

Inter-basin Water Transfers

Inter-basin water transfers move water from one watershed to another. As droughts constrict the availability of water, and cities grow larger and thirstier, such transfers are increasingly being eyed as a solution. Although inter-basin transfers usually do not increase the overall availability of water in a state, they can move water to where it is needed most. Some of the main proponents of inter-basin transfers are pro-growth city and state governments as the re-allocation of water across watersheds allows for flexibility in planning for future growth.

The Western Governors Association, for example, issued the following policy statement in 2011, “Western Governors believe states should identify and promote innovative ways to allow water transfers from agricultural to other uses (including urban, energy, and environmental) while avoiding or mitigating damages to economies and communities.” In addition to the predominant movement of water from agricultural to industrial use, water is also being transferred for energy development needs, ranging from renewable energy to hydraulic fracturing. A 2012 report by the Western Governors Association and the Western States Water Council predicts that the energy sector will be an increasingly important driver for transfers in the coming decade. According to the same report, farmers have used transfers to supplement drought-strained water supplies, offset the impacts of water withdrawals, and enhance their economic stability by leasing or selling water. In addition, conservation groups and federal resource managers in Western states are increasingly looking to transfers to augment in-stream flows for fish and wildlife, including threatened and endangered species.

“Upon initial consideration, interbasin transfer of water has enormous appeal. Indeed, many of the regional water plans offer vague references to receiving water from adjacent basins. However, a more thorough examination reveals that there are often few details to support these transfers...”

Professor Bruce Thomson,
Department of Civil Engineering,
University of New Mexico (2010)

Inter-basin water transfers move water from one watershed to another. As droughts constrict the availability of water, and cities grow larger and thirstier, such transfers are increasingly being eyed as a solution.

Concerns about inter-basin transfers often arise from rural communities in the “area of origin” (i.e., the location from which water is being removed). Fallowed agricultural lands can contribute to dust problems, encourage the proliferation of invasive weeds, and thereby increase the risk of fire. Transferring water from agricultural areas on a large scale raises concerns for proponents of local food and farmers’ markets and those concerned about food security. Additional misgivings come from environmentalists, who surmise that where there is a lack of legal protections for in-stream flows, water-dependent ecosystems will literally be left high and dry when water is transferred.

In New Mexico, a recent failed attempt to pass legislation regulating inter-basin transfers highlighted both the perceived lack of regulation of large transfers and the institutional unwillingness to add hurdles, especially cost, for water transfer applications. In the absence of such legislation, New Mexico’s legal landscape contains limited roadblocks to inter-basin transfers.

Furthermore, in some ways, inter-basin transfers embody a significant orientation toward the concept of beneficial use, on which our statutory and common-law water system is built. In order to address concerns about inter-basin transfers, other Western states have strengthened protections both for areas of origin and

receiving watersheds, using a combination of area-of-origin protections, compensation schemes, and other statutory tools. These methods may be instructive if New Mexico chooses to more closely regulate transfers in the future.

New Mexico’s Legal and Political Landscape

New Mexico statutes expressly recognize that the right to use water upon certain lands “may be severed from such lands and become appurtenant to other lands, or may be transferred for other purposes and other uses.” This principle has become ingrained in New Mexico water law, allowing for a persistent bias in favor of water transfers.

Under current New Mexico law, the approval of inter-basin water transfers rests with the Office of the State Engineer, which, within certain statutory limits, retains the sole discretion to approve or deny such transfers. The State Engineer uses three primary criteria to evaluate all transfer applications, which have been expanded and clarified in New Mexico’s courts. The State Engineer must reject applications that are: 1) likely to impair existing valid water rights, 2) contrary to conservation of water within the state, and 3) detrimental to the public welfare of the state. State Engineer decisions on any water rights applications, including transfers, are fully reviewable by the New Mexico Courts.

Under an impairment analysis, all other considerations are moot for the State Engineer if water is not available for a transfer, i.e., if all the water in a basin or area has already been appropriated to other users or not enough unappropriated water remains to fulfill the application.

In New Mexico, a recent failed attempt to pass legislation regulating inter-basin transfers highlighted both the perceived lack of regulation of large transfers and the institutional unwillingness to add hurdles, especially cost, for water transfer applications.

NM Senate Bill 77 (2014)—

Proposed regulation for the application process for the diversion of water from the basin of origin for use outside the basin of origin

New Mexico senators Timothy Keller and Brian Egolf Jr., introduced a bill to regulate inter-basin transfers in the 2014 Legislative Session. The bill would have required the State Engineer to use eleven explicit criteria when evaluating applications for inter-basin transfers exceeding 1,000 acre-feet per year. The bill, if passed, would have required legislative approval for transfers exceeding 7,000 acre-feet per year. The eleven criteria represent current concerns about water transfers in New Mexico:

1. the amount of water in the basin of origin available for future appropriation;
2. present and reasonably foreseeable projected future needs for water in the basin of origin and the receiving basin;
3. benefits presently and prospectively derived from the return flow of water used within the basin of origin that will be eliminated by the proposed out-of-basin use;
4. the correlation between surface water and groundwater in the basin of origin;
5. interference with planned uses or developments within the basin of origin for which a permit has been issued or for which an application is pending;
6. whether the proposed use will adversely affect the quantity or quality of water available for domestic, agricultural, environmental, public recreational, or municipal uses within either the basin of origin or the receiving basin;
7. whether the proposed transfer will unduly limit the future growth and development in the basin from which the water is exported;

8. the practicable availability of alternative sources of water for the proposed use that would not rely on transfer of water out of its basin of origin;
9. whether the entity in the receiving basin has prepared and implemented a drought contingency plan and an approved water conservation plan;
10. whether all funding necessary for the withdrawal and transportation of water to the receiving basin has been secured and guaranteed by the applicant; and
11. whether the source of supply can reliably sustain the diversion's anticipated firm yield considering the predicted effects of climate change on precipitation patterns and temperature in the basin of origin.

The Office of the State Engineer voiced opposition to the bill, primarily because it would add another layer of regulation to water transfer applicants at the expense of applicants. The Attorney General's Office added that requiring legislative consent for a private water permit application "is extremely rare and presents the applicant with significant obstacles to acquiring a permit involving an inter-basin transfer of more than seven thousand acre feet," especially because the Legislature is not always in session.

New Mexico courts maintain that the State Engineer may preclude impairment by denying an application all or in part, or by imposing conditions on its approval. The New Mexico Supreme Court held this discretion applies when an appropriator seeks a right to use groundwater in a manner that would impair existing surface water rights. In the 2007 case *Montgomery v. Lomos Altos, Inc.*, for example, the Court upheld the State Engineer's determination that an applicant seeking to withdraw groundwater in the Rio Grande Underground Water Basin, hydrologically connected to fully appropriated Rio Grande surface flows, would have to mitigate the surface water depletion as a condition of its permit.

Impairment is not limited to considerations of impact on water volume; water quality impacts can also be considered impairment. The Supreme Court, in the 1962 case *Heine v. Reynolds*, upheld a State Engineer's impairment determination as the facts showed granting the application would result in a small increase in salt content in an underground basin. Water quality concerns for the receiving basin in inter-basin transfers have garnered some recent attention outside of New Mexico. In 2006, the EPA issued a final rule excluding water transfers from Clean Water Act oversight. However, in an unpublished 2014 opinion in *Catskill Mountains Chapter of Trout Unlimited, Inc. v. U.S. E.P.A.*, a New York

federal district court held the exclusion of inter-basin transfers from the Clean Water Act to be invalid. Although the opinion is not binding on New Mexico courts, it provides a thorough regulatory history of the issue and offers a framework for the consideration of receiving basin prerogatives.

The concept of conservation of water is closely tied to the enduring principle of beneficial use, which is the measure of and limit to a water right. New Mexico courts often describe the beneficial use limitation on water rights as, "a right to take a given quantity of water for a specified purpose." A West-wide anti-speculation doctrine dictates that beneficial use must entail actual use, and not undefined plans for future use. In *Jicarilla Apache Tribe v. United States*, the 10th Circuit invalidated a water storage agreement between the Bureau of Reclamation and the City of Albuquerque when the City based its appropriation on plans to sell its water to as-yet unidentified customers: "We do not deny that Albuquerque could take the quantity authorized in order to provide its purchasers for beneficial use regardless of the economic results to the City," the court wrote. "But it cannot take the water now with a mere hope of possible sales in the future, most of which sales are yet to materialize."

The State Engineer's third and final legal consideration, "detrimental to public welfare," leaves much to interpretation. New Mexico's Constitution, Article XVI, § 2 reads: "The unappropriated water of every natural stream, perennial or torrential, within the state of New Mexico, is hereby declared to belong to the public..." In *Young & Norton v. Hinderlider*, a 1910 case, the Supreme Court construed the statute broadly, striking down a determination by the

The concept of conservation of water is closely tied to the enduring principle of beneficial use, which is the measure of and limit to a water right. New Mexico courts often describe the beneficial use limitation on water rights as, "a right to take a given quantity of water for a specified purpose."

water commission that considerations of public interest should be limited to menaces to public health and safety: "There is no such limitation expressed in terms in the statute, and we think not by implication. The declaration in the first section of the statute that the waters therein described are 'public waters,' and the fact that the entire statute is designed to secure the greatest possible benefit from them for the public, should be borne in mind." The *Hinderlider* court held that the public should be protected from "worthless investments:"

If there is available unappropriated water of the La Plata river for only 5,000 or 6,000 acres of land, it would be contrary to the public interest that a project for irrigating 14,000 acres with that water should receive an official approval which would, perhaps, enable the promoters of it to market their scheme, to sell stock reasonably sure to become worthless, and land which could not be irrigated, at the price of irrigated land. Such a proceeding would in the end result only in warning capital away from the territory. The failure of any irrigation project carries with it not only disastrous consequences to its owners and to the farmers who are depending on it, but besides tends to destroy faith in irrigation enterprises generally.

Proposed and Pending Transfers in New Mexico

Numerous inter-basin transfers have been proposed in New Mexico, and those proposals have incurred varying receptions.

Estancia Basin to Santa Fe

One company, Sierra Waterworks, LLC, proposed a groundwater transfer of 7,200 acre-feet a year from the Estancia Basin to

Numerous inter-basin transfers have been proposed in New Mexico, and those proposals have incurred varying receptions.

Santa Fe. A citizens group, the Estancia Bay Resource Association, quickly formed to oppose the plan, based on its potential to turn a thriving agricultural community into a dust bowl. That plan is now inactive. However, locals support a more modest transfer proposal that would keep water within the basin. Under the new plan, the EMW Gas Association may build a \$19 million regional water pipeline from Willard to Moriarty along New Mexico State Highway 41, to supplement individually owned wells.

Pecos River to Santa Fe

Berrendo, LLC, proposed a surface water transfer of 6,600 acre-feet per year from the Pecos River near Fort Sumner to Santa Fe, but the State Engineer denied the application. According to an Office of the State Engineer press release, Berrendo President Ron Green proposed the transfer to provide drinking water for growing parts of the state. Opponents of the transfer included "Chaves County, Eddy County, the cities of Artesia and Roswell, the towns of Hagerman and Dexter, the New Mexico Interstate Stream Commission, the State Land Commissioner, the Bureau of Reclamation, and the Pecos Valley Artesian Conservancy District, among others," according to the release. Concerns included well drawdown at individual wells, negative impacts on agriculture and the federally protected bluntnose shiner. The State Engineer's denial was based on a lack of specificity that made it "difficult to evaluate impairment or whether granting it would

The Arizona Water Settlements Act of 2004 authorized a diversion of up to 14,000 acre-feet per year from the Gila River system as part of an exchange with the Central Arizona Project. If New Mexico takes advantage of the diversion, the federal government will fund infrastructure up to \$66 million, which could move water out of the Gila Basin into the Mimbres or perhaps even the Rio Grande Basin.

be contrary to conservation or detrimental to the public welfare,” said then State Engineer John D’Antonio.

Plains of San Augustin to the Rio Grande

Augustin Plains Ranch, LLC, has proposed a groundwater transfer of 54,000 acre-feet per year from Plains of San Augustin to the Rio Grande. The State Engineer originally denied the application in 2008, following protests by more than 900 opponents, according to an April 2012 State Engineer press release. Opponents included the New Mexico Interstate Stream Commission, the Middle Rio Grande Conservancy District, the Bureau of Reclamation, New Mexico Department of Game and Fish, Gila and Cibola National Forests, Catron County, Socorro County, Luna Irrigation Ditch, Monticello Irrigation District, several adjoining ranches, over 100 individuals, the Pueblos of Santa Ana, Zuni, San Felipe, Isleta, Sandia, Acoma, Kewa (Santo Domingo), and the Navajo Nation. They worried that the drawdown of water could impact their wells and would have an adverse impact on their rural, agricultural lifestyle. The State Engineer Hearing Officer held the application was “vague, overbroad, lacked specificity, and the effects of granting it cannot reasonably be evaluated, problems which are contrary to public policy.” In addition, no end user

had been identified. The Ranch appealed the denial in the 7th Judicial District Court and lost in early 2013, then appealed to the Court of Appeals. That case was dismissed as moot in mid-July, because the Ranch had submitted a new application to the State Engineer. Local residents, banded together in a group called the San Augustin Water Coalition, continue to voice opposition to the proposal based on their own concerns about future recharge and depletion of groundwater supplies.

The Gila River to the Mimbres River

The Arizona Water Settlements Act of 2004 authorized a diversion of up to 14,000 acre-feet per year from the Gila River system as part of an exchange with the Central Arizona Project. If New Mexico takes advantage of the diversion, the federal government will fund infrastructure up to \$66 million, which could move water out of the Gila Basin into the Mimbres or perhaps even the Rio Grande Basin. Many have argued that it makes better economic sense to forego the diversion to develop alternative water sources. Biological diversity in the Gila could be threatened by the withdrawal of water, including many state and federally protected birds and other animals. Additionally, water must be delivered from the Central Arizona Project to offset the impacts to downstream communities is proposed to come, although shortages are projected for the Central Arizona Project supply in the near future.

Red River to Arroyo Seco

The Claims Resolution Act of 2010 includes settlements for the White Mountain Apache Tribe, the Crow Tribe, the Taos Pueblo, and four additional pueblos. The Act establishes a fund of \$36 million for the Taos Pueblo water rights

settlement, subject to Congressional appropriation, from which the Secretary of the Interior may make grants between 2011 and 2016, to pay for such projects. As of 2013, two transfers had been proposed under the settlement. The first of these is actually a set of several transfers to move a total of 284 acre-feet of water from northern Taos County. That water is owned or leased by El Prado Water and Sanitation District, which aims to move the water rights to offset groundwater pumping. The second involves a water transfer application to move 183 acre-feet per year from a Questa acequia to acequias in Arroyo Seco. Both are the subject of protests by Taos and neighboring citizens.

Rio Grande Basin to Pojoaque Basin

The Aamodt adjudication, quantifying rights for the Nambe, Pojoaque, San Ildefonso, and Tesuque pueblos, authorizes a transfer of 1,141 acre-feet from Santa Fe County's "Top of the World" farm in the Taos Basin to the Pojoaque Basin. The water will be combined with 302 acre-feet of Nambe Pueblo water and 1,079 feet of San Juan-Chama water for a regional water system. Plans include Rio Grande surface diversion facilities at San Ildefonso and "any treatment, transmission, storage and distribution facilities and wellfields...necessary to supply 4,000 acre-feet of water within the Pojoaque Basin," up to a cost of \$106.4 million (indexed for inflation). Although potential opponents are braced to protest transfers stemming from the Aamodt adjudication, no applications have been filed as of the end of 2014.

Canadian River to the Southern High Plains

The Eastern New Mexico Rural Water System (also known as the Ute Pipeline Project) has plans under way to divert 16,450 acre-feet per year from Ute

Reservoir for communities on New Mexico's eastern plains. Construction began on the project in 2011, and the state and its federal delegation are actively supporting its progress; the state Water Trust Board announced \$4 million in funds earlier this year that will fund engineering designs for connections at the Clovis/Cannon Air Force Base and Clovis/Portales. There are concerns about whether the reservoir actually has the capacity to deliver the promised water, and the potential for effects is unclear on tourism, recreation, and home ownership near Ute Reservoir.

Upper Colorado to Lower Colorado

The Navajo-Gallup Water Supply Project aims to pump 37,764 acre-feet per year through 260 miles of pipeline from the San Juan River to Gallup, Window Rock and other Native American communities. Touted as the cornerstone of the Navajo water settlement on the San Juan, the project is one of fourteen high-priority infrastructure projects identified in October of 2011 by the Obama Administration to be expedited through the permitting and environmental review process, according to a Department of Interior press release issued in 2014. Also in 2014, according to the release, the Bureau of Reclamation awarded a \$19.6 million contract to start construction on the first pumping plant in the system.

The Navajo-Gallup Water Supply Project aims to pump 37,764 acre-feet per year through 260 miles of pipeline from the San Juan River to Gallup, Window Rock and other Native American communities.

Other Western State Approaches to Inter-Basin Transfer Regulation

Western states have adopted differing approaches for the regulation of inter-basin water transfers. Some states have an outright prohibition on transfers that exceed a significant amount. Others require a heightened scrutiny to ensure that environmental and economic impacts are reasonable. Some require consent from the existing users, the local government, or the state legislature. Finally, some require offsets in the form of payments to the area of origin.

California's water code, for example, allows for transfers only if they do not unreasonably affect fish, wildlife, or other in-stream beneficial uses, and do not unreasonably affect the overall economy of the area from which the water is being transferred. The same code prohibits the transfer of groundwater unless the transfer is in compliance with a county-adopted groundwater management plan.

Colorado law provides that transfers from agricultural areas "shall include reasonable provisions designed to accomplish the revegetation and noxious weed management of lands from which irrigation water is removed." Colorado law also requires compensation to local governments in the source areas when applicants seek to transfer more than 1,000 acre-feet per year more than twenty miles away, and allow for

offsets if pollution excesses occur as a result of the lost water volume.

The Idaho Department of Water Resources oversees transfer applications, the approval of which must be "consistent with the conservation of water resources within the state of Idaho and is in the local public interest... [and] will not adversely affect the local economy of the watershed or local area within which the source of water for the proposed use originates." The statute also proscribes transfers that would significantly impact the agricultural base of a local area.

Montana seeks to safeguard both the area of origin and the source area; that state's code says that a determination of reasonable use for transfers greater than 4,000 acre-feet per year, and 5.5 cubic feet for second, must consider both "the effects on the quantity and quality of water for existing uses in the source of supply," and "the probable significant adverse environmental impacts of the proposed use of water."

In Nevada, transfers out of irrigation districts "must not adversely affect the cost of water for other water rights holders in the district or lessen the efficiency of the district in its delivery or use of water." Additionally, counties of origin can impose an annual fee of \$10 per acre-foot on certain groundwater transfers or draft a binding plan, including requirements for the applicant and successors to offset economic losses. For inter-basin groundwater transfers, the state engineer must consider whether the transfer will "unduly limit the future growth and development in the basin from which the water is exported." Finally, the state engineer must evaluate "whether the proposed action is environmentally sound as it relates to the basin from which the water is exported."

Applicants for water transfers in Oregon must quantify the return flow benefits that

Western states have adopted differing approaches for the regulation of inter-basin water transfers. Some states have an outright prohibition on transfers that exceed a significant amount. Others require a heightened scrutiny to ensure that environmental and economic impacts are reasonable.

will be eliminated and impacts on both surface water and groundwater, along with six other factors, and the state must “reserve an amount of water adequate for future needs in the basin of origin, including an amount sufficient to protect public uses, and subordinate the out-of-basin use to that reservation.” Oregon’s legislature must approve transfers of fifty cubic feet per second or more, and applications impacting streams subject to in-stream water rights must secure a “consent to injury” from any resource management agency that holds the in-stream flow rights.

In Texas, inter-basin transfers of more than 3,000 acre-feet per year of surface water are subject to an analysis of water quality impacts and economic considerations for the source area, among other factors. Surface-water inter-basin transfers in Texas carry a junior priority date. The Texas water code proscribes transfers that “cause adverse impact on other water right holders or the environment on the stream of greater magnitude than under circumstances in which the permit, certified filing, or certificate of adjudication that is sought to be amended was fully exercised.”

Utah’s water code directs the state engineer to reject a transfer application if it “...will unreasonably affect public recreation or the natural stream environment, or will prove detrimental to the public welfare.”

Wyoming statutes provide that “[t]he change in use, or change in place of use, may be allowed, provided that the quantity of water transferred by the granting of the petition shall not exceed the amount of water historically diverted under the existing use, nor exceed the historic rate of diversion under the existing use, nor increase the historic amount consumptively used under the existing use, nor decrease the historic amount of return flow, nor in

First and foremost, where the State Engineer has denied transfer proposals, lack of specificity has been a key reason. Similarly, New Mexico courts have overturned transfer approvals where end uses were insufficiently defined.

any manner injure other existing lawful appropriators.”

Conclusion

New Mexico’s case law, along with State Engineer commentary accompanying proposed inter-basin transfers, reveals several trends. First and foremost, where the State Engineer has denied transfer proposals, lack of specificity has been a key reason. Similarly, New Mexico courts have overturned transfer approvals where end uses were insufficiently defined. Therefore, arguments based on the anti-speculation doctrine may prevail at both levels. Secondly, coordinated local opposition appears to hold some sway. This may or may not be based on the fundamental principle, which the State Engineer must consider, of public detriment. New Mexico case law also suggests that impairment to water quality, even salt content, at the source basin precludes State Engineer approvals and is grounds for reversal when an application is wrongly approved. The same is true for the principle of waste. High evaporative loss, for example, has been held to be contrary to conservation in violation of statutory limits to transfer application approvals.

The future of inter-basin transfers in New Mexico will depend on the decisions of the State Engineer, the water marketplace, and any controls the Legislature may implement to regulate them.

By Anne Minard, UNM School of Law,
Class of 2015

Sources

Bounds v. D'Antonio, 2013-NMSC-037, 306 P.3d 457.

Bureau of Reclamation, Reclamation to Begin Field Work for Navajo-Gallup Water Supply Project (Sept. 20, 2010) <http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=33784> (last visited Sept. 11, 2014).

Carangelo v. Albuquerque-Bernalillo County Water Util. Auth., 2014-NMCA-032.

Catskill Mountains Chapter of Trout Unlimited, Inc. v. U.S. E.P.A., 08-CV-5606 KMK, 2014 WL 1284544 (S.D.N.Y. Mar. 28, 2014).

City of Albuquerque v. Reynolds, 1962-NMSC-173, 71 N.M. 428.

Claims Resolution Act of 2010, <http://repository.unm.edu/bitstream/handle/1928/21841/ClaimsResolutionAct2010.pdf?sequence=1&isAllowed=y> (last visited Sept. 11, 2014).

Colorado River Water Conservation Dist. v. Vidler Tunnel Water Co., 197 Colo. 413, 594 P.2d 566 (1979).

Dodds, Eileen, *SAWC Presentation to NM Water & Natural Resources Committee*, Oct. 14, 2013.

Heine v. Reynolds, 1962-NMSC-002, 69 N.M. 398.

J.R. Logan, *Taos County Protests Water Transfers*, *The Taos News* (March 5, 2012) http://www.taosnews.com/news/article_4e5eed0c-63cc-11e1-81c7-001871e3ce6c.html (last visited Sept. 11, 2014).

Jicarilla Apache Tribe v. United States, 657 F.2d 1126, 1135 (10th Cir. 1981).

Kay Matthews, *Capitalism and the Commons Engage in the Taos County Chamber*, *La Jicarita* (Oct. 31, 2013) <http://lajicarita.wordpress.com/2013/10/31/capitalism-and-the-commons-engage-in-the-taos-county-chamber/> (last visited Sept. 11, 2014).

Mathers v. Texaco, Inc., 1966-NMSC-226, 77 N.M. 239.

Montgomery v. Lomos Altos, Inc., 2007-NMSC-002, 141 N.M. 21.

Oglesby, A., *Implementation of the Arizona Water Settlement Act in New Mexico*, 52 *Natural Resources Journal* (Spring 2012).

Sporhase v. Nebraska, 102 S.Ct. 3456 (1982).

State ex rel. Erickson v. McLean, 1957-NMSC-012, 62 N.M. 264.

Western Governors' Association, *Water Transfers in the West* (December 2012), <http://www.westgov.org/reports?start=8>

Western Governors' Association Policy Resolution 11-7, *Water Resource Management in the West*, http://democrats.naturalresources.house.gov/sites/democrats.naturalresources.house.gov/files/WGA%20Policy%20Resolution_Water-Resources11-7.pdf

Yeo v. Tweedy, 1929-NMSC-033, 34 N.M. 611.

Young & Norton v. Hinderlider, 1910-NMSC-061, 15 N.M. 666.