



## **4. Legal Issues**

Analysis of the legal constraints that govern the use of water in the Taos Region is needed to understand the available water supply in the region. Even when ample water supplies are physically available in the Taos Region, their use is restricted by legal considerations such as senior water rights and interstate compacts. This section addresses the federal, state, and local legal issues and administrative policies that affect the regional use of water. Information on the physical water supply is included in Section 5.

The planning region has specific legal issues that distinguish it from other water planning regions, including interstate compact and historical treaty issues, pueblo water rights, acéquia water use, and ongoing water right adjudications. These and other issues are discussed in detail in Sections 4.1 through 4.6.

### **4.1 State Issues**

Throughout the State of New Mexico, water use is governed by a number of generalized state laws. New Mexico water laws affecting the planning region are found in the New Mexico Constitution, New Mexico Statutes Annotated (NMSA), and the case law interpreting and applying the existing law. Additional legal constraints include State Engineer regulations and guidelines governing groundwater and surface water as well as State Engineer policy for administering various groundwater basins throughout the state. A general overview of New Mexico water law is provided in Appendix D; state legal issues of particular relevance to the planning region are discussed in Sections 4.1.1 through 4.1.7.

#### **4.1.1 Appropriation and Transfer of Water**

Article XVI of the New Mexico Constitution establishes the basic principle underlying New Mexico water law including prior appropriation and beneficial use: until appropriated, all water belongs to the public and is subject to appropriation for beneficial use, in accordance with the laws of the State. The laws of the State allow the New Mexico State Engineer to administer surface water and underground water rights and to determine whether any unappropriated water is available for the public to appropriate (NMSA §§72-2-1, 72-5-6, 72-12-3).



The State exercises its authority based on two primary principles established by the New Mexico Constitution: (1) water rights “are subject to appropriation for beneficial use, in accordance with the laws of the state” and (2) “priority of appropriation shall give the better right” (N.M. Constit. Art. XVI Sec. 2):

- The concept underlying the principle of prior appropriation is that the first person to use water for a beneficial purpose has a prior right to use that water against subsequent appropriators. “First in time, first in right” is the phrase often used to describe prior appropriation. Water rights acquired through this system of prior appropriation are a type of property right and may be sold or leased. In all cases, however, the essential basis of water right ownership is “beneficial use.”
- The principle of beneficial use is that a water right arises out of a use that is productive or beneficial, such as agricultural, municipal, industrial, and domestic uses, among others. “Beneficial use shall be the basis, the measure and the limit of a water right” (N.M. Constit. Art. XVI, Sec. 3). This provision has also been incorporated into case law, which is the law developed by New Mexico courts. As recognized in *State ex rel. Reynolds v. Mendenhall*, beneficial use is the “measure and limit of the right to the use of waters” (68 N.M. 467, 473 (1961)).

#### **4.1.2 Water Banking**

Water banking is the concept of temporarily transferring the use of water from one person or entity to another through a centralized management entity. By going through the water bank, the holders of water rights do not have the burden of trying to find willing users for their rights. Instead, they can temporarily transfer the right to use their water to a “bank,” which then finds willing users and carries out the transfer. The water owner obtains a financial return on their water right, and the user benefits from having ready access to water without having to go through a complex transfer process.

The State Engineer has jurisdiction over all water transfers (NMSA §§72-5-22, 72-5-24, 72-12-3, 72-12-7), with two exceptions, both of which can be considered “banking” of water:



- Certain types of water management entities organized under New Mexico law have the ability to hold water rights and transfer them without being subject to forfeiture or requiring State Engineer approval of the transfer. These entities, which include conservancy districts and irrigation districts, can bank and move water around within the boundaries of the district (NMSA §§73-13-4, 73-14-50), but cannot transfer water outside district boundaries or change the place and purpose of use. Thus this type of water bank cannot be used to supply municipal demands.
- Acéquias and community ditches also have the authority to establish a water bank “for the purpose of temporarily reallocating water without change of purpose or use or point of diversion to augment the water supplies available for the places of use served by the acéquias or community ditch” (NMSA §73-2-55.1).

Neither State Engineer nor ISC recognition or approval is required for the establishment of acéquia or community ditch water banks. Water rights placed in such a water bank are not subject to forfeiture for non-use, and State Engineer approval is not required for these temporary transfers (NMSA §73-2-55.1).

The State Engineer also contemplates water banking in the Active Water Resource Management (AWRM) regulations (Section 4.1.5), to facilitate water rights administration and avoid costly administrative processes under priority administration (19-25-13.7 (O) NMAC). Expedited marketing and leasing processes may include, but are not limited to, expedited permit proceedings before the State Engineer (relying on hydrologic models adopted by the State Engineer). These rules do not apply to acéquias or community ditches (NMSA §73-2-9.1; 19-25-13.7 (O) NMAC).

### **4.1.3 Stockponds**

Whether stockponds should be regulated was a frequently debated issue until 2004, when the New Mexico legislature changed the long-standing rule that had allowed individuals to impound water for livestock purposes without approval from the State Engineer (Appendix D). Due to concerns about the number of unregulated stockponds, the legislature amended the Water Code to give the State Engineer jurisdiction over stockponds, and the State Engineer now



requires a permit for new surface water impoundments of any kind, including livestock water impoundments (NMSA §73-9-3; 19-26-2.14 NMAC).

To address the issue of ponds that were built for aesthetic and recreational purposes but called stockponds in order to avoid regulation by the State Engineer, the new regulations specifically state that water for livestock does not include “the impoundment of surface or groundwater in any amount for fishing, fish propagation, recreation, or aesthetic purposes” (19.26.2.14 NMAC.) In order to build and fill this type of pond, owners must have a valid water right recognized by the State Engineer (19.26.15 NMAC).

For a livestock pond located on or fed by a perennial stream, an applicant must comply with the surface water appropriation regulations (NMSA §72-9-3 (A)(B); 19.26.2.14 (D) NMAC). The State Engineer will grant a permit for stockponds located in a perennial stream system only when unappropriated water is available. Again, given that the stream systems in the Taos Region are considered by the State Engineer to be fully appropriated, the granting of such a permit is highly unlikely. An alternative to applying for a new water right would be to purchase existing water rights and transfer them to the new location and purpose of use.

Applications for stock and recreational ponds from groundwater basins isolated from stream systems will be evaluated for impairment, conservation, and public welfare factors (NMSA §72-12-3).

#### **4.1.4 Domestic Well Regulations**

Domestic wells are regulated by statute: “A person, firm or corporation desiring to use public underground waters . . . for irrigation of not to exceed one acre of noncommercial trees, lawn or garden or for household or other domestic use shall make application to the state engineer for a well on a form to be prescribed by the state engineer. Upon the filing of each application describing the use applied for, the state engineer shall issue a permit to the applicant to use the underground waters applied for . . .” (NMSA §§72-12-1.1, 72-12-1). Historically, this statute has allowed the issuance of a domestic well permit when applied for, permitting domestic well users to divert up to 3 acre-feet per year (ac-ft/yr) from domestic wells for household use, including outdoor watering of up to 1 acre of landscaping.



On August 15 2006, in response to the current demand on existing water supplies due to population growth and drought conditions, the State Engineer adopted new regulations governing domestic wells (NM OSE, 2006f). Significantly, these regulations apply only to new domestic wells, not to livestock wells and temporary wells. Furthermore, existing domestic wells are not affected by these regulations and can still divert up to 3 ac-ft/yr, unless otherwise limited by municipal ordinance or by a court adjudicating water rights (NMSA §§72-12-1, 72-12-1.1, 72-12-1.2).

The new regulations contain the following key provisions:

- Domestic use of water for one household is limited to 1 ac-ft/yr (19.27.5.9(D)(1) NMAC).
- Domestic use of water from one well used for more than one household is limited to 1 ac-ft/yr per household, with a maximum diversion of 3 ac-ft/yr from the well (19.27.5.9(D)(2) NMAC).
- Domestic use of water for drinking and sanitary uses that are incidental to the operation of governmental, commercial, or nonprofit facilities is allowed only if an alternative water supply is not reasonably accessible or available. Should no other water supply be available, the commercial incidental use is limited to 1 ac-ft/yr (19.27.5.9(D)(3) NMAC).
- Further limitations to the amount diverted may be imposed, by the courts, by municipal or county ordinances, or by the State Engineer (19.27.5.9 NMAC).
- Diversions from domestic wells in domestic well management areas generally cannot exceed 0.25 ac-ft/yr, and the State Engineer can impose even smaller limits or require that a consumptive use water right be transferred to the domestic well before diversions begin (19.27.5.14(C) NMAC). The 0.25-ac-ft/yr limitation may be increased in the case of multiple household use or if a larger consumptive use water right is transferred to the domestic well (19.27.5.14(C)(2), (D), and (E) NMAC).



- The State Engineer may reject domestic permit applications if the proposed well is located in an area with court-imposed restrictions on water use or drilling or in an area where well drilling has been prohibited by a government entity due to water quality concerns (19.27.5.13 (A) NMAC).
- Meters are required for domestic wells within domestic well management areas (19.27.5.13(C)(1) NMAC). The State Engineer will require meters for domestic well applications if:
  - Meter use is court-imposed.
  - The well is used by multiple households.
  - The well is used for drinking and sanitary domestic use incidental to the operations of a governmental, commercial, or nonprofit facility.
  - The well supplements another domestic well.
  - The well is a multi-use well, and only a portion is used for domestic purposes.
- Meters may be required for domestic wells permitted for one household (19.27.5.13(C)(2) NMAC).
- The filing fee for a domestic well permit is increased from \$5 to \$125 (19.27.5.8 NMAC).

The intent of the regulations is to impose particularly stringent restrictions in areas deemed “domestic well management areas.” Such areas are defined in the regulations as a “bounded area overlying a stream-connected aquifer, specifically described by section, township and range, or by other land survey descriptions, that requires special water resource protection as determined by the state engineer” (19.27.5.7(F) NMAC). Prior to establishing such a management area, however, the proposed regulations mandate that the State Engineer follow certain procedures and make certain hydrologic findings (19.27.5.14 NMAC):

- As hydrologic conditions require, the State Engineer may declare all or part of a stream-connected aquifer as a domestic well management area to prevent impairment to valid, existing surface water rights (19.27.5.14 NMAC).



- The State Engineer must develop guidelines for each declared domestic well management area, based on the hydrologic conditions of the domestic well management area and the existing water rights located therein. The guidelines must set forth the maximum diversion amounts and other additional restrictions, including any requirement for the transfer of a consumptive use water right, that will be conditioned on new 72-12-1.1 domestic well permits issued within the management area (19.27.5.14(A) NMAC).
- The public affected by the proposed guidelines must be notified and a public meeting held before any guidelines can be imposed by the State Engineer (19.27.5.14(B) NMAC), ensuring that domestic well management areas will be formed with public input.

If a domestic well owner wishes to divert more than 1 ac-ft/yr (or 0.25 ac-ft/yr in a domestic well management area) from a domestic well, the regulations allow for the transfer of a consumptive use water right, up to a maximum diversion of 3 ac-ft/yr, to the well (19.27.5.10 NMAC). Because the regulations do not require that the public be notified of such a transfer (19.27.5.9 (D)(4); 19.27.5.10(C) NMAC), it would be expedited. If the consumptive use water right sought to be transferred is from an acéquia or community ditch, any required approvals from the acéquia or community ditch must be obtained before transfer (19.27.5.10(A) NMAC).

Finally, the regulations contain enforcement provisions, and the holder of a domestic well permit is subject to possible fines and remedial action, including permit cancellation, for failure to comply with the terms (e.g., the diversion amount) of the permit (19.27.5.15 NMAC).

The regulations are in effect, but have been challenged in a court proceeding as being an illegal restriction on the use of domestic water (*Board of County Commissioners, et al. v. John D'Antonio, Jr., New Mexico State Engineer*, No. D-101-CV-200602087).

#### **4.1.5 Active Water Resource Management**

In December 2004 the OSE adopted the AWRM regulations (19.25.13.1 to 13.49 NMAC), which establish a general framework for water rights administration in New Mexico. The AWRM legislation creates a policy framework within which the OSE will establish water master districts,



appoint water masters for those districts, and develop district-specific water rights administration regulations. The OSE will work locally with the district water master and obtain input from local water rights holders to develop a system for priority administration that addresses district-specific issues and is consistent with the general AWRM regulations (19.25.13.1 NMAC). The OSE is actively implementing the regulations and has established seven priority basins for AWRM (NM OSE, 2006g), none of which are located in the Taos Region.

#### **4.1.6 Treaty of Guadalupe Hidalgo**

From the end of the 17th Century to the middle of the 19th Century, Spain and Mexico issued grants of land to individuals, groups, towns, pueblos, and other settlements in order to populate what is now New Mexico. After achieving independence from Spain in 1921, Mexico continued to follow Spanish law by extending additional land grants to individuals to continue to encourage settlement in unoccupied areas.

The Mexican-American War began in 1846 and ended with the signing of the Treaty of Guadalupe Hidalgo in 1848 (NMSA, chap. 1, Pamp. 3; 9 Stat. 922 (1948)) (hereinafter referred to as “Treaty of Guadalupe Hidalgo” or “Treaty”). Under the Treaty, Mexico ceded a vast territory in the present day southwest, including New Mexico, to the United States. The impact of the Treaty on the Taos Region relates to what impact, if any, the Treaty has on the water rights appurtenant to grant land within the region and whether the Treaty confers any protection to water right holders beyond those protections conferred by state law.

The Treaty of Guadalupe preserved the rights of Mexicans residing in the ceded territory, including their property rights (NMSA, chap. 1, Pamp. 3; 9 Stat. 922 (1948), Art. VIII). Article VIII provides in its entirety:

Mexicans now established in territories previously belonging to Mexico, and which remain for the future within the limits of the United States, as defined by the present treaty, shall be free to continue where they now reside, or to remove at any time to the Mexican republic, retaining the property which they possess in the said territories, or disposing thereof, and removing the proceeds wherever they please, without their being subjected, on this account, to any contribution, tax or charge whatever.





Those who shall prefer to remain in the said territories, may either retain the title and rights of Mexican citizens, or acquire those of citizens of the United States. But they shall be under the obligation to make their election within one year from the date of the exchange of ratifications of this treaty; and those who shall remain in the said territories after the expiration of that year, without having declared their intention to retain the character of Mexicans, shall be considered to have elected to become citizens of the United States.

In the said territories, property of every kind, now belonging to Mexicans not established there, shall be inviolably respected. The present owners, the heirs of these, and all Mexicans who may hereafter acquire said property by contract, shall enjoy with respect to it guaranties equally ample as if the same belonged to citizens of the United States.

Although the last paragraph above provides for “property of every kind” belonging to Mexicans within the ceded territory to be “inviolably respected” and guaranteed that the Mexican owners, their heirs, and “Mexicans acquiring said property by contract,” would enjoy the same protections of property as citizens of the United States, the plain language of the Treaty does not indicate that land grants would be exempt from state laws or state administration of water rights. In fact, the phrase “as if the same belonged to citizens of the United States” arguably implies that water rights and other property rights under the Treaty would be subject to all federal, state, and local laws just like any other property. Several court decisions explore the impact of the Treaty on water rights found on grant land.

*Chadwick v. Campbell* confirms that the Treaty of Hidalgo Guadalupe, while affording equal protection to land grants, does not exempt the land grants from state tax law: “. . . it is settled law in New Mexico that land constituting a private grant is subject to tax” (115 F.2d 401, 405 (10th Cir. 1940)).

Similarly, a 1900 case in the Supreme Court of the Territory of New Mexico confirms that the Treaty of Guadalupe Hidalgo affords no exemption from state water laws. In *Albuquerque Land & Irrigation Co. v. Gutierrez* (10 N.M. 177 (1900)), the irrigation company attempted to enter onto private lands to construct canals and other irrigation works, claiming the right of eminent domain (10 N.M. 177, 230 (1900)). The landowners denied access, claiming that the Treaty protected their lands from entry under territorial law. The New Mexico Supreme Court held that grant lands were subject to federal and state law (10 N.M. 177, 254 (1900)):



Upon the other allegation of defendants as to treaty rights, I am of the opinion that the lands of citizens of New Mexico, since the cession, are subject to the operation of the law of eminent domain under the laws of the United States, and the States and Territories thereof, and not exempt therefrom by virtue of the treaty of Guadalupe Hidalgo. The appropriation and distribution of water must be governed by similar laws, inasmuch as the United States has adopted its own system of water rights and adjusted the system to the different sections of the country as necessity required, and the laws of the States and Territories are in harmony therewith. These laws must govern wherein they differ from the treaty provisions, and wherein they are harmonious, treaty provisions need not be considered. The laws of the United States and the States and Territories are ample for the protection of the rights of appropriators of water in this Territory, and remedies for impairment or destruction of such rights, are adequate also.

The United States Supreme Court affirmed this decision in *Gutierrez v. Albuquerque Land & Irrigation Co.*, (188 U.S. 545, 556-57 (1903)).

The New Mexico Supreme Court has also held that unappropriated water within land grants is “public water” that is subject to appropriation for beneficial use in accordance with the laws of the state (*State ex rel. State Game Comm'n v. Red River Valley Co.*, 51 N.M. 207, 217, 182 P.2d 421 (1947)). While not as direct as the holding in *Gutierrez*, the Red River holding nevertheless supports the proposition that land grant water rights under the Treaty are subject to the same state water laws as are non-land grant rights.

Based on the language of the Treaty and its interpretations by federal and state courts, the Treaty provides the same protections for grant lands and water that are afforded to all private property. It provides equal protection under the state laws and not exemption from those laws. As early water users, under state law, land grantees are likely to hold either pre-1907 surface water rights or pre-basin groundwater rights.

#### **4.1.7 County Subdivision Regulations**

In accordance with the New Mexico Subdivision Act, Taos County has subdivision regulations governing water supply requirements for new developments (NMSA Chap. 47, Art. 6). The ordinance requires that a property owner seeking to subdivide land and obtain a preliminary plat



demonstrate an adequate water supply to meet the needs of the subdivision for at least 50 years (County of Taos, New Mexico, 2005, Appendix A, Section 1(A)(1)). This requirement applies to any type of water system that will supply the subdivision, including domestic wells, new and existing community water systems, and an existing utility (County of Taos, New Mexico, 2005, Appendix A, Section (2)(1-4)). In some cases involving a community water system or water utility, a subdivider is required to have water right permits in place showing the availability of water for use by the subdivision (County of Taos, New Mexico, 2005, Appendix A, Section (2)(4)(b)).

Rio Arriba County has subdivision regulations with a 40-year supply requirement (Rio Arriba County, 1987, 1997). The County has also passed an *Agricultural Protection and Enhancement Ordinance* (Appendix Q to the subdivision regulations [Rio Arriba County, 1987]) designed to protect and enhance the agricultural lands, acéquia systems, and groundwater and surface water resources of Rio Arriba County by establishing review and approval of land use zoning, subdivisions, or division of land located within irrigated agricultural lands (Rio Arriba County, 2002, Section 3).

## 4.2 Water Use by Acéquias

Acéquias, or community ditches, are ditch systems that are managed by a community and used for irrigation purposes. In New Mexico, acéquia management is governed by statute (NMSA §§73-2-1 *et seq.*, §§73-2A-1 through 3, §73-3-1). All New Mexicans have the right to construct and use either private or common acéquias (NMSA §73-2-1). Members (also known as *parciantes*) of a community ditch or acéquia are not entitled to compensation for the ditch or ditches crossing their respective properties (NMSA §73-2-3). After construction, the ditches belong to the acéquia members, and no other person can use the ditch without majority consent from the owners and payment of a share of ditch construction costs proportionate to the amount of water to be used (NMSA §73-2-7). Ownership of the ditch is separate from the right to use water that the ditch conveys (*Holmberg v. Bradford*, 56 N.M. 401, 403, 244; P.2d 785, 787 (1952)).



Officials elected by the community manage the ditch or ditches with respect to construction, operation, maintenance, and water allocation, and the ditch members provide the necessary labor to construct and maintain the ditch (*Snow v. Abalos*, 18 N.M. 681, 691-4 (1914)). Acéquias have three elected commissioners and one *mayordomo*, or superintendent (NMSA §73-2-12). Each officer must own an interest in the ditch or a water right (NMSA §73-2-12). The officers have the authority to manage the affairs of the acéquia, including contracting and making assessments to pay expenses related to operation of the acéquia, including distributing water, supervising ditch maintenance and operation, and collecting fines (NMSA §73-2-21).

Acéquias are corporations with the power to sue and be sued (NMSA §73-2-1). Moreover, acéquias are considered political subdivisions of the State (NMSA §73-2-28). This status is significant because it allows acéquias to condemn land (1969 Op. Att'y. Gen. No. 69-96). It also enables acéquias to receive loans from the ISC for ditch improvements and exempts them from payment of taxes on irrigation works (1964 Op. Att'y. Gen. No. 64-95).

The planning region has numerous acéquias/community ditches and associations (Section 6.1.2). Consequently, regional water planners must understand the rights of acéquia members and the impact of those rights on water allocation in the region.

Acéquias may now pass bylaws requiring that transfers or changes in location of water rights sought by individual water users on a ditch or acéquia be subject to approval by the acéquia or ditch commissioners (NMSA §73-2-4.1). The commissioners can deny such transfers if they find that the change would be “detrimental to the acéquia or community ditch or its members” (NMSA, §73-3-4.1). The statute provides no definition of “detrimental” and it appears that the commissioners have discretion to determine the meaning of this term on a case-by-case basis. Further, the State Engineer is prohibited from approving applications for changes or transfers of water rights in acéquias and community ditch associations if the applicant has not complied with existing rules of the acéquia or association (NMSA §72-5-24.1(A)).

As discussed in Section 4.1.2, acéquias and community ditches also have the authority to establish an agricultural water bank.



### 4.3 Federal Issues Affecting Water Use and Supply

Within the Taos Region, specific federal issues may impact water use and supply. Federal law affecting the availability and apportionment of water in the planning region is discussed in Sections 4.3.1 through 4.3.3. Federal law related to water quality is discussed in Section 4.4.

#### 4.3.1 *The Endangered Species Act*

The Endangered Species Act (ESA) (16 U.S.C. §§1531-1544), first enacted in 1973, can play a prominent role in determining the allocation of water, especially of stream and river flows. An example of this role is the decision in *Rio Grande Silvery Minnow v. Keys* (333 F.3d 1109 (10th Cir. 2003)), in which the Court held that the USBR may reduce deliveries of available water under its contracts with irrigation districts and cities to make more water available to the silvery minnow to comply with the ESA.

The protections of the ESA are triggered by listing a species as “threatened” or “endangered” (16 U.S.C. §§1531(a)(1)). The goal of the ESA is to protect threatened and endangered species and the habitat on which they depend (16 U.S. C. §1531(b)), with the ultimate goal being to “recover” species to the point where they are again secure, self-sustaining members of their ecosystems and no longer need protection under the ESA.

The ESA provides several mechanisms for accomplishing these goals:

- The ESA makes it unlawful for anyone to “take” a listed species unless an “incidental take” permit or statement is first obtained from the Interior Department (16 U.S.C. §§1538, 1539). “Take” is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or to attempt to engage in any such conduct” (16 U.S.C. §1532(19)).
- Federal agencies must use their authority to conserve listed species and must ensure that their actions do not jeopardize the continued existence of listed species or destroy or harm habitat that has been designated as “critical” for such species (16 U.S.C. §1536 (2000)).



- Federal agencies are required to consult with the U.S. Fish and Wildlife Service (USFWS) to determine whether federal actions or federally sponsored actions will affect or jeopardize threatened or endangered species or critical habitats. In addition, whenever a private or public entity undertakes an action that is “authorized, funded, or carried out” wholly or in part by a federal agency, the consultation requirement is also triggered and the potential impacts of the undertaking on threatened and endangered species are analyzed by the USFWS (16 U.S.C. §1536(a)(2) (2000)).

Three bird species in the region fall under the protections of the ESA as either threatened or endangered. Two of the species, the Mexican spotted owl (58 FR 14248 (March 16, 1993)) and the bald eagle (32 CFR 4001 (March 11, 1967)), are federally listed as threatened, and the third, the southwestern willow flycatcher, is listed as endangered (60 FR 10693, Feb. 27, 1995)). The final rule designating critical habitat for the southwestern willow flycatcher included Taos County and became effective November 18, 2005. The other two species do not have any designated critical habitat within the region (although critical habitat for the Mexican spotted owl has been designated, none of that critical habitat falls within the Taos Region [69 FR 53182, 53212 (August 31, 2004)]).

A Recovery Plan has been issued for the southwestern willow flycatcher (68 FR 10485 (March 5, 2003)). This plan describes actions considered necessary for the conservation of the species, establishes recovery level criteria for downlisting or delisting the species, and estimates the time and cost for implementing the necessary recovery measures. Specific actions outlined for the southwestern willow flycatcher include changing the management of surface water and groundwater where feasible and restoring flood cycles (68 FR 10485 (March 5, 2003)).

Because of the presence of these three species in the Taos Region, any federal actions relating to or impacting water resources within the region must assess the impact of such actions on these species and ensure that the action does not jeopardize the continued existence of the species.



### **4.3.2 Pueblo and Federal Reserved Water Rights**

The region consists of a large amount of land under pueblo or federal control. Two pueblos are located in the region (Taos and Picuris Pueblos), and the federal enclaves within the region consist of land managed by the Forest Service and the Bureau of Land Management (BLM) (Figure 3-2). Water rights for pueblo and federal land are each governed under a distinct legal framework.

#### **4.3.2.1 Pueblo Water Rights**

The United States recognizes and protects the right of the pueblos to make their own laws and be governed by them (*Williams v. Lee*, 358 U.S. 217, 223 (1959)). In order for pueblos to maintain their essential right of self-governance, courts recognize that the pueblos' water rights must remain independent of the state allocation rules and state administration of those rules, including the planning process (*State of New Mexico v. Aamodt*, 537 F. 2d 1102 (10th Cir. 1976), hereinafter referred to as "Aamodt I"). However, without cooperative efforts among different tribes and non-Indian communities, the purposes of regional water planning may not be realized, primarily because the pueblos are the senior-most users on a river. At least one court has ruled that the water supplies that can be tapped to meet federally recognized rights include all water, surface or ground, on tribal lands or outside tribal lands, where the diversion affects resources on tribal lands (*New Mexico v. Aamodt*, 618 F. Supp. 993, 1010 (D.N.M. 1983), hereinafter referred to as "Aamodt II").

In the planning region, cooperative efforts among the Taos Pueblo and other major stakeholders have led to the completion of the Taos Pueblo Draft Water Rights Settlement Agreement (DSA) (discussed in detail in Section 4.5.3.1). When completed, the DSA will adjudicate Taos Pueblo claims and expedite the adjudication of non-Pueblo water right claims. It will also assist regional water planners in assessing the availability of water for the future of the region. The discussion herein generally outlines the law surrounding the quantification and priority of pueblo water rights. Any specific issues relating to the quantification and priority of the Taos Pueblo water rights will be resolved through implementation of the DSA. Though the Picuris Pueblo has not yet begun adjudication or settlement of its water rights, general provisions of water law pertinent to pueblo rights may also pertain to Picuris.



Pueblos have rights to water that arise from the pueblos' aboriginal existence as autonomous societies and the use of their lands and waters. When the United States entered into the Treaty of Guadalupe Hidalgo (Section 4.1.6), the nation accepted the obligation to recognize and respect the aboriginal rights of tribes in areas acquired from Mexico. For tribal settlements, specifically the pueblos, the Spanish and Mexican governments recognized and protected a prior right to sufficient water to meet their needs.

The court in *New Mexico ex rel. State Engineer v. Aamodt*, No. 66cv06639 MV/LCS-ACE (D.N.M.) (the Aamodt adjudication) made certain rulings on legal issues relating to pueblo water rights. In particular, the Court in this adjudication (*State ex rel. Reynolds v. Aamodt* [Aamodt II, *supra* at 998]) held that these rights were not extinguished by any of the acts of Spain or its successor, Mexico. Therefore, when the United States became the sovereign entity after the Treaty, it was obligated to recognize and protect these original rights. The pueblos' rights include irrigation uses, in-stream or non-diversionary uses, stock watering, and municipal and domestic uses. Federal law explicitly preserved these rights (Section 9 of the Pueblo Lands Act of May 31, 1933 (48 Stat. 108, 73rd Congress, First Session, Chap. 45)), each of which is briefly discussed in the Sections 4.3.2.1.1 through 4.3.2.1.5.

Clearly, these rulings are binding in the Aamodt adjudication and would be controlling in other federal court proceedings in New Mexico. Such rulings would also be instructive (although not controlling) in state court proceedings, or federal court proceedings outside of New Mexico, that address pueblo water rights.

**4.3.2.1.1 Historically Irrigated Acreage, Ditch Rights.** The Aamodt Court concluded that as to aboriginal irrigation uses, the pueblos had a prior right to all water necessary to irrigate their farmlands, but that the expanding nature of this right was cut off by the Pueblo Lands Act of 1924. These aboriginal water rights are measured by the amount of water necessary to irrigate all lands irrigated when the United States took sovereignty in 1846, plus any additional lands put into irrigation up to 1924 (Aamodt II, *supra* at 1009-10). In addition to these rights, pueblos also have senior water rights for any irrigated lands or water rights associated with the loss of lands pursuant to the Pueblo Lands Act of 1924 and the 1933 Pueblo Compensation Act, where lands or water rights have been reacquired (*State ex rel. Reynolds v. Aamodt*, U.S.D.C.N.M. No. 6639, Mem. Op. & Order (Feb. 26, 1987)). These are referred to as "replacement" water rights.





Therefore, all rights prior to the 1924 cutoff are generally “aboriginal” or “time immemorial” rights and, against all non-pueblo users, are senior priority rights. The Aamodt Court has also found that Spanish law modified the aboriginally based right, because it expressly recognized all pueblo uses as having a first right, or “right of primacia” (Aamodt II, *supra* at 999). By virtue of the Treaty of Guadalupe Hidalgo, the United States was obligated to recognize and protect the senior priority.

**4.3.2.1.2 Non-Ditch or “Ak-Chin” Water Rights.** The pueblos have made claims for “ak-chin” or aboriginal water use that did not rely on diversions from the rivers to ditch systems for delivery of the water to the land. Through temporary catchments and use of rocks to direct water flow, various aboriginal water uses were supplied, including but not limited to irrigating small plots at different times. Aboriginal or first priority rights can be claimed for them. The Aamodt Court determined that even non-diversionary aboriginal use, if capable of being proved, could be the basis for a first priority right (*State ex rel Reynolds v. Aamodt*, U.S.D.C.N.M. No. 6639, Mem. Op. & Order (January 17, 1997)). Although most of these uses do not relate to water directly flowing into a river and, under some circumstances, would meet the state law definition of “private water” or “developed water,” these uses can give rise to tribal and federal claims within the larger river drainage basin.

**4.3.2.1.3 Stock Watering.** Congress recognized a “prior right” of “Pueblo Indians for domestic, stock water, and irrigation purposes for the lands remaining in Indian ownership” (Section 9 of the Pueblo Lands Act of May 31, 1933 (48 Stat. 108, 73rd Congress, First Session, Chap. 45)).

**4.3.2.1.4 Domestic (Municipal) Use.** The pueblos are governments, with all of the responsibilities of providing for municipal uses by pueblo residents and for making water available for the construction of homes and the operation of businesses. The Aamodt Court decided that the measure of the pueblos’ domestic or municipal water rights was cut off by the Pueblo Lands Act of 1924 (*State ex rel. Reynolds v. Aamodt*, U.S.D.C.N.M. No. 6639, Mem. Op. & Order, at 4-5 (Jan. 31, 2001)). The Court stated that the right included the pueblos’ cumulative use, not just the maximum used in any one year, and that all planned uses as of the date of the Act survived (*State ex rel. Reynolds v. Aamodt*, U.S.D.C.N.M. No. 6639, Mem. Op. & Order, at 6-7 (Jan. 31, 2001)).



**4.3.2.1.5 State Law-Based and Federally Reserved Water Rights.** The pueblos may have State law-based rights where they privately acquire lands with appurtenant pre-existing state law water rights. This applies, however, only where the lands would not qualify as “replacement lands,” in which case, the senior priority reasserts itself once the pueblo reacquires the land. Pueblos may also hold federal reserved water rights, as discussed in Section 4.3.2.2.

**4.3.2.2 Federal Reserved Water Rights**

When reserving land for federal purposes, the federal government may reserve water rights, either groundwater or surface water (*In re the General Adjudication of All Rights to Use Water in the Gila River System and Source*, Maricopa County W-1 through W-4 (Consolidated), Ariz. Sup. Ct., Maricopa Co. (Sept. 30, 1988), aff’d 989 P.2d 739 (1999)) sufficient to accomplish the primary purposes of the reserved land. The reservation of waters may be explicit or implied, and the amount reserved will reflect the nature of the federal enclave (*U.S. v. District Court in and for the County of Eagle*, 401 U.S. 520, 522-523 (1971)). These rights, called “federal reserved” water rights, must be considered when allocating water use within a region. Any federal reserved water rights that exist in the region will be determined during the adjudication process (Appendix D).

The “reservation” doctrine, as it applies to federal enclaves, was first recognized by the United States Supreme Court in *Winters v. United States* (207 U.S. 564 (1908)). The issue in this case was whether the United States, at the time of the creation of the Fort Belknap Indian reservation in Montana, had implicitly reserved a water right for future use by Indians living on those lands. The Court upheld the power of the federal government to reserve the waters and exempt them from appropriation under state laws.

In *Arizona v. California* (373 U.S. 546 (1963)), a case involving water rights on the Gila River, the Court extended the reservation doctrine to non-Indian federal enclaves. Although it did not specifically discuss whether a specific amount of water was reserved, it did state that the United States “intended to reserve water for the future requirements of . . . the Gila National Forest” (*Arizona v. California*, 373 U.S. at 601 (1963)).



Likewise, in *Mimbres Valley Irrigation Co. v. Salopek* (90 N.M. 410, 564 (1977)), the United States claimed a reserved right of water in the Gila National Forest for minimum instream flow and recreational purposes. The Court held, upon analysis of the Organic Act of 1897 (16 U.S.C. §475, [the statute setting forth the purposes for which forests were withdrawn]), that the United States had not reserved water rights in the Gila National Forest for its claimed purposes of instream flow and recreational use (*Mimbres Valley Irrigation Co. v. Salopek*, 90 N.M. at 413 (1977)). Instead, the Court concluded “. . . that the original purposes for which the Gila National Forest was created were to insure favorable conditions of water flow and to furnish a continuous supply of timber. Recreational purposes and minimum instream flow were not contemplated” (*Mimbres Valley Irrigation Co. v. Salopek*, 90 N.M. 413, 564 (1977)).

Any federal reserved rights within the planning region may only include the minimum quantities of water necessary to meet the primary purpose for which the reservation was established (*Cappaert v. United States*, 426 U.S. 141 (1976)). Such water rights will be quantified during the adjudication of water rights in the region; the priority date of such rights will be the date the reservation was formed (*United States v. Alpine Land & Reservoir Co.*, 697 F.2d 851, 859 (9th Cir. 1983)) and may therefore be senior to other users. A significant feature of federal reserved water rights is that, unlike state appropriative rights, such rights cannot be lost through nonuse or by the fact that the rights have not yet been put to beneficial use (*U.S. v. District Court in and for the County of Eagle*, 401 U.S. 520, 523 (1971)).

Depending on the purposes of the reservation, federal reserved water rights can have a variety of uses. Common federal reserved rights include domestic, irrigation, timber management, and recreational rights. The types of water use that can be reserved are illustrated by the types of federal reserved water rights that can occur on BLM lands: public water holes and springs, mineral hot springs, stock driveways, public oil shale withdrawals, wild and scenic rivers, national monuments and conservation areas, and wilderness areas. Probably the most common of these uses is for public water holes and springs: an executive order (Public Water Reserves No. 107) states that “. . . legal subdivision(s) of public land surveys which is vacant, unappropriated, unreserved public land and contains a spring or water hole, and all land within one quarter of a mile of every spring or water be reserved for public use.” The intent was not to reserve the entire yield of each public spring or water hole; rather, reserved water was limited to



domestic human consumption and stock watering. All water from these sources in excess of the minimum amount necessary for these limited public watering purposes is available for appropriation under state water law.

Federal reserved water rights are determined during the adjudication process. The federal government must submit all reserved water rights claims to the state's adjudication process, and such claims are limited by the "primary purpose" and "minimal needs" requirements. In addition, federal reserved water rights are nontransferable. By law, these rights can only exist on lands owned by the federal government. If a land transfer occurs, any existing federal reserved water right becomes invalid. In the region, the BLM holds reserved rights on the Red River Wild and Scenic River, acquired through the adjudication of the Red River Basin (U.S. District Court, 2000a). The USDA Forest Service also holds reserved rights in the Carson National Forest, adjudicated in the Rio Pueblo de Taos and Rio Hondo adjudications (*State of New Mexico ex rel. State Engineer, et al. v. Eduardo Abeyta and Celso Arellano, et al.*, U.S. District Court Nos. 69cv7896 BB and 69cv7939 BB (Consolidated) (Report of the Special Master, Nov. 5, 1991)).

#### 4.3.2.3 *The Pueblos' Federal Reserved Water Rights.*

Along with the aboriginal and state-based rights described in Section 4.3.2.1, pueblos can also have federal reserved water rights where lands outside pueblo grants have been reserved for them by the United States. These rights, known as "Winters reserved rights," reserve sufficient water for the present and future needs of the pueblo based on the "practically irrigable acreage" of the lands reserved for the pueblo or some other appropriate measure depending on the purposes of the creation of the reservation (*Winters v. United States*, 207 U.S. 564, 574-8 (1908); *Arizona v. California*, 376 U.S. 340, 343-7 (1963)). Several courts have held that Winters rights are not the same as other federal reserved rights, because of the many purposes served by federally created Indian reservations. Where no specific purpose is identified, there is always the implicit purpose of setting aside a tribal homeland, and in these instances, the "practically irrigable acreage" standard is used.

The priority date for a Winters water right is the date the reservation was created or, where applicable, the date that the land is set aside primarily for a tribe's use. The Aamodt Court



recognized the existence of a federal reserved right to capture intermittent flows, but did not decide the transferability of such a right (*State ex rel. Reynolds v. Aamodt*, 618 F. Supp. 993, 1010 (D.N.M. 1985)). At least one federal court has interpreted Winters to apply to either federal or tribal reservations of rights, thereby allowing an aboriginal priority date for some Winters rights (*United States v. Adair*, 723 F.2d 1394, 1398, 1412 (9th Cir. 1983)).

### **4.3.3 Wild and Scenic Rivers Act**

The National Wild and Scenic Rivers Act (16 U.S.C. §§ 1271-1287, October 2, 1968, as amended 1972, 1974-1976, 1978-1980, 1984, 1986-1994 and 1996) (“Wild and Scenic Rivers Act” or “Act”) establishes a National Wild and Scenic Rivers System for the protection of rivers with important scenic, recreational, fish and wildlife, and other values. The Act establishes protection for river areas designated as wild, recreational, and scenic, defined as follows:

- *Wild river areas* are those “rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.” (16 U.S.C. §§ 1273(b)(1))
- *Recreational river areas* are those “rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.” (16 U.S.C. §§ 1273(b)(3))
- *Scenic river areas* are those “rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.” (16 U.S.C. §§ 1273(b)(2))

In New Mexico, the Rio Grande between the State line and the Taos Junction Bridge and the Red River were among the first rivers designated by Congress under the Act in 1968. A total of 56 miles on these rivers were so designated for their wild and recreational values. In 1994, an additional 12-mile reach of the Rio Grande in the lower gorge was designated by Congress as



scenic to maintain its recognized values (see *The Rio Grande Corridor Final Plan* [BLM, 2000], 3-35 to 3-36; 16 U.S.C. § 1274(a)(4) (1968); 103 P.L. 242 (1994)). Since these portions of the Rio Grande and the Red River are within the planning region, it is important to consider whether the designations of the Rio Grande and Red River under the Wild and Scenic Rivers Act impacts water management within the region.

The policy behind the Wild and Scenic Rivers Act is to (1) preserve in a free-flowing condition certain selected rivers that, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values and (2) protect designated rivers and their immediate environments for the benefit and enjoyment of present and future generations (16 U.S.C. § 1271). “Free-flowing” is defined as (16 U.S.C. § 1286(b)):

... existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway. The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the national wild and scenic rivers system shall not automatically bar its consideration for such inclusion: Provided, That this shall not be construed to authorize, intend, or encourage future construction of such structures within components of the national wild and scenic rivers system.

Therefore, Congress clearly intended that rivers designated under the Wild and Scenic Rivers Act be preserved in their free-flowing conditions. Such policy most likely would prohibit the use of dams, diversion structures, or other modifications to designated wild and scenic rivers, and such structures could not be used in any management practices for such rivers.

The Wild and Scenic Rivers Act also includes protection for existing State jurisdiction and responsibilities. For example:

- The jurisdiction of the States and the United States over waters of any stream included in a national wild, scenic, or recreational river area must be determined by established State and Federal water law principles (16 U.S.C. § 1284(b)). If, due to the designation of a river under the Act, the United States must “take” a water right that is vested under



either State or Federal law, the owner of such right must be compensated (16 U.S.C. § 1284(b)).

- Designation of a river under the Act, while recognizing the reservation of water rights in quantities sufficient to meet the purposes of the Act, cannot be construed as a reservation of the waters of such streams for purposes other than those specified in this Act or in quantities greater than necessary to accomplish these purposes (16 U.S.C. §1284(c)).
- If a designated river is subject to an interstate compact (such as the Rio Grande Compact), nothing in the Act “shall be construed to alter, amend, repeal, interpret, modify, or be in conflict with” such interstate compact (16 U.S.C. § 1284(e)). In other words, all Rio Grande Compact obligations must be met, regardless of the possible impact of those obligations on the segments of the Rio Grande designated under the Act.

The Wild and Scenic Rivers Act mandates that management policies be put in place for rivers designated pursuant to the Act. As set forth in the Act, “[t]he Secretary of the Interior, the Secretary of Agriculture, and the head of any other Federal department or agency having jurisdiction over any lands which include, border upon, or are adjacent to, any river included within the National Wild and Scenic Rivers System or under consideration for such inclusion . . . shall take such action respecting management policies, regulations, contracts, plans, affecting such lands . . . as may be necessary to protect such rivers in accordance with the purposes of . . .” the Act. In the planning region, the management practices governing the portions of the Rio Grande and Red River that have been designated under the Act are outlined in *The Rio Grande Corridor Final Plan* (BLM, 2000) (Plan). As set forth in the Plan, the “basic objective of [Wild and Scenic River] designation is to maintain the existing condition of a river. If a land use or development clearly threatens the outstandingly remarkable value(s) that resulted in designation of the river, efforts would be made to remove the threat through such actions as local zoning, land exchanges, or purchases from willing sellers” (BLM, 2000, Appendix 3). Simply speaking, any management of the water resources of the Rio Grande and the Red River must comply with the Plan and maintain the rivers in their free-flowing states.



## 4.4 Impacts of Water Quality Laws on Water Use in the Region

Although water quality within all planning regions in the state is governed by both federal and state laws and regulations, most water quality laws have their genesis in federal law. An understanding of the federal water statutes and how they interrelate with state law is critical to understanding the regulation of water quality in the area. In addition, water quality can have a specific impact on the quantity of water within a planning region, as minimum instream flows may be necessary to meet water quality standards.

### 4.4.1 The Clean Water Act

Clearly, the most significant federal water quality law is the Clean Water Act (CWA) (33 U.S.C. §§1251 through 1387 (2002)). The CWA is a 1977 amendment to the Federal Water Pollution Control Act of 1972, which sets the basic structure for regulating discharges of pollutants to navigable waters of the United States. “Navigable waters” has been very broadly defined to include every creek, stream, river, or body of water that may in any way affect interstate commerce, including arroyos or ditches (*Friends of Santa Fe County v. LAC Minerals, Inc.*, 892 F.Supp. 1333 (D.C.N.M. 1995)). A recent and complex United States Supreme Court case, *Rapanos v. United States* (126 S.Ct. 2208 (2006)), addressed the broad definition of navigable waters in the context of wetlands development. The *Rapanos* Court split three ways:

- Four of the nine justices argued that the term *navigable waters* should be restricted to relatively permanent, standing, or continuously flowing bodies of water forming geographic features, such as streams, oceans, rivers, and lakes, or wetlands immediately adjacent to such water. These justices would exclude from navigable waters ordinarily dry channels through which water occasionally or intermittently flows.
- Four other justices argued for retaining an expansive reading of the CWA and for having the term “navigable waters” include wetlands that are adjacent to navigable waters or to tributaries of navigable waters.





- One lone justice wrote the opinion that will guide the lower courts. He argued that a water or wetland constitutes navigable waters under the CWA if it possesses a “significant nexus” to waters that are navigable in fact or that could reasonably be so made. In order to have this nexus, a waterbody must significantly affect the integrity of navigable waters.

The result of *Rapanos* is that if a wetland (or an intermittent or ephemeral stream) has a significant nexus (most likely, a hydrological connection) to navigable waters, then such body of water will be protected by the CWA. This result occurred in the first post-*Rapanos* appellate decision, *Northern California River Watch v. City of Healdsburg* (457 F. 3d 1023 (9<sup>th</sup> Cir. 2006)). While the Court followed Justice Kennedy’s concurring opinion and rejected Healdsburg’s argument that wetlands adjacent to navigable waters are automatically subject to CWA protection (457 F. 3d 1030 (9<sup>th</sup> Cir. 2006)), the Court concluded that the requisite nexus to navigable waters existed, based on a hydrological link and ecological connection between the wetlands and the Russian River, thus affording the wetlands CWA protections (457 F. 3d 1030-1031). Nonetheless, since the *Rapanos* decision was highly divided, the issue of what waterbodies are “navigable” will most likely continue to be subject to litigation or further legislative action.

The CWA’s objective is to “restore and maintain the chemical, physical and biological integrity” of the waters of the United States (33 U.S.C. §1251(a) (2002)). The CWA meets this goal in several ways:

- It allows water quality standards for specific segments of surface waters (33 U.S.C. §1313 (2002)).
- It makes it unlawful for a person to discharge any pollutant into waters without a permit (33 U.S.C. §§1311, 1342 (2002)).
- It requires the designation of total maximum daily loads (TMDLs) for pollutants threatening the water quality of stream segments (33 U.S.C. §1313(d) (2002)). TMDLs are identified for those waters where an analysis shows that discharges may result in a



violation of water quality standards (33 U.S.C. §1313(d)(1)(C) (2002)). The TMDL process can be best described as determining and planning a watershed or basin-wide budget for pollutant influx to a watercourse.

By enacting the CWA, Congress gave the U.S. EPA broad authority to address surface water pollution. With this authority, the EPA has developed a variety of regulations and programs to reduce pollutants entering surface waters. For example, applicable water quality standards, discharge permit requirements, and TMDLs are all defined by regulation.

The CWA also calls for effluent limitations, which are, simply speaking, restrictions on discharges into surface waters from the “end of the pipe” or point source. Point source discharges are regulated through the issuance of National Pollutant Discharge Elimination System (NPDES) permits (33 U.S.C. §1342 (2002)). These permits limit the discharge of a variety of pollutants and control the characteristics (e.g., temperature) of the discharge. NPDES permits also regulate stormwater discharges entering surface water (33 U.S.C. §342(p) (2002)). Although the EPA can delegate the administration of the NPDES program to individual states (33 U.S.C. §1251(b) (2002)), such administration has not yet been delegated to New Mexico.

The CWA allows the EPA to also delegate many other permitting, administrative, and enforcement aspects to state and tribal governments (33 U.S.C. §§1251(g), 1377 (2002)). Indeed, the CWA requires that states and tribes adopt surface water quality standards to protect certain designated uses (such as recreation, wildlife habitat, domestic water supply, irrigation and livestock water, or in the case of Indian tribes, culturally significant or sacred uses) for each river, stream segment, and lake in the state or on the Indian reservation (33 U.S.C. §1313 (2002)). To do so, water quality standards set maximum acceptable levels of various contaminants for each designated use of the surface water at issue. A water contaminant is any substance that alters the physical, chemical, biological, or radiological qualities of the water (NMSA §74-6-2 (A)); it becomes a pollutant when it exceeds the water quality standard for the applicable surface waterbody.

Water quality standards thus generally consist of several parts including (40 CFR §131.6):



- Designated uses for stream reaches and waterbodies
- Water quality criteria intended to protect and maintain the beneficial use of these designated uses (narrative and numeric)
- Antidegradation policy
- General standards intended to protect all waters

Examples of designated uses include public water supply, propagation of fish and wildlife, recreation, agricultural, industrial, and navigation uses (NMSA §74-6-4(C)). In most cases the numeric criteria will correlate with EPA standards or be stricter. Standards must be reviewed every three years and, as appropriate, be modified or replaced (33 U.S.C. §1313(c)(1) (2002)); this process is known as the “Triennial Review.”

Groundwater pollution is not specifically addressed by the CWA, and pollution such as runoff from mining, agricultural, and construction activities (referred to as “nonpoint sources”) is addressed mainly through voluntary management efforts, called “best management practices,” and not through regulation (40 C.F.R. §130.2 (2002)). Nonetheless, a recent court decision found that the EPA and states have the power to list and issue TMDLs for waters polluted only by nonpoint sources (*Pronsolino v. Marcus*, 91 F. Supp 2d. 1337, 1356 (N.D. Ca. 2000), affirmed by *Pronsolino v. Nastri*, 291 F.3d 1123 (9th Cir. 2002)).

The *State of New Mexico Standards for Interstate and Intrastate Surface Waters* (20.6.4 NMAC) cover most of the surface water in the state. In the Taos Region, tribal water quality standards also play an important role in protecting the quality of surface waters. Tribal water quality standards are initiated by tribes recognized by the federal government and approved by the U.S. EPA to administer federal programs under the CWA (33 U.S.C. §1377(e) (2002); 40 CFR §131.4(c)). Water quality standards adopted by such tribes are applicable and enforceable in the same manner as New Mexico's surface water standards (33 U.S.C. §§1313, 1377(e) (2002)).

Tribal water quality standards pertain only to waters of the reservation. Therefore a surface water reach flowing over tribal lands would be protected under the quality criteria established by the tribe, but the reaches upstream and downstream of the tribal reach may be under separate jurisdictions, such as another tribe or the state, and have different water quality standards.



Two pueblos in the planning region, Picuris Pueblo and the Pueblo of Taos, have established tribal water quality standards, as discussed in Sections 4.4.1.1 and 4.4.1.2.

**4.4.1.1 Picuris Pueblo Water Quality Code**

The Picuris Pueblo Water Quality Code was accepted by EPA in May 1995 and revised in May 2000. The entire code is available for review on the EPA web site at [http://www.epa.gov/ost/standards/wqslibrary/tribes/picuris\\_6\\_wqs.pdf](http://www.epa.gov/ost/standards/wqslibrary/tribes/picuris_6_wqs.pdf).

Waters within the boundaries of the Picuris Pueblo are predominantly along the Rio del Pueblo, Rio Santa Barbara, Picuris Creek, Chamisal Creek, and Embudo Creek. Table 4-1 summarizes designated uses on each of these stream reaches. The specific standards for each use are detailed in Section 2 of the Picuris Water Quality Code.

**Table 4-1. Summary of Designated Uses by Stream Reach, Picuris Pueblo**

| Waterbody  | Applicable Reaches   | Designated Uses  |
|--|--|--|
| Rio del Pueblo<br>Rio Santa Barbara  | Eastern reaches of Rio del Pueblo and Rio Santa Barbara, perennial reaches east of their confluence, and wetlands and other perennial waters | Domestic water<br>Fish culture<br>High-quality cold water fishery<br>Irrigation<br>Livestock watering and wildlife habitat<br>Municipal and industrial water supply<br>Primary contact use |
| Rio del Pueblo<br>Rio Santa Barbara<br>Picuris Creek<br>Chamisal Creek<br>Embudo Creek | Perennial reaches above and below the confluence of Rio del Pueblo and Rio Santa Barbara, including fishing ponds and wetlands               | Marginal coldwater fishery<br>Warmwater fishery<br>Irrigation<br>Livestock watering and wildlife habitat<br>Primary contact use<br>Recharge of domestic supply                             |
| All intermittent or ephemeral streams  | Standing water and wetlands  | Livestock watering and wildlife habitat<br>Irrigation<br>Primary contact use   |

**4.4.1.2 Pueblo of Taos Water Quality Code**

The Pueblo of Taos Tribal Council adopted its tribal code under Tribal Resolution #2002-07, and the EPA approved these standards on June 19, 2006, subject to the Endangered Species Act (ESA), although the dichlorodiphenyltrichloroethane (DDT), polychlorinated biphenyls (PCBs), and mercury criteria are still waiting EPA review and approval. The *Pueblo of Taos Water*



*Quality Standards* (available at <http://www.epa.gov/waterscience/standards/wqslibrary/tribes/taos-200606.pdf>) establish designated uses for each water body as defined in Table 4-2.

#### **4.4.2 Safe Drinking Water Act and the Arsenic Rule**

The Safe Drinking Water Act (SDWA) (42 U.S.C. §300f *et seq.* (2002)) protects the quality of drinking water in the United States. This law focuses on all waters actually or potentially designated for drinking use, whether from aboveground or underground sources. The SDWA authorizes EPA to establish safe standards and requires all owners or operators of public water systems to comply with the standards. New Mexico has promulgated drinking water regulations that adopt, in part, federal drinking water standards (20.7.10 NMAC).

Due to concerns with arsenic in drinking water, the EPA has enacted what is commonly called the Arsenic Rule (*Arsenic and Clarifications to Compliance and New Source Monitoring Rule*, 66 FR 6976 (January 22, 2001)). Arsenic, which is odorless and tasteless, enters drinking water supplies from natural deposits in the earth or from agricultural and industrial practices. It has been linked to different cancers and can cause a number of non-cancer conditions, including skin damage and problems with the circulatory system. The purpose of the Arsenic Rule is to improve public health by reducing the exposure to arsenic in drinking water.

Pursuant to the Arsenic Rule, EPA has set the arsenic standard for water systems to 10 parts per billion (ppb), a significant decrease from the previous standard of 50 ppb (40 CFR 141.62(b)). The new standard became effective January 23, 2006, five years after the rule was enacted, in order to give public water systems adequate time to comply with the standard (40 CFR 141.6(j)). All community water systems (defined as systems that serve 15 locations or 25 residents year round [40 CFR 141.2]) in the United States must comply with the standard. The revised standard also applies to approximately 20,000 non-community water systems that serve at least 25 of the same people at least six months a year, such as schools and churches (40 CFR 141.2). (In this water plan, both types of affected water systems are collectively referred to as “public water systems.”) In New Mexico, the Arsenic Rule is enforced by the NMED and is reflected in the New Mexico Drinking Water Regulations (NMDWR) (20.7.1 NMAC).



**Table 4-2. Designated Uses for Pueblo Waters  
Taos Pueblo Water Quality Standards**

| Water Body                           | Designated Use |                 |                  |                                |                   |            |                                 |   |  |                                    |
|--------------------------------------|----------------|-----------------|------------------|--------------------------------|-------------------|------------|---------------------------------|---|--|------------------------------------|
|                                      | Drinking Water | Domestic Supply | Wildlife Habitat | High-quality Coldwater Fishery | Coldwater Fishery | Irrigation | Livestock and Wildlife Watering | Aquatic Life (Acute and Chronic Criteria) | Primary Human Contact / Ceremonial Use | Outstanding Tribal Resource Waters |
| Mountain lakes                       | ■              | ■               | ■                | ■                              |                   | ■          | ■                               | ■   | ■                                      | ■                                  |
| Mountain streams and springs         | ■              | ■               | ■                | ■                              |                   | ■          | ■                               | ■   | ■                                      | ■                                  |
| Rio Pueblo, traditional village area | ■              | ■               | ■                | ■                              |                   | ■          | ■                               | ■   | ■                                      |                                    |
| Rio Pueblo, above Los Cordovas       |                | ■               | ■                | ■                              |                   | ■          | ■                               | ■   | ■                                      |                                    |
| Rio Lucero                           | ■              | ■               | ■                | ■                              |                   | ■          | ■                               | ■   | ■                                      |                                    |
| El Salto Creek                       | ■              | ■               | ■                | ■                              |                   | ■          | ■                               | ■   | ■                                      |                                    |
| Irrigation ditches                   | ■              | ■               | ■                |                                | ■                 | ■          | ■                               | ■   | ■                                      |                                    |
| Wetlands                             | ■              | ■               | ■                |                                |                   | ■          | ■                               | ■   | ■                                      |                                    |
| Rio Pueblo, below Los Cordovas       |                | ■               | ■                |                                | ■                 | ■          | ■                               | ■   | ■                                      |                                    |
| Rio Grande                           |                |                 | ■                |                                | ■                 | ■          | ■                               | ■   | ■                                      |                                    |
| Intermittent and ephemeral streams   |                | ■               | ■                |                                |                   | ■          | ■                               |   | ■                                      |                                    |

Source: Nordhaus Law Firm and Taos Pueblo Environmental Office, 2002, p. 9 of 25



Meeting the standard could have significant economic impact on smaller public water systems. According to NMED, 90 of the 806 affected public water systems in New Mexico have arsenic levels that exceed the new standard (levels of arsenic in the Taos Region are discussed in Section 5.4). To avoid violating the NMDWR, the public water systems that could not meet the standard by the January 2006 effective date must have applied for and received an extension of time to achieve compliance through either an exemption or variance issued by NMED (40 CFR Part 142):

- An exemption allows a public water system additional time (most likely, three years) to comply with the standard. An exemption will only be granted if (1) compelling circumstances, such as financial hardship, are demonstrated and (2) delaying compliance will not pose an unreasonable risk to health.
- A variance allows a public water system to comply with the Arsenic Rule through an alternate drinking water standard. Variances are granted to systems that have installed technology to address the arsenic issue but, due to source water quality, cannot comply with the standard and do not have access to an alternative water source. Systems granted variances will have various compliance time frames. A system will only be granted a variance if the alternate standard does not pose an unreasonable risk to health.

Relevant deadlines relating to the Arsenic Rule include:

- January 23, 2006: New standard became effective (40 CFR 141.6(j)).
- December 31, 2006: Surface water systems must complete initial monitoring or have a state-approved waiver (40 CFR 141.23(c)(1)).
- December 31, 2007: Groundwater systems must complete initial monitoring or have a state-approved waiver (40 CFR 141.23(c)(1)).



The new standard does not apply to private domestic wells. Owners of such wells may contact NMED for further information on arsenic testing (Section 8.3.1).

#### **4.4.3 Groundwater Standards and Regulations**

As noted in Section 4.4.1, the CWA focuses primarily on surface water pollution. Groundwater pollution not caused by hazardous waste is addressed directly by the state and tribes, pursuant to the New Mexico Water Quality Act and its regulations (NMSA §74-6-1 *et seq.*; 20.6.2 NMAC). In New Mexico, groundwater pollution originates from a number of sources, including septic tank systems and cesspools, spills and leaks of hazardous materials, solid waste disposal sites, overuse of fertilizers and pesticides, dairies, and mines (Section 5.4). Except for hazardous and liquid waste, which is regulated separately, these sources are required to have discharge plans under the Water Quality Act and its implementing regulations (NMSA §74-6-1 *et seq.*; 20.6.2 NMAC). The release of hazardous wastes is regulated pursuant to 20.4.1 NMAC, and liquid waste disposal is regulated pursuant to 20.7.3 NMAC.

Improperly installed or maintained domestic septic systems are a potentially significant source of groundwater pollution in New Mexico. NMED, which is charged with writing regulations for liquid waste disposal, has recently revised New Mexico liquid waste disposal regulations (20.7.3 NMAC). These revised regulations became effective September 1, 2005. The major features of the revised regulations include provisions for minimum lot sizes on which a septic system can be placed (0.5 to 0.75 acre, depending on depth to groundwater and proximity to wells), with advanced treatment systems required for smaller lot sizes, drainfield sizing, treatment standards, and permitting of systems that are currently operating without a permit.

#### **4.4.4 Stormwater Regulations**

Stormwater discharges are generated by precipitation and runoff from land, pavement, building rooftops, and other surfaces. As stormwater runoff travels across land, it accumulates pollutants such as oil and grease, chemicals, nutrients, metals, and bacteria. According to the EPA, polluted stormwater runoff is a leading cause of impairment to the nearly 40 percent of surveyed waterbodies in the United States that do not meet water quality standards (U.S. EPA, 2003).





The EPA controls stormwater discharges through its NPDES (Section 4.4.1), a program authorized under the Clean Water Act that prohibits the discharge of any pollutant to navigable waters of the United States from a point source unless the discharge is authorized by an NPDES permit (33 U.S.C. §1342 (2002)). The NPDES program provides guidance to municipalities and to state and federal permitting authorities for addressing the non-agricultural sources of stormwater discharges that adversely affect water quality. It uses the NPDES permitting mechanism to require the implementation of controls designed to prevent harmful pollutants from being washed by stormwater into local waterbodies (33 U.S.C. §1342(p) (2002)). In New Mexico, the NPDES stormwater permitting authority is the EPA (68 FR 39087 (July 1, 2003)).

The NPDES program regulates three specific kinds of stormwater discharges through permit coverage:

- Operators of municipal separate storm sewer systems (MS4s) located in “urbanized areas”
- Industrial facilities that discharge to an MS4 or waters of the United States
- Operators of construction activity that disturbs one or more acres of land, or smaller sites if part of a larger plan of development

NPDES requirements for these types of discharges are summarized in Sections 4.4.4.1 through 4.4.4.3.

#### *4.4.4.1 Storm Sewer Systems Urbanized Areas*

MS4s are defined by regulation as a “conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town . . . or other public body . . . including special districts . . . such as a sewer district, flood control district or drainage district . . . or an Indian tribe . . . ; (ii) Designed or used for collecting or conveying stormwater; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment



Works . . .” (40 CFR 122.26(b)(8)). In practical terms, operators of MS4s can include municipalities, local sewer districts, public universities, public hospitals, military bases, and correctional facilities.

“Urbanized areas” constitute the largest and most dense areas of settlement. The Census Bureau defines “urbanized area” as a place and the adjacent densely settled surrounding area that together have a residential population of at least 50,000 (55 FR 42592 (October 22, 1990)).

Operators of MS4s in urbanized areas must obtain an NPDES permit for stormwater discharges (40 CFR 122.26). Most likely, based on the definitions of MS4s and urbanized area, this type of stormwater discharge would not occur in the Taos Region. Clearly though, any operator of an MS4 should contact EPA to determine the necessary steps to comply with any applicable regulations.

#### *4.4.4.2 Industrial Dischargers*

Operators of industrial facilities in New Mexico requiring an NPDES permit may obtain coverage under the Multi-Sector General Permit (MSGP) if their activities are included in one of 30 industrial sectors designated by the EPA and they discharge to an MS4 of “waters of the United States” (i.e., relatively permanent, standing, or continuously flowing bodies of water forming geographic features, such as streams, oceans, rivers, or lakes [Section 4.4.1; *Rapanos v. United States*, 126 S.Ct. 2208, 2225 (2006); 40 CFR 122.26(b)(14)]). Although the regulatory descriptions of the industrial sectors are quite detailed, examples of such sectors include mining operations, landfills, recycling facilities, transportation facilities, and hazardous waste treatment, storage, or disposal activities (40 CFR 122.26(b)(14)), and such facilities may operate in the Taos Region. Industrial facilities falling within the delineated sectors must obtain coverage for stormwater discharges under the MSGP unless the facility qualifies for the “no exposure” exclusion (40 CFR 122.26(a)(6)). This exclusion applies if there is “no exposure” of industrial materials and activities to precipitation due to the use of storm-resistant shelters (40 CFR 122.26(g)).



#### 4.4.4.3 Construction Activity

According to the EPA, sediment runoff rates from construction sites are typically 10 to 20 times greater than those from agricultural lands, and 1,000 to 2,000 times greater than those from forest lands. During a short period of time, construction activity can contribute more sediment to streams than can be deposited from other lands over several decades (U.S. EPA, 2005a).

Construction activities (including other land-disturbing activities) that disturb 1 acre or more are regulated under the NPDES program. Construction activities are regulated under two rules:

- The Phase I NPDES stormwater rule regulates industrial stormwater and includes large construction activity disturbing 5 or more acres of land (55 FR 47990 (November 16, 1990)).
- The Phase II construction rule regulates small construction activity, that is, activities that result in a land disturbance of between 1 and 5 acres (64 FR 68722 (December 8, 1999)).

In New Mexico, operators of regulated construction sites are required to develop and implement Stormwater Pollution Prevention Plans (SWPPPs) and to obtain permit coverage from the EPA through the Construction General Permit (CGP) (68 FR 39087 (July 1, 2003)). The CGP outlines a set of provisions that construction operators must follow to comply with the requirements of the NPDES stormwater regulations (68 FR 39087 (July 1, 2003)). The CGP covers any site 1 acre and larger, including smaller sites that are part of a “larger common plan of development or sale,” such as a contiguous area where multiple separate and distinct construction activities are occurring under one plan (40 CFR 122.26(b)(15)). Small construction activities (5 acres or less) can obtain a waiver to the permit requirement under certain conditions based on rainfall predictions or the water quality of the receiving body of water (40 CFR 122.26(b)(15)).

The process in New Mexico for obtaining coverage under both the MSGP and the CGP is the same:



- The applicant must first submit a Notice of Intent (NOI) that includes general information about the applicant and the industrial or construction site, as well as a certification that the activity will not impact endangered or threatened species (68 FR 39087 (July 1, 2003); 65 FR 64764 (October 30, 2000)).
- The applicant must then develop and implement a SWPPP that includes appropriate “best management practices” (BMPs) to minimize the discharge of pollutants from the site (68 FR 39087 (July 1, 2003); 65 FR 64764 (October 30, 2000)). Other general requirements of an SWPPP include a site description, designation of a pollution prevention team, a summary of potential pollution sources, inspection, monitoring, and reporting requirements, and retention of records (U.S. EPA, 1992). BMPs include both nonstructural BMPs (good housekeeping, exposure minimization, preventive maintenance, spill prevention and response procedures, routine inspections, employee training) and structural BMPs (material storage covers, stormwater retention structures).

One current issue relating to the MSGP is that the current permit (MSGP-2000) expired on October 30, 2005. It has been administratively continued until a new permit is issued, which is expected to occur in 2007.

## **4.5 Water Rights Administration and Relevant Lawsuits in the Region**

This section discusses the administration of water rights within the defined surface water and groundwater basins in the Taos Region, as well as a number of relevant lawsuits. General information on the administration of water rights in New Mexico is provided in Appendix D.

### **4.5.1 Rio Grande Compact**

The Rio Grande above Fort Quitman, Texas, is governed by the Rio Grande Compact, an agreement entered into by New Mexico, Texas, and Colorado in 1939 and approved by the United States Congress and the State of New Mexico (NMSA §72-15-23). Agreements with Mexico are addressed in a separate treaty. The Compact applies to the use of surface water of the Rio Grande, from its headwaters in Colorado to Fort Quitman by each of the three states



(NMSA §72-15-23). Each upstream state is required to make a surface water delivery to its downstream neighbor (NMSA §72-15-23, Arts III, IV). The volumes of water required to be delivered to New Mexico and Texas are calculated based on upstream flows, and an annual accounting is conducted to determine each state's actual deliveries in relation to that delivery obligation and the resulting credits or debits (over- or under-deliveries), which are carried over from year to year (NMSA §72-15-23, Arts. III, IV, VI).

New Mexico's Compact delivery requirements are based on an inflow-outflow schedule, where inflow is measured at the Rio Grande at Otowi Bridge near the San Ildefonso gage (Otowi gage) (NMSA §72-15-23, Art. IV). Because of the Otowi gage's role in determining delivery amounts, the State Engineer has a long-standing administrative practice of not permitting a change in point of diversion from one side of the gage to the other, whether by sale or by lease (Cartron et al., 2002).

Depletions above the Otowi gage are limited to the 1929 condition as determined by the 1938 Rio Grande Joint Investigation (National Resources Committee, 1938). Accordingly, no new depletions are allowed (NM OSE, 2006a), severely limiting development of additional water resources in the Taos Region. To meet new uses above the Otowi gage, water rights predating the Compact must be purchased or leased.

#### **4.5.2 Costilla Creek Compact**

The Costilla Creek Compact is an interstate compact between New Mexico and Colorado that apportions the waters of the Costilla Creek stream system among water users in New Mexico and Colorado. The Compact, as amended in 1963 (NMSA §72-15-13 (Compact text available at <[http://www.ose.state.nm.us/PDF/ISC/ISC-Compacts/Amended\\_Costilla\\_Creek\\_Compact.pdf](http://www.ose.state.nm.us/PDF/ISC/ISC-Compacts/Amended_Costilla_Creek_Compact.pdf)>), establishes uses, allocations, and administration of the waters of Costilla Creek in Colorado and New Mexico based on a common tabulation of water rights. The Compact makes apportionments and allocations in direct flow terms among specific facilities and sets out the water duty in terms of cubic feet per second for specific acreages of irrigated land (NMSA §72-15-13, Article III (1)).



Administration of the Compact is overseen by the Costilla Creek Compact Commission, of which the New Mexico State Engineer is a member (NMSA §72-15-13, Article VIII). The Costilla Creek water master oversees daily operations using the 2001 Costilla Creek Water Operations Manual (Costilla Creek Compact Commission, 2001) to administer the adjudicated water rights in accordance with priority dates as set out in the 1911 District Court Decree (Territory of New Mexico, County of Taos District Court, 1911). Costilla Creek is one of the few streams in New Mexico that is administered on a strict priority basis in times of drought (NM OSE, 2006d).

#### **4.5.3 State v. Abeyta Adjudication**

All water rights in the Rio Pueblo de Taos and the Rio Hondo stream systems are being adjudicated in the consolidated lawsuits *State of New Mexico ex rel. State Engineer, et al. v. Eduardo Abeyta and Celso Arellano, et al.*, U.S. District Court Nos. 69cv7896 BB and 69cv7939 BB (Consolidated) (commonly referred to as the Abeyta adjudication). The Abeyta adjudication includes both pueblo and non-pueblo claims, as discussed in Sections 4.5.3.1 and 4.5.3.2.

##### *4.5.3.1 Taos Pueblo Draft Water Rights Settlement Agreement.*

On March 31, 2006, the *Taos Pueblo Draft Water Rights Settlement Agreement* (DSA) (U.S. District Court, 2006b) was publicly released by the seven parties to the DSA: the United States, Taos Pueblo, the State of New Mexico, the Taos Valley Acéquia Association and its 55 member acéquias, the Town of Taos, El Prado Water and Sanitation District (EPWSD), and the 12 Taos area mutual domestic water consumers associations (MDWCAs). These parties collectively represent the vast majority of the surface water and groundwater appropriators in the Taos Valley (U.S. District Court, 2006b, p. 4; NM OSE, 2006e):

- The Taos Pueblo has more than 2,400 members.
- The Taos Valley Acéquia Association represents 7,000 non-Pueblo irrigators in the Taos Valley.
- The Town of Taos has approximately 4,900 residents.



- The EPWSD provides domestic water to approximately 1,200 people in and around the community of El Prado.
- The 12 Taos Area MDWCAs provide domestic water to about 5,000 people in 12 rural, non-pueblo communities in the Taos Valley.

The parties to the DSA gathered hydrologic information and developed surface water and groundwater models that provided the framework for developing the DSA. When completed, the DSA will adjudicate Taos Pueblo claims and expedite the adjudication of non-Pueblo water right claims, thereby serving to (DSA, p. 4; NM OSE, 2006e):

- Avoid the cost and uncertainty of litigation
- Provide finality with respect to the quantification of the pueblo's water rights
- Provide an opportunity for non-pueblo irrigators in the Taos Valley to preserve their acéquias and for other non-pueblo water rights owners to protect, develop, and maintain their water uses while establishing a means by which the Pueblo may put its decreed rights to beneficial use
- Restore, preserve, and protect the Taos Buffalo Pasture
- Foster cooperation among all Taos Valley residents regarding the allocation and use of water supplies

Significant technical and legal work was completed as part of the DSA, and the agreement represents a very significant effort by water rights holders to settle the claims of the Taos Pueblo and other water rights holders in the region. The DSA can be summarized in four categories—pueblo water rights, non-pueblo water right acquisitions and contract actions, the pueblo water development fund, and settlement-related projects and funding—as discussed in the following subsections. While these subsections only briefly summarize information regarding the DSA (because detailed information is readily available on the OSE web site, at



[http://www.ose.state.nm.us/legal\\_ose\\_proposed\\_settlements\\_taos.html](http://www.ose.state.nm.us/legal_ose_proposed_settlements_taos.html)), the agreement is recognized in this plan as a key strategy for addressing water needs in the Central subregion, as indicated by the many references to the DSA throughout this plan.

*4.5.3.1.1 Pueblo Water Rights.* Section 5 of the DSA describes the water rights to be adjudicated to the Taos Pueblo pursuant to the DSA. The total water right equals 12,152.51 ac-ft/yr (depletion), with the following components:

- A historically irrigated acreage (HIA) water right of 7,883.4 acre feet (5712.12 acres) (DSA, Art. 5.1.1.1)
- A stockpond right of 114.35 ac-ft/yr (DSA, Art. 5.1.2)
- A San Juan-Chama Project surface water right of 2,440 ac-ft/yr (DSA, Art. 5.4)
- A deep groundwater right of 1,300 ac-ft/yr (DSA, Art. 5.2.3)
- A municipal, industrial and domestic groundwater right of 300 ac-ft/yr (DSA, Art. 5.2.1)
- A stock well right of 14.72 ac-ft/yr (DSA, Art. 5.2.2)
- A Rio Grande depletion credit of 100 ac-ft/yr for use in offsetting any Rio Grande surface water depletion effects associated with the Buffalo Pasture Recharge Project (DSA, Art. 5.3.4).

In order to avoid the disruption to non-Pueblo irrigation in the Taos Valley caused by the Pueblo's immediate use of its HIA right, the Pueblo agreed in the DSA to "forbear" from the immediate full exercise of the HIA right (DSA, Art. 5.1.1.2). Pueblo forbearance will limit its initial exercise of the HIA right to approximately 3,205 ac-ft/yr, with the amount increasing in accordance with terms of the DSA (DSA, Arts. 5.1.1.2.1, 5.1.1.2.2).





Pursuant to the DSA, Taos Pueblo has the right to market, consistent with applicable law and the DSA, any of the water secured through the DSA, under certain conditions (DSA, Art. 5.5). Most significantly, the Pueblo cannot permanently alienate any portion its water right (DSA, Art. 5.5.1.2). In other words, any marketing must be in the form of water leases. Further, any diversion or use of the Pueblo's water rights off Pueblo land will be subject to applicable state and federal laws, including all applicable State Engineer requirements (DSA, Art. 5.5.1.3).

*4.5.3.1.2 Non-Pueblo Water Right Acquisitions and Contract Actions.* Several non-pueblo parties to the DSA will acquire water rights on the open market or through the San Juan-Chama Project.

- The Acéquia Madre del Rio Lucero y Arroyo Seco will acquire 100 ac-ft/yr for use in a water storage and development project as part of the resolution of a dispute involving the allocation of the Rio Lucero (DSA, Art. 6.1.1). The state will pay for the costs of the water rights, along with the administrative, legal, and technical costs associated with acquiring and transferring the water rights (DSA, Art. 6.1.2).
- The DSA recognizes the right of the Town of Taos to operate and maintain its existing water rights of 1,852.67 ac-ft/yr (diversion)/1,460.67 ac-ft/yr (consumptive) as currently permitted by the State Engineer (DSA, Art. 6.2.1). The DSA also provides for the Town to convert its San Juan-Chama Project service contract for 400 ac-ft/yr to a repayment contract and allows the Secretary of the Interior to enter into a separate repayment contract with the Town for an additional 500 ac-ft/yr (DSA, Arts. 6.2.10, 11). The 400-ac-ft/yr contract conversion between BOR and the Town of Taos was executed on August 15, 2006.
- The EPWSD will be allowed to acquire up to 100 ac-ft/yr of consumptive use water rights from the Rio Grande or its tributaries, with the state paying for the costs associated with such acquisition (DSA, Art. 6.3.1.8). The DSA also allows for EPWSD to enter into a repayment contract for 50 ac-ft/yr of San Juan-Chama project water. (Both the Town of Taos and EPWSD have agreed to limit diversions from existing groundwater wells located in the vicinity of the Buffalo Pasture in exchange for funding for the construction



of wells to be located farther from the Pasture, an area of cultural and religious importance to the Pueblo [DSA, Arts. 6.2.4, 6.3.1]).

- The DSA recognizes the right of the 12 MDWCAs to operate and maintain in perpetuity their existing groundwater diversions totaling 553.12 ac-ft/yr (DSA, Art. 6.4.1). It also allows the MDWCAs to acquire up to 145 ac-ft/yr of consumptive use water rights from the Rio Grande or its tributaries to be allocated among the MDWCAs, with the state paying for the costs associated with such acquisition (DSA, Art. 6.4.4).

*4.5.3.1.3 The Taos Pueblo Water Development Fund.* The DSA anticipates that, consistent with any legislation enacted by Congress authorizing the settlement as outlined in the DSA, the United States will establish a \$100,000,000 fund to be known as the Taos Pueblo Water Development Fund (DSA Art. 9.1). The Fund would be used for (1) acquisition of water rights so that the Pueblo may exercise its full HIA right, (2) water infrastructure construction and rehabilitation programs, such as irrigation systems, water and wastewater systems, and well fields, (3) the Buffalo Pasture Recharge Project, in order to restore, protect, and preserve this wetland, (4) administration of the Pueblo's water right acquisition program and implementation of a water management administration system, and (5) other purposes as approved by the Tribal Council (DSA Art. 9.1).

*4.5.3.1.4 Settlement Related Projects and Funding.* The DSA outlines a number of settlement-related projects and funding allocations (DSA Arts. 6 and 10). These projects include construction of a mitigation well system to protect surface flows in order to offset depletions caused by groundwater pumping and supplement the production capacity of five MDWCAs (DSA Art. 10.1.5), construction of wells for a water storage project (DSA Art. 10.1.3), and construction of wells to provide both the Town of Taos and EPWSD with production capacity that avoids adverse effects on the Buffalo Pasture (DSA Arts. 10.1.1 and 10.1.2).

The release of the DSA is the first step in a long process to finalizing the settlement. All of the local signatories (that is, all parties including the State of New Mexico, but not the United States) have reviewed and executed the DSA, and the settlement parties are negotiating the language for the Federal legislation. Once the legislation is enacted, federal and state funding will have to be procured to implement the settlement.



#### *4.5.3.2 Non-Pueblo Claims*

Although non-Pueblo entities will receive benefits under the DSA (Section 4.5.3.1.2), the adjudication of non-Pueblo claims proceeds separately from the claims of the Pueblo. Nearly all of the non-Pueblo claims, which include those of individual water users, MDWCAs, and acéquias, have been adjudicated. To prepare for the issuance of a partial final decree of the non-Pueblo water rights, the state and the adjudication court are conducting an errors and omissions process to identify and correct discrepancies between adjudicated subfile orders and hydrographic survey maps.

#### **4.5.4 Implications of Actions in Other Parts of New Mexico on the Taos Region**

Ongoing adjudications and legal actions in other parts of the state also have the potential to affect the planning region. In particular, a recent proposed settlement in the Aamodt adjudication and a lawsuit relating to the regulation of domestic wells could impact the region.

##### *4.5.4.1 Aamodt Settlement*

The Aamodt adjudication (*New Mexico ex rel. State Engineer v. Aamodt*, No. 66cv06693/MV/LCS-ACE (D.N.M.)) involves the Nambe-Pojoaque-Tesuque stream system, an area directly south of the planning region. Negotiations to settle the case have resulted in the issuance of a revised Settlement Agreement in January 2006 (U.S. District Court, 2006a). The Aamodt Settlement Agreement has many components, but the one that could potentially impact the planning region relates to the use of imported water; that is, water originating outside the Nambe-Pojoaque-Tesuque stream system. The Agreement calls for the United States to acquire 2,500 ac-ft/yr of imported water for the use of the four pueblos whose rights are at issue in the Aamodt adjudication, in exchange for the pueblos agreeing to not fully exercise their right to call priority of their senior rights (Aamodt Settlement Agreement, Arts. 2.2.4.1, 2.5, 2.7, 4.2, and 9.3.71). Further, pursuant to the Agreement, Santa Fe County would be responsible for acquiring 750 ac-ft/yr of imported water for the benefit of future non-pueblo water users in the Nambe-Pojoaque-Tesuque stream system (Aamodt Settlement Agreement, Art. 9.6.3).

In comparing the Aamodt Settlement Agreement with the Taos Pueblo DSA (Section 4.5.3.1), it is clear that the Pueblo could become a source of imported water for acquisition by the United



States or Santa Fe County for use in the Nambe-Pojoaque-Tesuque stream system (i.e., water imported to the Nambe-Pojoaque-Tesuque stream system could potentially be exported by Taos Pueblo). Pursuant to the DSA, Taos Pueblo has the right to market, consistent with applicable law and the DSA, any of the water secured through the DSA under certain conditions (DSA, Art. 5.5). Although the Pueblo cannot permanently alienate any portion its water right, it can enter into long-term leases, which would move water out of the region for significant periods of time, up to 99 years. (DSA, Arts. 5.5.1.2, 5.5.1.4).

#### *4.5.4.2 Domestic Well Regulation*

The domestic well regulations governing the state are described in detail in Section 4.1.4. These regulations were adopted on August 15, 2006. A group consisting of the Board of County Commissioners of Rio Arriba County, the New Mexico Acéquia Association, and individual acéquias, MDWCAs, and similar groups have collectively joined forces and sued the New Mexico State Engineer, alleging that the regulations are unconstitutional and contrary to law (*Board of County Commissioners et al. v. John D'Antonio, Jr., New Mexico State Engineer*, No. D-101-CV-200602087). The plaintiffs allege, in part, that the State Engineer has acted outside of his authority by enacting regulations that restrict the amount of water that can be diverted pursuant to a domestic well permit, permit expedited transfers of water into domestic wells without notice and hearing, condition permits at the sole discretion of the State Engineer, and create restricted domestic well management areas. The eventual outcome of this lawsuit will impact new domestic well uses throughout the state.

### **4.5.5 Administration of Surface Water and Groundwater Within the Taos Region**

#### *4.5.5.1 Rio Grande Surface Water*

Management and use of water in the Rio Grande is governed by the Rio Grande Compact (Section 4.5.1), state statutes, and State Engineer regulations and policies. The State Engineer considers the Rio Grande to be fully appropriated and will thus deny applications for new surface water rights (NM OSE, 2000, p.1). Within the geographic boundaries of the Abeyta adjudication (Section 4.5.3), management of water will be determined in part by the Draft Abeyta Settlement Agreement once it is finalized, signed, and funded. Until that time, general rules and regulations will apply on those streams as well.



The State Engineer policy prohibiting transfers of water across the Otowi gage (Section 4.5.1) significantly limits movement of surface water out of the northern New Mexico area. Even if a willing seller can be identified that holds a water right that does not require a transfer across the gage, water rights transfers on the Rio Grande are routinely protested and can require expenditure of significant technical and legal fees. Additionally, “All permits for changes in place and purpose of use or point of diversion are conditioned. The State Engineer may require that the depletions on the Rio Grande resulting from the exercise of this permit be offset with valid surface water rights” (Sanders, 2006). This policy makes water right transfers more complex and difficult to complete.

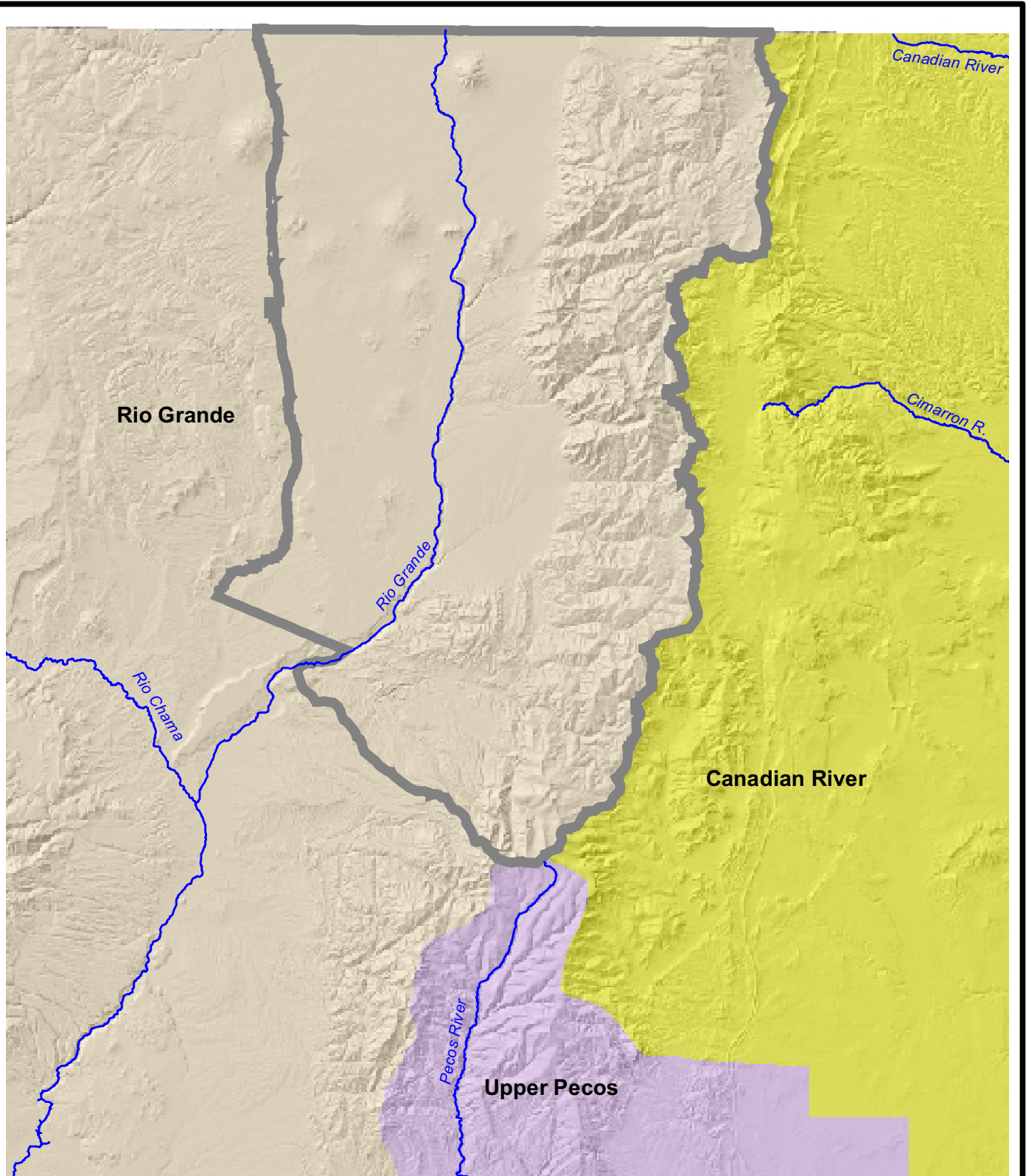
One exception to the OSE policy regarding transfers of water across the Otowi gage is transfer of water for the San Juan-Chama project. In accordance with Article X of the Rio Grande Compact, because San Juan-Chama water originates in the Colorado River Basin, New Mexico does not incur any delivery obligation to Texas for that water; thus it can be transferred across the gage.

#### *4.5.5.2 Rio Grande Declared Groundwater Basin*

The Rio Grande Basin was first declared by the State Engineer in 1956 (a discussion of the State Engineer administration of groundwater basins is provided in Appendix D.1.1), and numerous extensions of the basin occurred through 1980 (19.27.49 NMAC). All of the Taos Region lies within the boundaries of this basin (Figure 4-1). Although the State Engineer has administrative criteria for the Middle Rio Grande (NM OSE, 2000), the criteria apply only within the boundaries of the administrative area, which is located in Sandoval and Bernalillo Counties. The State Engineer has no unique administrative criteria for the portion of the Rio Grande Basin in the planning region. Applications to appropriate groundwater will be evaluated to determine whether approval of the application will impair existing water rights, be detrimental to the public welfare, or be contrary to the conservation of water (NMSA §72-12-3).

Throughout the Rio Grande Basin, groundwater permittees have been required to obtain valid surface water rights in an amount that sufficiently offsets the effects of their diversions on the surface flows of the Rio Grande stream system, to protect those flows from being depleted (NM OSE, 2000, p. 2). State Engineer policy further defines which rights may be used for offsets; that is, groundwater rights can be used for offsets only if they have a pre-1939 priority date.


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Miles

**Explanation**

 River

 Planning region boundary



**Daniel B. Stephens & Associates, Inc.**

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TAOS REGIONAL WATER PLAN  
**Declared Groundwater Basins**

Figure 4-1



Similarly, only surface water rights having a pre-1907 priority date may be used for offset purposes (NM OSE, 2006a). This policy currently applies only in the Middle Rio Grande region, but it is likely to extend to the entire Rio Grande Basin.

## **4.6 Major Water Rights Holders in the Region**

Except for the main stem of the Rio Grande, a significant portion of the region has been adjudicated or is in the process of being adjudicated:

- The earliest adjudication was completed in 1911 on the Costilla Creek system.
- The adjudication of non-federal surface water and groundwater rights on the Red River system, including West Latir Creek and the groundwater in the Sunshine Valley and Costilla areas, was completed in 2000 (federal claims were settled in 1992) (Final Judgment and Decree on Non-Federal Water Rights, December 1, 2000).
- The adjudication of the Taos Valley is ongoing, with the DSA in place for the Taos Pueblo water rights and several municipal water suppliers (U.S. District Court, 2006). The non-Pueblo claims are in the process of being finalized.

A discussion and inventory of the adjudicated surface water rights is provided in Section 6.1.2. Table 4-3 lists available information on major groundwater irrigation and public supply water rights in the region (a complete list of water suppliers is provided in Section 6.1.1).

Water right estimates for the Taos Region were developed from various sources, including court decrees, OSE documentation, and data compilation as discussed in Section 6.1.2. Water rights have been adjudicated only in the North subregion; water rights adjudications in the other subregions are either incomplete or have not yet been initiated. To develop estimates of water rights for those areas, DBS&A relied on OSE documents to define water right acreage and used other sources such as USGS satellite imagery (Landsat) and digital land coverages (National Gap Analysis Program [GAP]) to develop estimates of irrigated acreage in the unadjudicated areas. These estimates, along with the amounts specified in the adjudications, provide an



**Table 4-3. Major Groundwater Rights in the Taos Water Planning Region**  
Page 1 of 2

| System Name   | Irrigated Acreage or Population Served | Water Right (ac-ft/yr)               | File No or Decree <sup>a</sup>                 |
|---|--|--------------------------------------|--|
| <i>North subregion irrigation rights</i>                  |  |                                      |  |
| Sunshine Valley irrigation rights                         | 5,113.8                                | 10,370.59                            | U.S. District Court, 2000 (Red River Decree)   |
| Top of the World Farm <sup>b</sup>                        | 2,088.2                                | 4,176 <sup>c</sup>                   | RG 01441                                       |
| Bankers Trust Co/Mellon Bank <sup>b</sup>                 | 716                                    | 2,148                                | RG-O5845                                       |
| Ute Farm  | 519.4                                  | 1,038.8                              | No RG file, Red River Decree                   |
| Charles Gallagher <sup>b</sup>                            | 250                                    | 400                                  | RG-01050                                       |
| <i>North subregion major water suppliers <sup>d</sup></i> |  |                                      |  |
| Costilla MDWCA  | 425                                    | 53.77                                | RG 21992                                       |
| Questa  | 1,800                                  | 71                                   | RG 10641 <sup>e</sup>                          |
| Red River   | 350 <sup>f</sup>                       | 933.6                                | RG 02184                                       |
| San Cristobal   | 139                                    | 7.32                                 | RG 25531                                       |
| <i>Central subregion irrigation rights</i>                |  |                                      |  |
| Cerro San Cristobal Ranch                                 | 316                                    | 695.2                                | RG 64632                                       |
| Chilton B. Anderson                                       | 206.74                                 | 330.78                               | RG 10344                                       |
| Jose Manuel Santistevan                                   | 133.4                                  | 333.5                                | RG 29644                                       |
| <i>Central subregion water suppliers</i>                  |  |                                      |  |
| Arroyo Seco MDWCA   | 280                                    | 120                                  | U.S. District Court, 2006b (Abeyta Settlement) |
| El Prado Water & Sanitation District                      | 1,008                                  | Varies depending on location of well | Abeyta Settlement, R 40450                     |
| Canon   | 600                                    | 58.34                                | Abeyta Settlement                              |
| Ilano Quemado   | 650                                    | 35.56                                | RG 03894                                       |
| Lower Arroyo Hondo  | 388                                    | 24.30                                | Abeyta Settlement                              |
| Lower Des Montes  | 300                                    | 21.59                                | Abeyta Settlement                              |
| Ranchos de Taos   | 1,100                                  | 105                                  | Abeyta Settlement                              |
| Talpa   | 735                                    | 46.23                                | Abeyta Settlement, RG 09655                    |
| Taos  | 3,516                                  | 1,852.67                             | Abeyta Settlement                              |

<sup>a</sup> All information for RG files comes from the OSE WATERS database (actual water right files were not reviewed to determine accuracy of the database information).

<sup>b</sup> All within Sunshine Valley

<sup>c</sup> Applications for transfers have been submitted and protested, creating much controversy in the region. If approved, the total right will be reduced.

<sup>d</sup> Includes only groundwater rights. Water suppliers may also have surface water rights to serve their population.

<sup>e</sup> Red River adjudication lists 54.01 for Questa. WATERS database shows additional water rights.

<sup>f</sup> Resident population only.





**Table 4-3. Major Groundwater Rights in the Taos Water Planning Region**  
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| System Name                              | Irrigated Acreage or Population Served | Water Right (ac-ft/yr) | File No or Decree <sup>a</sup> |
|--|--|------------------------|--------------------------------|
| Ranchitos                                | 266                                    | 18.15                  | Abeyta Settlement              |
| Valdez MDWCA                             | 120                                    | 11.5                   | Abeyta Settlement, RG 04077    |
| <i>South subregion irrigation rights</i> |  |                        |                                |
| Mark Romero                              | 10.07                                  | 26.75                  | RG 27135                       |
| <i>South subregion water suppliers</i>   |  |                        |                                |
| Chamisal MDWCA                           | 313                                    | 123.08                 | RG 43509                       |
| Cuchilla Del Llano MDWCA                 | 181                                    | 29.41                  | RG 69911                       |
| Peñasco                                  | 437                                    | 179.3                  | RG 42318                       |

<sup>a</sup> All information for RG files comes from the OSE WATERS database.  
 Actual water right files were not reviewed to determine accuracy of the database information.



overview of the amount of water being used in the Taos Region for irrigation, but the actual number of water rights in the region will be ascertained only through the adjudication process.

Table 4-4 summarizes the total estimated acreage with water rights in each subregion and the current estimates of irrigated acreage and both irrigated and fallow acreage. In all cases, the water right acreage and irrigated acreage are different. Several factors explain these differences:

- The estimates of acreage that is currently irrigated and acreage that is fallow is based on the most recent satellite imagery or GIS coverage.
- The water right acreage is the acreage with claims to use water as listed in various OSE tables and studies. The validity of those rights has not been determined.
- In the North subregion, the groundwater rights included in the Red River Adjudication have not been fully put to beneficial use, which explains the higher estimate of water rights than currently irrigated.
- The estimate of acreage that is currently irrigated represents a snapshot in time for the year assessed. Therefore, if the water supply is insufficient to meet demands, the irrigated acreage may be less than the water rights acreage.
- Using GIS analysis to estimate acreage can introduce errors if the sizes of the irrigated parcels are very small or the land coverage is misinterpreted, as discussed below.

**Table 4-4. Summary of Acreage with Water Rights and Estimated Irrigated Acreage**

| Subregion | Estimated Water Right Acreage <sup>a</sup> | Acreage Irrigated in 1999 <sup>b</sup> | Acreage Irrigated in 2004 <sup>b</sup> | Acreage Irrigated and Fallow in 2004 <sup>d</sup> |
|-----------|--|--|--|---|
| North     | 19,580                                     | 10,500                                 | 7,300                                  | 15,560  |
| Central   | 16,495                                     | 13,000                                 | 12,100                                 | 16,700  |
| South     | 6,805                                      | 5,300                                  | 7,300                                  | 9,000   |
| West      | 627  | 80                                     | 940                                    | 4,600   |

<sup>a</sup> Saavedra, 1987

<sup>b</sup> Wilson et al., 2003

<sup>c</sup> DBS&A Landsat (USGS, 2004y)

<sup>d</sup> DBS&A GAP data (USGS, 2004x)



The water rights in the North subregion were adjudicated with the Costilla Decree in 1911 and the Red River Adjudication in 2000. Several OSE reports published after the Costilla adjudication indicate additional water rights on the Costilla stream system, including approximately 7,000 acres in the Costilla and Ute Creeks in New Mexico. The status of these additional rights is unknown, and attempts to obtain the water rights administered by the Costilla Creek Water Master have been unsuccessful. However, because these additional rights have been cited by the OSE, DBS&A has included them in the total water right acreage for the North subregion, as discussed in Section 6.1.2. The Red River adjudication identifies about 12,600 acres of water rights on Red River, Latir Creek, San Cristobal Creek, and Cabresto Creek.

The estimates of water rights in the Central subregion are based on a database from Karla McCall, Data Manager for *State v. Abeyta* (No. 69cv07896 (Oct 13, 2005)). The total acreage also includes Taos Pueblo acreage listed in the Draft Abeyta Settlement Agreement for Pueblo claims (March 31, 2006).

The acreage with water rights for the South subregion is about 500 acres less than the acreage estimated from the 2004 satellite image and 2,200 acres less than the irrigated and fallow acreage determined from the GAP analysis. It is unclear why the GAP analysis shows so much more acreage. The water right estimate, which is based on a 1987 OSE report (Saavedra, 1987) and does not reflect final adjudicated water rights, does show about 1,500 acres more than the 1999 irrigated acreage estimate by Wilson et al. (2003). Until the basin is adjudicated, a meaningful analysis of water rights versus use cannot be developed; however, the estimates provided in Table 4-4 should all be within an order of magnitude.

Estimates of irrigated land in the West subregion vary greatly, and this difference is not understood. The high estimate for currently irrigated acreage is from the USGS GAP data, which include areas of grasses, legumes, or grass-legume mixtures planted for livestock grazing or the production of seed or hay crops, typically on a perennial cycle, where pasture/hay vegetation accounts for greater than 20 percent of total vegetation (USGS, 2004x). The GAP may have misinterpreted the prairie grasses as irrigated lands, which would account for the much higher estimate than the water right acreage of 627 acres or the 940 irrigated acres estimated from a 2004 satellite image. However, the water right estimate, which comes from a 1987 OSE report (Saavedra, 1987), may be too low for this subregion.