy State Engineer of the State of New Mexico, a named party in this action, and that he is the authorized agent for the purpose of executing this document on behalf of the State of New Mexico; that while he does not have personal knowledge of all facts recited in the *State of New Mexico's Responses to Gary L. Horner's First Set of Interrogatories and First Requests for Production of Documents to the State of New Mexico*, the information contained therein has been collected and made available to him by counsel and employees of the Office of the State Engineer, and the *State of New Mexico's Responses to Gary L. Horner's First Set of Interrogatories and First Requests for Production of Documents to the State of New Mexico* are true to the best of his knowledge and belief, based upon the information made available to him.

Accordingly, the undersigned, being first sworn upon oath, verifies on behalf of the State of New Mexico that the statements set forth in the *State of New Mexico's Responses to Gary L. Horner's First Set of Interrogatories and First Requests for Production of Documents to the State of New Mexico* are true and correct, and hereby certifies the same, except as to matters stated to be on information and belief and as to such matters the undersigned certifies that he believes the same to be true.



Estevan R. López, P.E.
Director, New Mexico Interstate Stream Commission
Deputy New Mexico State Engineer

Subscribed and sworn to before me this 17 day of August, 2012, by Estevan R. López.



Notary Public

