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ARTICLES

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A New Approach in Water Management or Business as Usual? The Milk River, Montana

The allocation, management and development of water in the West is a highly dynamic area. The basic law governing the allocation of western water has not changed substantially in over 100 years and is steeped in archaic concepts fashioned to address situations no longer relevant.¹ Why this dichotomy between what is happening on the ground and in the law? In short, the resource itself, our demand on it, and our view of its value is changing at a rate that outpaces the ability of the law to adapt. Supply fluctuates on both a seasonal and long-term basis. Estimates indicate that 1.2 billion people globally experience a shortage of potable water and given current population trends, that number will only increase.² Many Indian reservations in the United

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¹ See, e.g., CHARLES F. WILKINSON, *CROSSING THE NEXT MERIDIAN: LAND, WATER, AND THE FUTURE OF THE WEST* 25 (1992) (referring to prior appropriation as a "lord of yesterday").

² Arun P. Elhance, *Water Scarcity in the Third World*, in *HYDROPOLITICS IN THE THIRD WORLD: CONFLICT AND COOPERATION IN INTERNATIONAL RIVER BASINS* 8 (1999).

States, like the developing world, lack potable water.³ In the West, growing urban demand and recent recognition of tribal rights and critical habitat needs place increasing strain on this finite, yet ever renewable resource.⁴

To meet these needs in the face of growing concern about the impact of water development on the integrity of ecosystems, the focus of water policy both globally and in the West has moved away from the twentieth century emphasis on water development and toward improvements in water management and efficiency.⁵ Many of the efforts to solve these growing concerns conflict with the archaic law governing water allocation. Western water policymakers and practitioners are in a constant struggle to introduce sufficient flexibility into the law in order to address changes in supply, demand, and values.⁶ In the effort to address modern problems, negotiation plays an increasingly important role. Collaborative processes aimed at resolving local issues are taking place in many of the water basins in the West. Frequently, what began as a focused process to settle, for example, tribal water right claims, has expanded to cover basin-wide issues. The current ad hoc approach to settlement has given rise to a variety of processes, thus providing a fertile ground for testing a variety of approaches and solutions designed to address water allocation

³ See, e.g., MSE-HKM Engineering, *Municipal, Rural and Industrial Water Supply System Needs Assessment, Rocky Boy's Indian Reservation*, prepared for the United States Bureau of Reclamation (Jan. 1996).

⁴ Charles F. Wilkinson, *Western Water Law in Transition*, 56 U. COLO. L. REV. 317, 321-22 (1985).

⁵ Peter H. Gleick, *The Changing Water Paradigm*, in THE WORLD'S WATER 1998-1999, THE BIENNIAL REPORT ON FRESHWATER RESOURCES 9 (1999).

⁶ See, e.g., LAWRENCE J. MACDONNELL, FROM RECLAMATION TO SUSTAINABILITY: WATER, AGRICULTURE, AND THE ENVIRONMENT IN THE AMERICAN WEST 232 (1999) (discussing the problem created by a rigid legal system that has not kept pace with change in water-use preferences); Joseph W. Dellapenna, *The Importance of Getting Names Right: The Myth of Markets for Water*, 25 WM. & MARY ENVTL. L. AND POL'Y REV. 317 (2000) (discussing the growing need to reallocate water from agricultural to urban and environmental uses); David H. Getches, *From Askhabad, to Wellton-Mohawk, to Los Angeles: The Drought in Water Policy*, 64 U. COLO. L. REV. 523 (1993) ("The goals of water policy tend to be confined to respecting existing rights and rewarding development. Western states are lately realizing that economic stability, human health, ecological balance, and survival of urban and rural communities all have a nexus in water."); Janet C. Neuman, *Adaptive Management: How Water Law Needs to Change*, 31 ENVTL. L. REP. 11432 (2001) (discussing the need to introduce flexible "adaptive" management into the prior appropriation system).

problems.⁷ The growing use of negotiation to solve problems which are not adequately addressed by existing law may herald a new era for water distribution and management in the West. An era tailored to the problems faced by specific water basins and structured around governance that mimics basin boundaries. This paper explores one such effort in a typical western basin, the Milk River.⁸

The Milk River on the east side of the continental divide in north-central Montana, like many basins in the West, faces problems associated with multiple jurisdictions, limited and variable water supply, and changing water needs. Its history is a testament to our changing federal policy toward the development and use of public lands and water in the West. In 1805, when Meriwether Lewis described the milky stream laden with glacial silt entering the Missouri River, the stream's banks were home to bison, grizzly bear, and wolf. The territory of the Milk River was hunted by the Blackfeet and Sioux Indians. Today, the grizzly bear and wolf are gone, and the only bison are in an introduced herd on the Fort Belknap Reservation. The Milk River Basin is now home to four Indian reservations, numerous Indian allotments, and is the recipient of one of the earliest reclamation projects developed by the federal government. The basin is also the site of the dispute that led to the Winters Doctrine, the United States Supreme Court's recognition of Indian and federal reserved water rights. However, the recognition of those rights on the Fort Belknap Reservation in 1908 did not address their quantification. Since that recognition, a national park and several national wildlife refuges have been established in the basin. Also, bull trout, a listed species in streams on the western side of the Continental Divide under the Endangered Species Act, have

⁷ See, e.g., David H. Getches, *The Metamorphosis of Western Water Policy: Have Federal Laws and Local Decisions Eclipsed the States' Role?*, 20 STAN. ENVTL. L.J. 3, 5-6 (2001) (“[t]hese [locally-driven] approaches . . . can serve as laboratories for incubating proposals for systematic change at the state level”); see also A. Dan Tarlock, *Reconnecting Property Rights to Watersheds*, 25 WM. & MARY ENVTL. L. AND POL’Y REV. 69, 75 (2000) (noting that “[w]atershed management is once again in vogue but in a more decentralized, ad hoc, stakeholder-driven form than previous hydrologic governance efforts”).

⁸ As legal counsel for the Montana Reserved Water Rights Compact Commission, the author was lead negotiator for the State of Montana on negotiations to settle the water rights of the Gros Ventre and Assiniboine Tribes of the Fort Belknap Reservation in the Milk River Basin which is the subject of this article.

been documented by the United States Fish and Wildlife Service in the Milk River's upper tributaries.

In 1979, the State of Montana launched a new program for the resolution of water rights claimed for federal and Indian reservations through negotiation,⁹ and identified the Milk River Basin as its highest priority.¹⁰ In 1997, after years of data collection, negotiations began in earnest among the State, the Gros Ventre and Assiniboine Tribes of the Fort Belknap Reservation, and the federal government. Similar to other tribal water negotiations throughout the West, negotiators soon realized that no settlement would be possible without addressing issues of basin-wide concern.

This Article explores the use of the tribal settlement process on the Milk River to address two specific problems of broader concern:

1. Water distribution and management in a basin with multiple jurisdictions; and
2. Re-allocation of water to meet critical needs during drought.

The conclusion of the Article is that the measures applied in the Milk River settlement are a major step toward solving the problems created by current law and jurisdictional boundaries. The Milk River measures provide a basin-wide forum for coordination of water management and enforcement, and eliminate some of the inequities in the current system of water allocation, but does not yet provide a system of water use that will sustain the aquatic habitat. This Article is Part I in a three part series. Part I of the series looks at a basin-wide effort to resolve management and storage allocation issues on the Truckee River in Nevada and California. Part II concludes that the introduction of flexible management to existing water storage infrastructure by the Truckee River negotiations are overcoming substantial barriers to the reallocation of water. Part III of the series looks at the processes used in achieving the Milk River and Truckee River settlements and concludes that, while litigation or its threat may be necessary to force consideration of non-economic interests, such as aquatic habitat, negotiation offers the best means to arrive at solutions to improve water governance and allocation in

⁹ MONT. CODE ANN. §§ 85-2-701 to -708 (2001).

¹⁰ MONT. CODE ANN. § 85-2-321(2) (2001). Reasons for prioritization of the Milk River include: critical water shortage and the presence of unquantified water rights for five Indian reservations, three national wildlife refuges, and one national park.

the West. Part III also recommends changes to the current federal team process for participation in water negotiations in order to provide accountability to national interests broader than the United States' proprietary interests in the particular basin which is the focus of the negotiation. In addition, Part III recommends congressional prioritization of the expenditure of funds on water settlements that promote a fair allocation of the benefits of the water resource, movement toward sustainable use of the water resource, and the use of federal subsidies only to the achievement of these ends.

Section I of this Article describes the current state of water law in a basin with both appropriative and reserved water rights and a federal reclamation project. Section II describes the Milk River Basin and the water-related problems its inhabitants face. Section III sets forth the process used in Montana to negotiate a settlement and the solutions achieved.

I

WESTERN WATER LAW

Understanding the solutions developed on the Milk River requires background on the basic laws governing private and tribal water allocation in the West, the doctrines of prior appropriation and reserved water rights, and the complexity created by the overlay of a federal reclamation project. However, western water law is difficult to comprehend without an understanding of the meaning and consequences of aridity.

A. Aridity

No one who has driven through red rock country at sunrise or has gotten their second flat tire in that same country at noon can fail to appreciate the aridity of the West. No one who has floated through sage-scented canyons on the whitewater of one of the West's few untamed stretches of river can fail to appreciate its irony. In the West, we are defined by aridity.¹¹

Aridity refers to a basic lack of rainfall. In a vast area between the Mississippi River and the Sierra Nevada Mountains, rainfall is generally less than twenty inches per year, the amount needed

¹¹ See, e.g., WALLACE STEGNER, *THE AMERICAN WEST AS LIVING SPACE* 8 (1987) ("Aridity, and aridity alone, makes the various Wests one.")

to farm without irrigation.¹² Under the influence of aridity, westerners have a special relation with the West's major rivers. These rivers control where they can and where they want to live.¹³ John Wesley Powell, when surveying these arid regions in the late 1800's, recognized that the major rivers of the West would control its development.¹⁴ He recommended that the federal government eliminate the straight line rectangular survey so dear to the engineer and draw jurisdictional boundaries along topographic divides.¹⁵ He further recognized that these great rivers could not be developed for irrigation by individuals, and recommended the formation of collectives or irrigation districts for the control of land and water.¹⁶ Powell's recommended policies reflect a clear understanding of water as a public good.¹⁷ However, Congress did not follow his recommendations when defining political boundaries. Irrigation districts were formed under

¹² WALLACE STEGNER, *BEYOND THE HUNDREDTH MERIDIAN: JOHN WESLEY POWELL AND THE SECOND OPENING OF THE WEST* 214 (1953).

¹³ This concept is recognized in both our great legal writing and our great literature: "A river is more than an amenity, it is a treasure. It offers a necessity of life that must be rationed among those who have power over it." *New Jersey v. New York*, 283 U.S. 336, 342; "Water is H₂O, hydrogen two parts, oxygen one, but there is also a third thing, that makes it water and nobody knows what that is." D.H. Lawrence, *The Third Thing*, in *BIRDS, BEASTS AND THE THIRD THING* (1932); "A very little deficiency, even a slight distortion of the season in which the rain falls, makes all the difference. My family homesteaded on the Montana-Saskatchewan border in 1915, and burned out by 1920, after laying the foundation for a little dust bowl by plowing up a lot of buffalo grass. If the rains had been kind, my father would have proved up on that land and become a naturalized Canadian. I estimate that I missed becoming Canadian by no more than an inch or two of rain; but that same deficiency confirmed me as a citizen of the West." STEGNER, *supra* note 11, at 6.

¹⁴ STEGNER, *supra* note 12, at 229. For discussion about how the rivers of the West determined where Native Americans chose to live, see, e.g., BARBARA T. ANDREWS & MARIE SANSONE, *WHO RUNS THE RIVERS? DAMS AND DECISIONS IN THE NEW WEST* 168 (1983) (referring to the fifteenth century canal systems of the Hohokam Indians); María Rosa García-Acevedo, *The Confluence of Water, Patterns of Settlement, and Constructions of the Border in the Imperial and Mexicali Valleys (1900-1999)*, in *REFLECTIONS ON WATER* 57, 59 (Joachim Blatter & Helen Ingram eds., 2001) ("the Colorado River was 'the most important natural factor influencing native cultures in the delta'" (citations omitted)).

¹⁵ STEGNER, *supra* note 12, at 227. See also, MARC REISNER, *CADILLAC DESERT: THE AMERICAN WEST AND ITS DISAPPEARING WATER* 49 (1987) (noting that Powell recommended that state boundaries follow the boundaries of the major water basins).

¹⁶ STEGNER, *supra* note 12, at 229.

¹⁷ See, e.g., Dellapenna, *supra* note 6, at 329-30 (concluding that water is a public good because it is essential to life and therefore must be distributed fairly, and because it is an ambient resource—i.e., shared among users such that use by one affects all others).

state law in response to development by the United States Bureau of Reclamation. However, this attempt at shared use rarely encompassed an entire basin and thus conflicted with other water use. States ignored much of Powell's advice concerning shared development and shared water use. To understand the obstacles facing those who now seek to develop, manage, share, or conserve water on a basin-wide basis, it is necessary to understand the system developed instead.

B. Prior Appropriation

During the same era as the Powell surveys, the West was valued primarily for exploitation of its vast resources, in particular, its mineral wealth.¹⁸ The general rule is that water allocation and management is left to state law.¹⁹ State courts sought a means of allocation that protected investment.²⁰ These means did not consider that the West would become home to a population that must share its water resources for diverse economic pursuits or the havoc that dewatering of streams would play on habitats. The result is the doctrine of prior appropriation which is followed by most western states.²¹

¹⁸ *Irwin v. Phillips*, 5 Cal. 140, 146 (1855).

¹⁹ *California-Oregon Power Co. v. Beaver Portland Cement Co.*, 295 U.S. 142, 158 (1935) (holding that the effect of the 1866 Mining Act as amended in 1870, the 1877 Desert Lands Act, and the 1891 Act governing right-of-way for canals and reservoirs for public lands and reservations, was to sever the water right from the public land leaving it available for appropriation under local law). *See also* *United States v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690, 706 (1899) (stating with respect to the same Acts that "the obvious purpose of congress [sic] was to give its assent, so far as the public lands were concerned, to any system, although in contravention to the common-law rule [of riparian rights], which permitted the appropriation of those waters for legitimate industries"); *cf.* *Fed. Power Comm'n v. Oregon*, 349 U.S. 435, 448 (1955) (Pelton Dam case) (held that the same Acts do not apply to reserved land, only to public land defined as land subject to private appropriation and disposal under the public land laws).

²⁰ *See, e.g., Wilkinson, supra* note 4, at 317 (noting that prior appropriation was created to meet the needs of the mining camps); *see also Dellapenna, supra* note 6, at 346 (noting that shared, riparian ownership only works when a resource is abundant, and identifying prior appropriation as an attempt at creating private property rights to encourage investment in the face of scarcity).

²¹ WELLS A. HUTCHINS, *WATER RIGHTS LAWS IN THE NINETEEN WESTERN STATES*, Vol. I, Chap. 7, 226 and Vol. II, Chap. 10, 6-14 (Misc. Pub. No. 1206, Natural Resource Economics Div., Economic Research Service, USDA 1971). The other form of rights for allocation of water—riparian rights—is followed by most eastern states and by some western states in combination with prior appropriation. Riparian law recognizes the right of landowners along a water source to reasonable use of water from the source.

In practical terms, an appropriative right has certain key attributes that become critical in times of drought. First, a water right exists to the extent of the application of water to a beneficial use.²² Second, in times of shortage, allocation occurs on the basis of temporal priority, i.e., the date on which the water right was first developed.²³ The right of the earliest appropriator on a stream is satisfied first. Junior appropriators take remaining water. Shortage is not shared. During periods of drought, a frequent occurrence in the West, those who came late to the basin are left with nothing.

The allocation of appropriative water rights to individuals rather than geographically related communities, as recommended by Powell, significantly reduced the possibility that allocation and management decisions would be made for the good of the community as a whole, or for the long-term health of the riparian habitat.²⁴ Nevertheless, adapting the archaic system of prior appropriation to modern needs for water allocation may have been relatively simple had Congress not also ignored Powell's recommendation to draw boundaries along topographic divides. The resulting checkerboard of federal and private land and the decision that state law does not govern water rights on reserved federal and Indian land mean that prior appropriation is not the only doctrine governing water allocation on a single water source.

C. *Reserved Water Rights*

When the federal government sets aside public land for a particular purpose such as an Indian Reservation, the federal government may reserve water under federal law for that purpose.²⁵ This ability of the federal government contravenes the general rule that state law governs the allocation and management of water. Similar to an appropriative right, the reserved water right is allocated on the basis of priority date.²⁶ However, the priority date of a reserved right is the date of the withdrawal of the federal land and reservation for a specific purpose, not the date of

²² See, e.g., MONT. CODE ANN. § 85-2-301(1) (2002).

²³ See, e.g., MONT. CODE ANN. § 85-2-401, 406(1) (2002).

²⁴ Tarlock, *supra* note 7, at 72, 79-80 (asserting that the assignment of water to individuals rather than geographic entities has led to the degradation of watersheds).

²⁵ *Winters v. United States*, 207 U.S. 564, 577 (1908).

²⁶ *Id.*

development of the water.²⁷ As a result, the reserved right is not lost by nonuse, but remains held in senior status for future development.²⁸

Unlike the doctrine of prior appropriation, the doctrine of reserved rights accounts for future development in its definition. The reserved rights doctrine also accounts for the need to share scarce resources in its use of a single priority date for an entire community. Nevertheless, the doctrine has its shortcomings. The quantity of the right is vaguely defined as that amount necessary to fulfill the purpose of the reservation. This lack of definition offers no real protection for the right. If the scope of the water right is undetermined, it is impossible to determine if water use off a reservation affects the reserved water right. A tribe seeking to protect a portion of its undeveloped water right must first prove the extent of that right. However, no body of federal statutory or common law exists to easily determine the quantification of the reserved water right.²⁹ Observable beneficial use, the clear criteria for quantification of appropriative rights, affords greater protection on a practical daily basis than the vague standard of “purpose” defining reserved rights. Consider now, reserved and appropriative rights in the same water basin.

²⁷ *Id.* The Colorado Supreme Court summarized the basic attributes of a reserved water right as follows: “(1) the right may be created without diversion or beneficial use; (2) the priority of the right dates from the time of the land withdrawal and not from the date of appropriation; (3) the right is not lost by nonuse; and (4) the measure of the rights is quantified only by the amount of water reasonably necessary to satisfy the purposes of the reservation.” *United States v. Jesse*, 744 P.2d 491, 494 (Colo. 1987).

²⁸ *Conrad Inv. Co. v. United States*, 161 F. 829 (9th Cir. 1908).

²⁹ *See, e.g., In re the Adjudication of Existing and Reserved Rights to the Use of Water, Both Surface and Underground, of the Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation Within Mont. in Basins 40E, 40EJ, 40O, 40Q, 40R and 40S, Mont. Water Ct. Cause No. WC-92-1* (Aug. 10, 2001) (“Fort Peck Decree”) (“After nearly one hundred years of legislation, litigation, and policy-making, there are still no bright lines clearly and consistently delineating the [Reserved Water Rights] Doctrine. Most of the legal issues inherent in the Doctrine remain unsettled and hotly debated and are now complicated by decades of distrust and competing policies. . . . [T]here is no clear consensus among the federal courts as to how the ‘purpose’ of the reservation is to be determined, the proper quantification standard to apply, or the method for quantifying the rights based on that standard.”), available at <http://www.supreme.state.az.us/wm/pdfs/ftpeck.pdf> (last visited Sept. 17, 2003).

D. Prior Appropriation v. Winters

The weaknesses in appropriative and reserved water right laws are exacerbated when the two types of rights operate in the same water basin. The water supply is significantly depleted in order to satisfy appropriative rights and is further strained as senior reserved rights are developed. As a result, junior water users see increasing periods in which their rights cannot be satisfied. At the same time, tribes have witnessed the explosion in population growth along with private and federal water development in the West with limited means to protect their senior unquantified rights. Although the Winters Doctrine arose in 1908, the United States did not begin actively seeking quantification of reserved water rights on behalf of Indian tribes until the 1960s³⁰ and is only now achieving resolution on the quantification of many of those rights.

Without some means of coordination, reserved and appropriative rights drawing from the same resource are compatible only to the extent that the reserved right is developed immediately following the establishment of a reservation.³¹ Yet in the vast majority of cases, development of tribal water has lagged far behind that of their neighbors.³² As will become apparent in the following sections, the lag in development on reservations costs tribes dearly because the ensuing off-reservation development taps the water source beyond its capacity to meet the tribes' needs.³³

E. The Overlay of Reclamation

The explosion in non-Indian irrigation water development, often in water basins shared with Indian reservations, reached its peak in the early twentieth century under the direction of the United States Bureau of Reclamation (formerly the Reclamation

³⁰ See *Arizona v. California*, 373 U.S. 546 (1963).

³¹ Judith V. Royster, *A Primer on Indian Water Rights: More Questions Than Answers*, 30 TULSA L.J. 61, 63 (1994) ("Because of their early priority dates and often sizable quantity, Indian reserved rights to water, if not timely recognized and accommodated, have the potential to disrupt state appropriation systems of water rights.").

³² Daniel McCool, *Winters Comes Home to Roost*, in *FLUID ARGUMENTS: FIVE CENTURIES OF WESTERN WATER CONFLICT* 121 (Char Miller ed. 2000).

³³ See, e.g., *Summarizing the Milk River Water Supply Study*, in *Milk River Valley Lands*, U.S. Bureau of Reclamation Report, app. 11-12 (July 1990) (noting that the Milk River Project is short water in five out of ten years).

Service). The federal government has had a strong role in western water development and management throughout the modern history of the West.³⁴ The Reclamation Act was Congress' response to Powell's recommendation of cooperative development.³⁵ In the Reclamation Act, Congress created a highly imperfect approximation of Powell's ideal. The Reclamation era represents one of the most ambitious and costly chapters in the efforts of the United States to settle the West.

Powell's concept that federal assistance would be necessary to develop western water was embraced wholeheartedly in the passage of the Reclamation Act.³⁶ But his recommendation that settlement and development proceed slowly, apace with study and planning, and his cautions concerning the limits on water supply were ignored.³⁷ In addition, the Act contained another serious flaw. Section 8 of the Reclamation Act requires appropriation of water for federal projects pursuant to state law.³⁸ Thus, the facilities built pursuant to this Act, passed in response to the need for cooperative development and management of the West's waters, simply take their place in line with all other water rights in the basin. No barrier exists to prevent continued state recognition of water rights in competition with a reclamation project.³⁹ No undeveloped water can be claimed for a project to meet future needs under state requirements of diversion to a beneficial use.

³⁴ Getches, *supra* note 7, at 6.

³⁵ Act of June 17, 1902, Pub. L. No. 57-161, 32 Stat. 388 (1902); see Reclamation Act, 43 U.S.C. §§ 371-526; see also ANDREWS & SANSONE, *supra* note 14, at 171-72 ("Powell was instrumental in changing public perception of the role of the federal government.").

³⁶ WILKINSON, *supra* note 1, at 247 (The Reclamation Act passed in 1902, the year of Powell's death.); see also ANDREWS & SANSONE, *supra* note 14, at 170-71 (noting that even state governments had insufficient resources for the necessary expenditure to harness the West's rivers).

³⁷ WILKINSON, *supra* note 1, at 245-46 (Fallout from his cautionary approach led to Powell's resignation from the Geological Survey in 1894.); see also REISNER, *supra* note 15, at 5 (Powell believed the water supply was sufficiently limited that even with large scale development of storage, most of the West would remain a desert.).

³⁸ Act of June 17, 1902, Pub. L. No. 57-161, § 8, 32 Stat. 390 (1902); see 43 U.S.C. § 383; see also WILKINSON, *supra* note 1, at 245 (The requirement of appropriation under state law was a major win by western Congressmen who sought to maintain state control of water while obtaining federal funding for its development.).

³⁹ See, e.g., Closing the Basin to Certain Permit Applications of the Mainstem of the Milk River in Hill, Blaine, Phillips, and Valley Counties (Mont. Dep't of Natural Res. and Conservation, Apr. 4, 1983) (final order) (Eighty years after authorization of the Milk River Project by the Secretary of the Interior, the final order closes the mainstem of the river to new appropriation during the irrigation season while leaving the tributaries open.).

Yet, for all of its flaws, the Reclamation Act represents one of the most progressive land distribution and development programs ever undertaken by a government. Its passage was steeped in romanticism concerning the small family farm and the wild West.⁴⁰ Where reclamation projects developed agriculture in areas of rich soil and mild climate, such as the Central Valley of California, the ideal of the Jeffersonian family farm championed by Powell was quickly overrun by large agribusiness.⁴¹ Nevertheless, in some areas where the land and climate carried less potential for profit, irrigation with substantial federal subsidy rendered a family business capable of sustaining a simple existence. In these areas, the Reclamation Act gave land, employment, and hope to a class of American society that brought little more to the West than the shirts on their backs, a willingness to work hard, and a stubborn refusal to give up. In a marriage of opposites that remains uncomfortable today, the chosen life of this independent pioneer became wholly reliant on federal subsidy.⁴² Under the Reclamation Act, 9.2 million acres of arid land received irrigation.⁴³ Yet, few of the projects ever lived up to their original goal of self-support. Studies by the Department of the Interior indicate that federal subsidy covers 57%-97% of the cost of irrigation water development per irrigated acre.⁴⁴

At the same time that federal funds flowed to the private irrigation of the West, funding for development of adjacent Indian land was entirely inadequate.⁴⁵ Funding for most tribal development has been conditioned on the relinquishment of a portion of the tribal water right instead of providing a federal subsidy.⁴⁶

⁴⁰ WILKINSON, *supra* note 1, at 243.

⁴¹ ANDREWS & SANSONE, *supra* note 14, at 169, 177; WILKINSON, *supra* note 1, at 250.

⁴² REISNER, *supra* note 15, at 4, 120-24 (summarizing the many bailouts of Reclamation projects through restructuring of repayment and extension of the repayment period required on the federal capital investments in reclamation, Reisner states: "[w]ere it not for a century and a half of messianic effort toward [manipulation of water], the West as we know it would not exist").

⁴³ WILKINSON, *supra* note 1, at 248.

⁴⁴ DANIEL MCCOOL, *COMMAND OF THE WATERS: IRON TRIANGLES, FEDERAL WATER DEVELOPMENT, AND INDIAN WATER* 71 (1987) (referencing a 1980 study by the Interior Department's Office of Policy Analysis).

⁴⁵ *Id.* at 125.

⁴⁶ MCCOOL, *supra* note 32, at 125; Monique C. Shay, *Promises of a Viable Homeland, Reality of Selective Reclamation: A Study of the Relationship Between the Winters Doctrine and Federal Water Development in the Western United States*, 19 *ECOLOGY L.Q.* 547, 561 (1992).

The history of western water development is fraught with accounts of heavy subsidies to develop and sustain projects serving small family farms, failure to develop adjacent Indian land, and a legal and institutional structure that makes it difficult to reconcile the two. No where are these elements more apparent than on the Milk River of Montana.

II

THE MILK RIVER

Inability to coordinate water management, lack of mechanisms to respond to drought, and failure to develop tribal water resources, are three of the major issues that brought people to the table to seek solutions in the Milk River Basin of Montana.⁴⁷ The story of this valley begins with its unique setting.

Thousands of years ago, ice pushed the Missouri River south into its present channel in Montana, leaving an empty river bed and a vast plain of glacial debris.⁴⁸ A small stream that swells to a river in spring with runoff from the Rocky Mountain Front began to carve its own path in the wake of the ancestral Missouri.⁴⁹ Because of its load of suspended glacial silt, Meriwether Lewis called this stream the "Milk [R]iver."⁵⁰ The Milk River has its headwaters in the Rocky Mountain front in what is now Glacier National Park and the Blackfeet Indian Reservation. Flows in the Milk River prior to development of the Milk River Reclamation Project are estimated to have ranged from as high as 35,000 cubic feet per second (cfs) during spring runoff to as low as 5 cfs during the late summer and early fall of a dry year.⁵¹

⁴⁷ The first two issues are addressed in this paper. The problem of underdevelopment of tribal water rights will be addressed in a companion paper.

⁴⁸ Frank Swenson, *Geology and Ground-Water Resources of the Lower Marias Irrigation Project Montana*, USGS Water Supply Paper 1460-B (1957).

⁴⁹ *Id.*

⁵⁰ THE JOURNALS OF LEWIS AND CLARK—Lewis 106-107 (Bernard DeVoto ed., The Riverside Press Cambridge 1953)

Wednesday May 8th 1805. [w]e nooned it just above the entrance of a large river . . . from the quantity of water furnished by this river it must water a large extent of country . . . the water of this river possesses a peculiar whiteness, being about the colour of a cup of tea with the admixture of a tablespoonful of milk. [F]rom the colour of it's [sic] water we called it Milk River. . . . Capt. C. could not be certain but thought he saw the smoke and some Indian lodges at a considerable distance up Milk river [sic].

⁵¹ *Natural Flow and Water Consumption in the Milk River Basin, Montana and Alberta, Canada*, USGS Water Resources Investigations Report 86-4006 (1986).

The Fort Belknap Reservation is located primarily in the valley of the Milk River.⁵² The Reservation was established for members of the Gros Ventre and Assiniboine Tribes.⁵³ The river forms the reservation's northern boundary.⁵⁴

The Gros Ventre and Assiniboine Tribes have strikingly different histories. The Gros Ventre are thought to have separated from the Arapaho and became known as a division of the Blackfeet Nation in the mid-1700's.⁵⁵ Gros Ventre were reported along the Milk River throughout the 1800's,⁵⁶ and were party to the Blackfeet Treaty of 1855.⁵⁷ The Assiniboine separated from the Sioux in the mid-1600's and were reported along the Upper Missouri River in the late 1700's and early 1800's.⁵⁸ The Assiniboine were party to the 1851 Treaty of Fort Laramie designating their territory in the vicinity of the Missouri and Mussleshell Rivers.⁵⁹ The Assiniboine Tribe was heavily reliant on the buffalo for sustenance and trade.⁶⁰ Prior to the 1880's, the Milk River Valley had abundant large game, including buffalo.⁶¹ Smallpox epidemics in 1780 and 1838 took their toll on the Assiniboine.⁶²

By the 1870's, the Gros Ventre and certain Assiniboine were known to inhabit an area along the Milk River near the Fort Bel-

⁵² Montana Reserved Water Rights Compact Commission Staff, *Draft Technical Report on the Compact with the Gros Ventre and Assiniboine Tribes of the Fort Belknap Reservation 1* (2002) (hereinafter Commission Staff, *Technical Report: Fort Belknap*) (unpublished report, manuscript on file with the Montana Reserved Water Rights Compact Commission, Helena, Montana).

⁵³ Act of May 1, 1888, ch. 213, 25 Stat. 113 (1888).

⁵⁴ *Id.*

⁵⁵ Commission Staff, *Technical Report: Fort Belknap*, *supra* note 52, at 13.

⁵⁶ *Id.*

⁵⁷ Treaty with the Blackfeet Indians, Oct. 17, 1855, U.S.-Blackfeet Indians, 11 Stat. 657, 660.

⁵⁸ Commission Staff, *Technical Report: Fort Belknap*, *supra* note 52, at 11.

⁵⁹ Treaty of Ft. Laramie with Sioux, etc., Sept. 17, 1851, 11 Stat. 749, 750.

⁶⁰ THE ASSINIBOINE, Michael Stephen Kennedy ed. 63 (U. of Okla. Press 1961) ("To the Assiniboines, the buffalo was more than an animal. It was the staff of life."). A written record of the Assiniboine, as with many tribes, does not exist. Scholars must rely on oral history. "The Assiniboine" is the result of one of the attempts to record some of that history as part of the Depression era Federal Writer's Program of the Work Projects Administration, Montana.

⁶¹ THE JOURNALS OF LEWIS AND CLARK, *supra* note 50, at 105 ("After brackfast I walked on shore Saw great numbers of Buffalow & Elk Saw also a Den of young wolves, and a number of Grown Wolves in every direction . . . in the evening we saw a Brown or Grisley beare on a sand beach."). This was a typical day for the Lewis and Clark Expedition in the vicinity of the Milk River.

⁶² Commission Staff, *Technical Report: Fort Belknap*, *supra* note 52, at 11.

knap Agency.⁶³ As the buffalo disappeared from the plains, the tribes were moved onto smaller and smaller reservations with the promise of agriculture by the federal government. Prior to May 1, 1888, the entire Milk River Basin within the United States lay within the larger reservation of the Blackfeet, Gros Ventre, other tribes and groups of Indians,⁶⁴ and the Fort Assiniboine Military Reservation (a smaller area wholly within the larger Indian Reservation).⁶⁵ On May 1, 1888, the United States fragmented the larger reservation into three smaller reservations: the Blackfeet Reservation, Fort Belknap Reservation, and Fort Peck Reservation.⁶⁶ Fort Assiniboine remained a separate military reservation in the vicinity of what is now the Rocky Boy's Reservation.⁶⁷

The Acts of 1888 creating the Blackfeet, Fort Belknap, and Fort Peck Indian Reservations opened the remaining area in the Milk River Valley to settlement.⁶⁸ Settlement began in earnest when the Great Northern Railroad was completed in 1890 along the north bank of the Milk River.⁶⁹ Federal policy toward the western public lands at the turn of the last century encouraged the development of small, family-owned farms. The non-Indian irrigation development along the Milk River occurred with the encouragement of federal law.⁷⁰ At the same time, federal Indian policy favored establishment of smaller reservations and conversion of Indian people into farmers. Unfortunately, insuffi-

⁶³ JOHN SHURTS, INDIAN RESERVED WATER RIGHTS: THE *Winters* Doctrine in its Social and Legal Context 1880s-1930s 18 (U. of Okla. Press 2000); Commission Staff, *Technical Report: Fort Belknap*, *supra* note 52, (citing Executive Order of March 4, 1880, General Orders and Circulars, 1876-1881, Dept. of Dakota, Vol. 208, Adjunct General Field Office, National Archives, Washington, D.C.).

⁶⁴ Treaty with the Blackfoot Indians, *supra* note 57.

⁶⁵ SHURTS, *supra* note 63, at 18.

⁶⁶ Act of May 1, 1888, Pub. L. No. 50-213, 25 Stat. 113 (1888) ("An act to ratify and confirm an agreement with the Gros Ventre, Piegan, Blood, Blackfeet, and River Crow Indians in Montana.").

⁶⁷ Montana Reserved Water Rights Compact Commission Staff, Technical Report on the Compact with the Chippewa Cree Tribe of the Rocky Boy's Reservation 12 (2002) (unpublished report, manuscript on file with the Montana Reserved Water Rights Compact Commission, Helena, Montana).

⁶⁸ Two ranches on tributaries to the Milk River claim water right priority dates prior to the May 1, 1888 opening of the land to settlement. Thus, it is clear that settlers had already entered the Milk River Valley at the time of negotiation of the new treaty. Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Rights Compact Commission, June 25, 2002.

⁶⁹ SHURTS, *supra* note 63, at 29.

⁷⁰ See, e.g., Homestead Act of 1862, 43 U.S.C. 161-284 (repealed 1976); Desert Lands Act 1877, 43 U.S.C. 321-339 (repealed 1976).

cient water existed in the Milk River for the implementation of both policies. The basin became one of the sites of the earliest water disputes between appropriative and reserved water rights.⁷¹

In 1895, farmers began diverting water from the Milk River upstream of the Fort Belknap Reservation.⁷² Three years later, on July 5, 1898, the agency at Fort Belknap began diverting approximately 5,000 miner's inches (approximately 120 cfs) of water from the Milk River for irrigation of reservation land.⁷³ Although downstream irrigators both on and off the reservation saw diminished flows as more people settled in the upper Milk River Valley, the development of farming proceeded until severe drought struck in 1904-1905.⁷⁴ As a result, water no longer reached the tribal diversion facilities. The United States filed suit in the United States Circuit Court for the District of Montana to enjoin diversion of water upstream from the Fort Belknap Reservation to the extent necessary to prevent interference with the flow of water to the reservation.⁷⁵

In 1908, after the case had been decided in favor of the Tribes by both the Circuit Court for the District of Montana and the Circuit Court of Appeals of the Ninth Circuit, the United States Supreme Court concluded that the Tribes had the superior right to water and affirmed the injunction.⁷⁶

While the United States championed this landmark case on behalf of the Gros Ventre and Assiniboine Tribes, it was not idle on other fronts. On June 17, 1902, Congress passed the Reclamation Act establishing a fund from the sale of public lands in the West for use in development of water for irrigation.⁷⁷ Among the projects recommended to Congress by the United States Geological Survey during consideration of the Act was construction of a canal to divert water from the St. Mary River into the Milk River to provide irrigation in the Milk River Basin.⁷⁸ In 1903,

⁷¹ See *Winters v. United States*, 207 U.S. 564 (1908).

⁷² See *Winters v. United States*, 143 F. 740, 742 (9th Cir. 1906), *aff'd*, 207 U.S. 564 (1908).

⁷³ *Winters*, 207 U.S. at 566.

⁷⁴ SHURTS, *supra* note 63, at 29, 35.

⁷⁵ *Winters*, 143 F. at 741.

⁷⁶ *Winters*, 207 U.S. at 577.

⁷⁷ See *supra* note 35 (establishing the Reclamation Service).

⁷⁸ Commission Staff, *Technical Report: Fort Belknap*, *supra* note 52, at 51-52 (citing FIRST ANNUAL REPORT OF THE RECLAMATION SERVICE, H.R. DOC. NO. 57-29

the Secretary of the Interior authorized this project known as the Milk River Project (“Project”).⁷⁹

One barrier to development of the Project was the lack of agreement on distribution of water between the United States and Canada (then Great Britain). Distribution was complicated by the fact that the Milk River, with its headwaters in the United States, enters Canada for about 200 miles until it curves south and re-enters the United States at what is known as the Eastern Crossing. The St. Mary River simply begins in the United States and then leaves it, heading north into some of Canada’s fertile farmland. Following the announcement of plans by the Reclamation Service to divert water from the St. Mary River into the Milk River in its upper reaches for capture downstream from the Eastern Crossing, bulldozers lined up on the Canadian side of the border prepared to divert the water back to the St. Mary River in what was referred to as the “Spite Canal.”⁸⁰ On May 5, 1910, the Boundary Waters Treaty was concluded.⁸¹ The International Joint Commission Order issued on October 4, 1921 was based on the Treaty and distributes the water of the St. Mary and Milk Rivers between the United States and Canada.⁸² Canada has not yet developed its share of the Milk River; that water is put to use in the United States by the Project.⁸³

The current configuration of the Milk River Project includes diversion of water from a reservoir on the St. Mary River backing water into Glacier National Park and then to the Milk River on the Blackfoot Reservation.⁸⁴ The water is stored downstream from the Eastern Crossing at Fresno Reservoir and downstream of the Fort Belknap Reservation in Nelson Reservoir, an off-

(2d Sess. 1903) that described the Project to transfer water from the St. Mary River into the Milk River and to irrigate 200,000 acres).

⁷⁹ *Id.*

⁸⁰ Mary Ellen Wolfe, *The Milk River: Deferred Water Policy Transitions in an International Waterway*, 32 NAT. RESOURCES J. 55 (1992).

⁸¹ Treaty between the United States and Great Britain Relating to Boundary Waters between the United States and Canada, Jan. 11, 1909, U.S.-Gr. Brit., art. 4, 36 Stat. 2455.

⁸² INTERNATIONAL JOINT COMMISSION, IN THE MATTER OF THE MEASUREMENT AND APPORTIONMENT OF THE WATERS OF THE ST. MARY AND MILK RIVERS AND THEIR TRIBUTARIES IN THE STATE OF MONTANA AND THE PROVINCES OF ALBERTA AND SASKATCHEWAN (Oct. 4, 1921) (order from the Commission).

⁸³ Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Rights Compact Commission (June 25, 2002).

⁸⁴ Commission Staff, *Technical Report: Fort Belknap*, *supra* note 52, at 9.

stream facility filled through a canal.⁸⁵ The Project serves approximately 100,000 acres in seven irrigation districts.⁸⁶ Five of those districts, Alfalfa, Paradise Valley, Zurich, Harlem, and Chinook, are upstream from and adjacent to the reservation. These districts make up the Chinook Districts.⁸⁷ The principal irrigation in the Malta and Glasgow Districts is downstream from the reservation.⁸⁸ None of these districts serve land on the Fort Belknap Reservation. In addition to the water contracted to the districts, the Bureau of Reclamation has individual contracts with irrigators for approximately 10,000 acres.⁸⁹ Pursuant to reclamation law, the Bureau of Reclamation followed state water law in obtaining water rights for the Milk River Project. The primary crop grown on Project land is alfalfa.⁹⁰

To summarize the jurisdictional morass, the Milk River has its headwaters in Glacier National Park in the United States which join to become the Milk River on the Blackfeet Reservation. From these, the river receives water from the St. Mary River as part of the Milk River Project. The river then leaves the United States and crosses the provinces of Alberta and Saskatchewan before returning to the United States at the Eastern Crossing.⁹¹ Downstream from this point, the river serves seven private irrigation districts and one BIA irrigation district. It then flows past three Indian reservations, numerous Indian allotments, and two national wildlife refuges before it joins the Missouri River below Fort Peck Dam.⁹² Thus, there are four federal agencies, five Indian reservations, seven irrigation districts, one state, two Canadian provinces, and two countries managing or claiming a right to water from the Milk River.⁹³

Almost a century after the *Winters* litigation, there is no comprehensive tool for coordinated management of water in the Milk River Basin. Despite the Reclamation Project, the basin remains defined by drought. The United States Bureau of Recla-

⁸⁵ *Id.*

⁸⁶ *Id.*

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ Approximately 60% of Milk River Project land is devoted to alfalfa. The remainder is used for small grains and pasture. Telephone Interview with Bill Greiman, *supra* note 83.

⁹¹ Commission Staff, *Technical Report: Fort Belknap*, *supra* note 52, at 9.

⁹² *Id.*

⁹³ *Id.*

mation estimates that water for irrigation from the Project is short in five out of ten years. That shortage will become even more pronounced when Canada and the Gros Ventre and Assiniboine Tribes develop their shares.⁹⁴ Ninety-four years after the United States Supreme Court ruling in *Winters*, the water rights of the Fort Belknap Reservation remain woefully underdeveloped. Although originally designed to serve over 10,000 acres, the Fort Belknap Indian Irrigation Project serves less than 5,000 acres.⁹⁵ Absent storage, natural flows on the Milk River during irrigation season are simply inadequate to supply water to the entire project.⁹⁶ Tribal lands were among those authorized for service from the Milk River Project; however, the Fort Belknap Agency refused participation.⁹⁷ With this background, the following sections turn to the process established to address these problems and the resulting solutions.

III

PROCESS AND SOLUTIONS

The solutions designed to meet the needs of the Milk River Basin arose in a unique process established by the State of Montana to determine the attributes of reserved water rights within the state. Understanding this process is required for understanding the solutions.⁹⁸

⁹⁴ *Summarizing the Milk River Water Supply Study*, Milk River Valley Lands, U.S. BUREAU OF RECLAMATION REPORT, app. at 11-12 (July, 1990). Telephone Interview with Bill Greiman, *supra* note 83.

⁹⁵ Telephone Interview with Bill Greiman, *supra* note 83.

⁹⁶ Telephone Interview with Bob Levitan, Hydrologist, Montana Reserved Water Rights Compact Commission, Helena, Mont. (June 24, 2002) (referring to analysis using the U.S. Bureau of Reclamation HydROSS Model of the Milk River). The use of the term "natural flow" refers to the amount of water in the bed of the Milk River that would be present without the interbasin transfer and storage provided by the Reclamation Project and other storage facilities, and without any diversion.

⁹⁷ Commission Staff, *Technical Report: Fort Belknap*, *supra* note 52, at 27 (citing Letter from Fort Belknap Indian Agent to George Stratton, Bureau of Reclamation (April 26, 1918) ("Letters Sent, Local 1918," Fort Belknap Agency, BIA RG 75, Box 70, National Archives, Seattle)). At the time of the refusal the Leavitt Act, 25 U.S.C. § 386, deferring repayment of construction costs for irrigation facilities on trust land had not been passed. Costs of irrigation on the Fort Belknap Reservation in 1918 were already prohibitive. Commission Staff, *Technical Report: Fort Belknap*, *supra* note 52, at 30-31. Repayment obligations on non-trust land continued after passage of the Leavitt Act.

⁹⁸ Analysis of the adequacy of that process is discussed in a companion paper.

A. *The Montana Process*

Reserved water rights occur in every major water basin in Montana. Montana is a headwater state for the Columbia, Missouri, and Saskatchewan rivers. Twenty-eight percent of Montana is federal or tribal land, and sixty-nine percent of that land is reserved.⁹⁹ Of the eighty-five subbasins in Montana identified for purposes of water right adjudication, seventy contain claims for reserved water rights.¹⁰⁰ Ten of the subbasins comprise the Milk River Basin.¹⁰¹

The Montana Water Use Act¹⁰² established a general adjudication for all water rights developed under Montana state law prior to July 1, 1973,¹⁰³ and for all federal and Indian reserved water rights.¹⁰⁴ Water appropriations made under Montana state law after July 1, 1973 must adhere to the permit system established by the Water Use Act.¹⁰⁵ The Montana Department of Natural Resources and Conservation has continued to issue permits for water use even though the adjudication of senior water rights is not complete.¹⁰⁶ However, due to the uncertainty of water availability pending the outcome of the adjudication, all permits are currently provisional.¹⁰⁷ A provisional permit may be modified on finalization of the adjudication.¹⁰⁸

As part of the 1979 amendments to the Montana Water Use Act, the Montana Legislature established the Montana Reserved Water Rights Compact Commission ("Compact Commission").¹⁰⁹ The Compact Commission consists of:

(a) "two members of the House of Representatives appointed by the speaker, each from a different political party;

⁹⁹ U.S. BUREAU OF THE CENSUS, 1993, Table 358 at 219.

¹⁰⁰ MONT. CODE ANN. § 3-7-102 (2002) (identifying four water divisions in the State: the Yellowstone River basin; the lower Missouri River basin; the upper Missouri River basin; and the Clark Fork River basin). Within those four divisions, the Montana Water Court recognizes eighty-five subbasins for purposes of adjudications.

¹⁰¹ *Id.*

¹⁰² MONT. CODE ANN. § 85-2-101 (2002) (passed in 1973 and amended by Senate Bill 76 in 1979).

¹⁰³ MONT. CODE ANN. §§ 85-2-211 to -243 (2002).

¹⁰⁴ MONT. CODE ANN. §§ 85-2-313, -701 to -705 (2002).

¹⁰⁵ MONT. CODE ANN. §§ 85-2-301 to -344 (2002).

¹⁰⁶ *See, e.g.*, Confederated Salish and Kootenai Tribes v. Clinch, 992 P.2d 244 (Mont. 1999).

¹⁰⁷ MONT. CODE ANN. § 85-2-313 (2002).

¹⁰⁸ *Id.*

¹⁰⁹ MONT. CODE ANN. § 2-15-212 (2002).

(b) two members of the Senate appointed by the president, each from a different political party;

(c) four members designated by the governor; and

(d) one member designated by the attorney general.”¹¹⁰

The Compact Commission is charged with negotiating water rights “compacts for the equitable division and apportionment of waters between the state and its people and the several Indian tribes claiming reserved water rights within the state.”¹¹¹ The Compact Commission acts on behalf of the state and its citizens as a whole. Although it represents the interests of water users in general, the Commission does not represent each individual water user.¹¹² However, to ensure that the interests of the public and of individual water users are addressed, two additional steps are required by Montana law. First, negotiated compacts must be ratified by the state legislature.¹¹³ Second, after ratification, a compact must be filed with the Montana Water Court. The Water Court then proceeds to consider the rights of individual water users claiming water in the state adjudication. The Water Court also enters the negotiated water right in a final decree in which it is integrated with other water rights in the basin.¹¹⁴

What allows a state to determine the process for quantification of water rights established under federal law? To accomplish this, a state must join the United States in a suit for adjudication of its reserved water rights and the reserved water rights it holds in trust for the benefit of various Indian tribes. Without an express waiver of sovereign immunity by Congress, joinder of the United States in a suit would not be possible.¹¹⁵ In 1952, as a

¹¹⁰ *Id.* at 212(2)(a)-(d). This composition of legislative and executive appointees has never been challenged in Montana on the basis of separation of powers. Recently the California Coastal Commission, with a similar composition, has been challenged on that basis, however, the ruling may turn on the lack of fixed terms for commissioners. *Marine Forests Society v. California Coastal Commission*, 128 Cal. Rptr. 2d 869 (Dec. 30, 2001), modified in 105 Cal. App. 4th 773A (Jan. 23, 2003). The Montana Commissioners have fixed terms.

¹¹¹ MONT. CODE ANN. §§ 85-2-701(1) (2002).

¹¹² See MONT. CODE ANN. § 2-15-212 (2002) (indicating that “the commission is acting on behalf of the governor”).

¹¹³ MONT. CODE ANN. § 85-2-702(2) (2002).

¹¹⁴ *Id.* at 202(3).

¹¹⁵ Thus, the U.S. Supreme Court stated that: “[i]t is elementary that ‘[t]he United States, as sovereign, is immune from suit save as it consents to be sued . . . , and the terms of its consent to be sued in any court define that court’s jurisdiction to entertain the suit.’” *United States v. Mitchell*, 445 U.S. 535, 538 (1980) (quoting *United States v. Sherwood*, 312 U.S. 584, 586 (1941)). A waiver of sovereign immu-

rider on the Department of Justice Appropriations Act, Congress passed the McCarran Amendment, allowing the United States to be joined in a state adjudication of water rights.¹¹⁶

The United States Supreme Court subsequently concluded that the McCarran waiver extends to suits to adjudicate reserved water rights.¹¹⁷ The Court has further concluded that, although jurisdiction to adjudicate reserved water rights is not exclusive in state court, the policy of McCarran—to avoid piecemeal adjudication—counsels in favor of dismissal of federal litigation in deference to a state adjudication in progress.¹¹⁸ The Court's interpretation of the waiver of immunity under McCarran extends specifically to a general adjudication involving "all of the rights of various owners on a given stream."¹¹⁹

Concurrent with Montana's initiation of the statewide adjudication, the United States filed suits in federal district court to quantify the reserved water rights associated with the seven Indian Reservations in the State of Montana.¹²⁰ Montana success-

nity "cannot be implied but must be unequivocally expressed." *United States v. King*, 395 U.S. 1, 4 (1969).

¹¹⁶ 66 Stat. 560, §§ 208(a)-(c), (1952) (codified at 43 U.S.C. 666 (2001)). The relevant text of the McCarran Amendment states that:

(a) Consent is given to join the United States as a defendant in any suit (1) for the adjudication of rights to the use of water of a river system or other source, or (2) for the administration of such rights, where it appears that the United States is the owner of or is in the process of acquiring water rights by appropriation under State law, by purchase, by exchange, or otherwise, and the United States is a necessary party to such suit. The United States, when a party to any such suit, shall (1) be deemed to have waived any right to plead that the State laws are inapplicable or that the United States is not amenable thereto by reason of its sovereignty, and (2) shall be subject to the judgments, orders, and decrees of the court having jurisdiction. . . .

43 U.S.C. § 666(a).

¹¹⁷ *United States v. Dist. Ct. for Eagle County*, 401 U.S. 520 (1971).

¹¹⁸ *Colo. River Water Conservation Dist. v. United States*, 424 U.S. 800 (1976).

¹¹⁹ *Dugan v. Rank*, 372 U.S. 609, 618 (1963), (quoting S. REP. NO. 755, 82d Cong., at 9 (1951)).

¹²⁰ *United States v. Adsit*, 721 F.2d 1187 (C.A. Mont. 1983) consolidated with *Northern Cheyenne Tribe v. Tongue River Water Users Ass'n*, 484 F. Supp. 31 (Dist. Ct. Mont. 1979) (asserting the claims of the Northern Cheyenne Tribe of the Northern Cheyenne Reservation on the Tongue River and the Crow Tribe of the Crow Reservation on Rosebud Creek), *dismissed* Nov. 29, 1979; *United States v. Big Horn Low Line Canal*, 484 F. Supp. 31 (Dist. Ct. Mont. 1979) (asserting the claims of the Crow Tribe of the Crow Reservation on the Tongue, Big Horn and Little Bighorn Rivers, and on Pryor, Sage, Tullock, and Sarpy Creeks), *dismissed* Nov. 29, 1979; *United States v. Aageson*, 484 F. Supp. 31 (Dist. Ct. Mont. 1979) (asserting the claims of the Blackfeet Tribe of the Blackfeet Reservation, the Chippewa Cree Tribe

fully sought dismissal of the federal suits in favor of the state adjudication.¹²¹ The United States Supreme Court concluded in 1983 that dismissal of the federal suits without prejudice was appropriate in deference to state adjudication.¹²² The Court further noted that states have the authority to assert concurrent jurisdiction, pursuant to McCarran, provided that the state proceeding is adequate to adjudicate reserved water rights.¹²³ The Montana Supreme Court subsequently concluded that the Montana Water Use Act is facially adequate to adjudicate federal reserved water rights.¹²⁴ It remains to be seen if the Montana adjudication is adequate as applied.¹²⁵ Should a court eventually determine that application of the Water Use Act is inadequate, federal suits may be resumed. In the meantime, the settlement of the reserved water rights may render the issue of adequacy moot.

B. The Fort Belknap Negotiation

In 1997, after twelve years of data gathering, proposals, and occasional false starts, the Gros Ventre and Assiniboine Tribes of the Fort Belknap Reservation, the State of Montana, and the United States entered serious negotiations to settle the water rights of the Tribes.¹²⁶ In January of 2001, the Tribes and the Compact Commission presented a settlement, referred to as a

of the Rocky Boy's Reservation, the Sioux and Assiniboine Tribes of the Fort Peck Reservation and the Gros Ventre and Assiniboine Tribes of the Fort Belknap Reservation in the Milk and St. Mary's River Basins), *filed* April 5, 1979, *dismissed* Nov. 29, 1979; *United States v. Aasheim*, 484 F. Supp. 31 (Dist. Ct. Mont. 1979) (asserting the claims of the Sioux and Assiniboine Tribes of the Fort Peck Reservation on Poplar, Muddy, Wolf, Little Wolf, and Tule Creeks), *dismissed* Nov. 29, 1979; *United States v. AMS Ranch*, 484 F. Supp. 31 (Dist. Ct. Mont. 1979) (asserting the claims of the Blackfeet Tribe of the Blackfeet Reservation on the Marias River), *dismissed* Nov. 29, 1979; *United States v. Abell*, 484 F. Supp. 31 (Dist. Ct. Mont. 1979) (asserting the claims of the Salish and Kootenai Tribes of the Flathead Reservation on the Flathead River), *dismissed* Nov. 29, 1979; *dismissals upheld in Arizona v. San Carlos Apache Tribe*, 463 U.S. 545 (1983).

¹²¹ *Northern Cheyenne Tribe v. Tongue River Water Users Ass'n*, 484 F. Supp. 31 (D. Mont. 1979) (dismissing the federal suit), *rev'd sub nom.* *Northern Cheyenne Tribe v. Adsit*, 668 F.2d 1080 (9th Cir. 1982), *consolidated and rev'd sub nom.* *Arizona v. San Carlos Apache Tribe*, 463 U.S. 545 (1983).

¹²² *Arizona v. San Carlos Apache Tribe*, 463 U.S. 545 (1983).

¹²³ *Id.*

¹²⁴ *State ex rel. Greely v. Confederated Salish and Kootenai Tribes*, 712 P.2d 754 (Mont. 1985).

¹²⁵ *Id.*

¹²⁶ Telephone Interview with Susan Cottingham, Program Manager, Montana Reserved Water Rights Compact Commission (Aug. 1, 2001).

“compact,” to the Montana Legislature for ratification.¹²⁷ On April 6th, 2001, the Governor of Montana signed the compact into state law.¹²⁸ Following a brief summary of the water right agreed to in the compact, this Article assesses two important aspects of the agreement: (1) the mechanism established to coordinate water distribution and management in the face of multiple jurisdictions; and (2) the mechanism to allow re-allocation of water to meet critical needs during drought.¹²⁹

1. *The Water Right*

The Fort Belknap Reservation is the site of the earliest United States Supreme Court case addressing reserved water rights. In *Winters v. United States*, eighty-nine years later when the parties came to the table, no further definition of the water rights of the Tribes was available beyond the 1908 declaration of its existence. The *Winters* Court did not discuss, nor had the United States or the upstream farmers argued, the full extent of the reserved water right.¹³⁰ The Court affirmed the decree issuing an injunction by the lower court.¹³¹ The “decree” of the lower court was an order “enjoining [Winters et al.] from interfering in any manner with the use of 5,000 inches of the waters of the Milk River in the state of Montana.”¹³² The injunction approved by the Court in *Winters*, against upstream diversion that depleted the flow of the Milk River below 125 cfs, was directly tied to the capacity of the diversion facilities on the Fort Belknap Reservation in 1908.¹³³ *Winters* did not quantify the limits of the reserved water right necessary for future use. The limitation of the injunction to the Tribes’ developed capacity simply reflects the basic rule that an injunction will be narrowly tailored to fit the circumstances.

¹²⁷ MONT. H.B. 626, 57th Legislature (2001). The term “compact” is used in Montana law and should not be confused with an interstate compact.

¹²⁸ MONT. CODE ANN. § 85-20-1001 (2002). Substantial work remains to finalize the settlement: (1) approval by the United States requires ratification by Congress; (2) formal Tribal approval will require a referendum vote on the reservation; and (3) State law requires filing of the Compact with the Montana Water Court for entry of a decree.

¹²⁹ The use of the settlement to seek funding for the development of tribal water resources will be discussed in a companion paper.

¹³⁰ *Winters*, 207 U.S. at 578.

¹³¹ *Id.*

¹³² *Winters*, 143 F. at 741. The famous plaintiff named in this case was actually Henry Winter. The case name is a typo. SHURTS, *supra* note 63, at 150.

¹³³ *Winters*, 207 U.S. at 565.

The defensive posture of the United States in the early 1900's in seeking curtailment of conflicting water use rather than affirmative adjudication of the tribal water right was not limited to the Fort Belknap Reservation. Concurrent with *Winters*, the United States successfully sought an injunction in federal district court against water diversions upstream from facilities diverting water to the Blackfeet Reservation from Birch Creek. The Ninth Circuit held the case pending the outcome of *Winters* in the United States Supreme Court, then affirmed the injunction.¹³⁴ In doing so, the Ninth Circuit acknowledged the fact that the case was limited to current developed capacity. The court stated that the case could be re-opened if necessary to provide additional water "reasonably necessary for the purposes" of the Reservation.¹³⁵

Thus, in entering negotiations, the parties had the following information on the tribal water right from *Winters*: (1) prior to 1888 the Tribes had command of all the water in the basin; (2) the 1888 Treaty reserved to the Tribes the water necessary to cultivate the reservation; (3) that right is at least as large as necessary to serve the diversion facilities constructed in 1898; and (4) the measure of the reserved water right is the "purpose" of the Reservation.¹³⁶

The parties to the Fort Belknap negotiations agreed to a tribal diversion right from the Milk River of 625 cfs, five times that directly protected in *Winters*. This right was based on:

- (1) the Tribes' assessment of what would be necessary for a viable irrigation project and what could be served from a technically feasible off-stream storage site on the reservation;¹³⁷ and
- (2) the assessment by the State and the U.S. Bureau of Reclamation that with reasonable changes to existing Milk River Project facilities, the Tribes' needs along with those of their neighbors, could be met.¹³⁸

¹³⁴ *Conrad Investment Co.*, 161 F. at 834.

¹³⁵ *Id.*

¹³⁶ *Winters*, 207 U.S. at 576-77.

¹³⁷ *Water Rights Development Plan, Fort Belknap Indian Reservation, Montana*, (November 28, 1995), prepared for the Gros Ventre and Assiniboine Tribes of the Fort Belknap Indian Reservation, Montana by Natural Resources Consulting Engineers, Inc., (available from the Montana Reserved Water Rights Compact Commission, Helena, Mont.).

¹³⁸ Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Rights Compact Commission (June 24, 2002).

This agreement allocates the entire natural flow of the Milk River to the Tribes in most months, leaving the Project to rely on continued diversion from the St. Mary's River. The ability of the parties to agree to this interest-based solution in the Milk River was aided by the fact that substantial room for improvement lies within existing project facilities and that water diverted from the St. Mary River is a significant share of the flow in the bed of the Milk River.¹³⁹ To allow thorough study of the alternatives for supply of water to off-reservation irrigation and the environmental impact of such alternatives, the compact leaves the choice of measures to be taken open until completion of environmental review by the U.S. Bureau of Reclamation.

The concept that growing needs can be met with existing facilities is not new, nor is it limited to the Milk River. As Professor Wilkinson notes:

[T]he West is so extravagantly overbuilt . . . so much water has been developed, and so many water users are so wasteful . . . that the water supplies in the present system, if used sensibly, can meet most or all future needs for the foreseeable future without investment in more structural alternatives, such as substantial dams and stream diversions.¹⁴⁰

Although some disagreement exists concerning whether the focus should be on conveyance facilities,¹⁴¹ or on-farm improvements,¹⁴² all parties agreed that some water supply problems on the Milk River can be solved through improvements in efficiency. On the Milk River, as elsewhere in the West, return flows are re-diverted multiple times downstream.¹⁴³ Thus, although individual farm efficiency is low, basin-wide efficiency is, in theory, high.¹⁴⁴ Nevertheless, significant water is lost through evapotranspiration from conveyance facilities so that even proponents of the basin-wide efficiency theory agree there is room for im-

¹³⁹ *Id.*

¹⁴⁰ WILKINSON, *supra* note 1, at 286-87.

¹⁴¹ Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Rights Compact Commission (Feb. 14, 2002).

¹⁴² John C. Dalton, *Milk River on-Farm Irrigation Study for Blaine, Phillips and Valley Counties*, prepared for the United States Bureau of Reclamation and the Montana Department of Natural Resources and Conservation (1999).

¹⁴³ RICHARD D. LAMM & MICHAEL MCCARTHY, *THE ANGRY WEST: A VULNERABLE LAND AND ITS FUTURE* (Houghton Mifflin Co. 1982).

¹⁴⁴ Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Rights Compact Commission (Feb. 14, 2002).

provement.¹⁴⁵ In addition, the Milk River Project, as with most reclamation projects built in the early 1900s, has deteriorated in its capacity to service irrigation due to decline in both capacity of conveyance facilities and siltation of reservoirs.¹⁴⁶ Thus, renovation to its earlier capacity could substantially improve water supply to the Project.

2. *Getting the Water Right Delivered*

The quantification of the right was easy relative to the tasks of determining whether it is actually available, and if so, how to guarantee its delivery.¹⁴⁷ Reclamation's existing accounting system allows natural flow Milk River water to be passed through storage to the Fort Belknap diversion.¹⁴⁸ No system exists, however, to coordinate storage in reservoirs owned by the Project with those owned by other entities or with the proposed tribal reservoirs nor to account for storage allocation. Technical advisors to the negotiations determined that coordination and operation of all storage in the basin with the single goal of maximizing water supply would contribute to water availability.¹⁴⁹ For example, from an efficiency viewpoint, a senior reservoir located low in the basin and built in leaky glacial sediments (e.g., the Project's Nelson Reservoir) should not be filled before a more competent junior reservoir upstream (e.g., Hill County's Lower Beaver Creek Reservoir).¹⁵⁰ Improvements in water availability

¹⁴⁵ *Id.*

¹⁴⁶ Telephone Interview with Leny Duberstein, Engineer, United States Bureau of Reclamation (Feb. 22, 2002) (The original design capacity of the St. Mary diversion facility of 850 cfs is now reduced to 650 cfs. The original capacity of the main-stream reservoir—Fresno Reservoir—of 130,000 acre-feet is not 92,000 acre-feet due to siltation.).

¹⁴⁷ Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Rights Compact Commission (Feb. 14, 2002).

¹⁴⁸ Draft *Reservoir and River Operation Guidelines Milk River Project*, United States Bureau of Reclamation 13 (Dec. 15, 1997). In 1946, BIA on behalf of Fort Belknap, entered a contract for some storage in the Project's Fresno Reservoir to store natural flow Milk River water, thus increasing the likelihood the Fort Belknap Indian Irrigation Project could be served in late summer. (Memorandum of Agreement between the Bureau of Reclamation and the Office of Indian Affairs, Milk River Project, Montana, Aug. 16, 1946). This storage allocation is part of the Reclamation's existing accounting system.

¹⁴⁹ Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Rights Compact Commission (June 24, 2002).

¹⁵⁰ *Id.*

could be realized by holding late fall precipitation high in the basin and simply accounting to whom it belongs.¹⁵¹

Concerns that water once released from upstream reservoirs would not be allowed to flow down to the appropriate headgate were prevalent from both Tribal and private irrigators.¹⁵² For years the downstream irrigation districts of Malta and Glasgow had accused the upstream Chinook Districts of taking more than their fair share of water.¹⁵³ At the same time, the Chinook Districts were seeking a means to prove they diverted only within legal limits.¹⁵⁴ All seven districts and the Tribes criticized the Bureau of Reclamation for not only issuing additional individual contracts to irrigate from a project already short on water but for failing to police those contracts to assure additional water was not taken.¹⁵⁵ Reclamation in turn criticized the Montana Department of Natural Resources and Conservation (DNRC) for its continued issuance of new permits to divert water from surface water sources in the Milk River Basin.¹⁵⁶ Reclamation also expressed frustration with DNRC for its failure to police the river for illegal diversions.¹⁵⁷

All parties and members of the public did agree that the lack of enforcement on the Milk River had to end.¹⁵⁸ More than an

¹⁵¹ *Id.*

¹⁵² Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Rights Compact Commission (Feb. 14, 2002).

¹⁵³ *Id.*

¹⁵⁴ *Id.* In a testament to the fact that nothing brings people together like adversity, faced with the prospect of a tribal settlement, the seven irrigation districts put aside their history of accusation and formed the Milk River Joint Board of Control under state law during the course of negotiations. This provided a (somewhat) unified voice for comment and more importantly, a logical governmental entity to participate in the future coordination of the river.

¹⁵⁵ It appears these concerns were well founded. Studies by the Compact Commission staff indicate that individual (i.e., contracts other than the district contracts) contracts for water to irrigate 10,000 acres are being used to apply water to 20,000 acres. Telephone Interview with Bill Greiman, *supra* note 147.

¹⁵⁶ See *supra* note 39 for the 1983 DNRC Order closing the mainstem of the Milk River to certain new appropriations. Despite the fact that the justification for the Closure Order was water shortage, it did not extend to the Milk River's tributaries.

¹⁵⁷ Reclamation's frustration stems in part from a feature of Montana law. Most western states have a State Engineer charged with the enforcement of water rights. In contrast, prior to the 1973 development of Montana's permit system, only a state district court in response to a complaint or petition for appointment of a water commissioner could enforce water rights. (MONT. CODE ANN. § 85-2-406 (2002)). This system remains in force for all pre-1973 rights. Reclamation has never sought enforcement of rights on the Milk River in state court.

¹⁵⁸ Telephone Interview with Bill Greiman, *supra* note 152.

enforcement authority, however, is necessary to ensure that water reaches the appropriate headgate. Complicating the enforcement issue is the fact that a single tract of land may, at different times of the year and under different conditions of water flow, receive Project district water, Project direct contract water, and water diverted pursuant to an individual state appropriative right.¹⁵⁹ To ensure appropriate enforcement, a massive accounting effort would be necessary to sort out various types of water conveyed by the bed of the Milk River to specific tracts of land.

As part of the settlement, the parties agreed to include means to: (1) account for and coordinate the storage and release of water in reservoirs within the basin; (2) more accurately track the distribution of water to land pursuant to specific forms of the water right; and (3) enforce distribution of water from the mainstem of the Milk River.¹⁶⁰ From these initial goals of allocating and enforcing delivery of the tribal water right grew an entity designed to address issues facing the entire basin.

a. The Milk River Coordinating Committee

Under the jurisdictional goulash described above, the following entities have a role in water storage and distribution in the basin: (1) the Tribes—for new storage proposed by the Compact and distribution on the Reservation; (2) BIA—for distribution of water within the Fort Belknap Indian Irrigation Project;¹⁶¹ (3) the Bureau of Reclamation—for storage in, and release from Project reservoirs (Sherburne, Fresno, and Nelson), and for distribution of water to irrigation districts and individual contract holders; (4) DNRC—for overseeing post-1973 water rights, including Hill County's right for Lower Beaver Creek Reservoir; and (5) the irrigation districts—for distribution of water within their canal systems and filling of Nelson Reservoir from one of the canals.¹⁶² To coordinate these entities, the settlement estab-

¹⁵⁹ *Id.*

¹⁶⁰ Interview with Susan Cottingham, Program Manager, Montana Reserved Water Rights Compact Commission (June 25, 2002).

¹⁶¹ Certain units of the Indian Irrigation Project have been quit claimed to companies formed by the individual Indian allottees who handle water distribution within the unit. Following the Compact the companies will continue to distribute their own water, but the Tribes will have jurisdiction over delivery to their headgates. Fort Belknap Compact, art. IV.A.1.c., MONT. CODE ANN. § 85-20-1001 (2002).

¹⁶² Fort Belknap Compact, art. IV.C.2., MONT. CODE ANN. § 85-20-1001 (2002).

lishes the Milk River Coordinating Committee (MRCC) comprised of the following representatives:

1. Two representatives of the Tribes;
2. Three representatives of the Milk River Joint Board of Control;¹⁶³
3. One representative of DNRC;
4. One representative of the Bureau of Reclamation;
5. One representative of the Bureau of Indian Affairs;
6. One representative selected at large by the other eight members.¹⁶⁴

The MRCC is geared toward representation by local interests: the Tribes and the private irrigation districts. Therefore, the composition of the MRCC gives responsibility for coordinating management of the basin as a whole to those with power over the use of the river.¹⁶⁵ The balance between Tribal and Joint Board (irrigation district) members was a subject of considerable debate during negotiations.¹⁶⁶ The districts serve over 100,000 acres of irrigated land.¹⁶⁷ The Tribes proposed irrigation project will combine with their existing project for a total of 30,000 acres irrigated.¹⁶⁸ Due to the separate governmental status of the Tribes and the seniority of their right, the division was not drawn strictly on an acreage basis.¹⁶⁹ Furthermore, the parties sought to allow representation of both the Gros Ventre and Assiniboine Tribes by providing for at least two tribal members.¹⁷⁰

¹⁶³ The Milk River Joint Board of Control represents the seven private irrigation districts in the basin. *See supra* note 154.

¹⁶⁴ Fort Belknap Compact, art. IV.C.2., MONT. CODE ANN. § 85-20-1001 (2002).

¹⁶⁵ *See, e.g.*, Neuman, *supra* note 6 (discussion of the importance of integrating management basin-wide and to place the responsibility for that integration in the hands of those who actually manage the allocation of the water).

¹⁶⁶ Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Right Compact Commission (Feb. 14, 2002).

¹⁶⁷ Compact Commission, *Technical Report: Fort Belknap*, *supra* note 52, at 9.

¹⁶⁸ Fort Belknap Compact, art. III.A., MONT. CODE ANN. § 85-20-1001 (2002).

¹⁶⁹ Telephone Interview with Richard Aldrich, Field Solicitor, Department of the Interior (Feb. 14, 2002).

¹⁷⁰ *Id.* Note that the seniority of the Tribes' water right gives them primary control of the Milk River's natural flow, leaving project water users to rely on diversions from the St. Mary River and storage. This warranted a strong tribal voice on the Committee. In addition, as noted above, the Gros Ventre and Assiniboine Tribes have strikingly different cultural histories. A traditional faction of the Gros Ventre, referring to themselves as "The Gros Ventre Treaty Committee," opposed many of the elements of the settlement. Negotiators were extremely sensitive to recognizing the possibility of separate interests among the two Tribes. Interview with Susan Cot-

In addition to the voting membership, several other government agencies with substantial interests in the basin, were given advisory roles. They are not, however, directly responsible for storing or distributing water. These advisory members include: the United States Geological Survey, which is responsible, along with the Canadian Survey, for the daily allocation of water between the United States and Canada; the United States Fish and Wildlife Service, which purchases water for Bowdoin National Wildlife Refuge from the Malta Irrigation District, and which is responsible for any listing of endangered or threatened species in the basin; the Montana Department of Fish, Wildlife and Parks, which holds state water rights for instream flow on some of the tributaries to the Milk River, and is responsible for many of the fishery studies in the basin; and the United States Bureau of Land Management, which is a substantial land manager in the Milk River Basin.

The MRCC is given the following directives by the compact that are pertinent to this discussion: (1) consult with Reclamation on the development of operating criteria for coordination of storage and release of water from storage;¹⁷¹ (2) review applications for new storage in the basin beyond that contemplated by the settlement;¹⁷² (3) oversee a loan program for efficiency improvements in on-farm and conveyance facilities;¹⁷³ (4) coordinate a common database on use of water diverted from the Milk River;¹⁷⁴ and (5) oversee a grant program for a drought water bank (discussed below).¹⁷⁵ Formation of the MRCC with representation from all major interests in the basin allowed the parties to introduce a degree of flexibility into water management while limiting the water user fear that change could occur without their input. The first four tools of the MRCC are discussed in turn, followed by a discussion of drought, and the use of a water bank to reallocate water.

tingham, Program Manager, Montana Reserved Water Rights Compact Commission, in Helena, Montana (June 25, 2002).

¹⁷¹ Fort Belknap Compact, arts. IV.C.11. and IV.C.3.e. and f., MONT. CODE ANN. § 85-20-1001 (2002).

¹⁷² Fort Belknap Compact, art. IV.C.3.g., MONT. CODE ANN. § 85-20-1001 (2002).

¹⁷³ Fort Belknap Compact, art. IV.C.8.-10., MONT. CODE ANN. § 85-20-1001 (2002).

¹⁷⁴ Fort Belknap Compact, art. IV.C.3.d., MONT. CODE ANN. § 85-20-1001 (2002).

¹⁷⁵ Fort Belknap Compact, art. IV.C.8.-10., MONT. CODE ANN. § 85-20-1001 (2002).

(1) Consultation on Operating Criteria

Once ratified by Congress, the compact directs Reclamation to develop operating criteria and an accounting method to provide the maximum utilization of storage in the basin.¹⁷⁶ The role of the MRCC is one of consultation: to ensure information on storage availability, use, and water needs are passed between entities. The lead role is given to Reclamation due to its dominance in water development and its unique expertise in reservoir accounting in the Milk River Basin. The operating criteria are not locked in place by the compact but may be adapted by Reclamation to address new information, more sophisticated understanding of water supply and distribution, and changing needs.¹⁷⁷

Allowing operating criteria to evolve as circumstances change is a reasonable step toward introducing flexibility into the stagnant legal regime of water management. As discussed below, more sophisticated modeling of water supply and distribution may enhance the efficiency of water management, allowing changes in operation to benefit other resource values. Tools currently being introduced in the basin by Reclamation and the Montana Department of Natural Resources and Conservation to record rainfall geographically will allow more precise identification of water need on any particular day. On a broader scale, adaptability of operating criteria allows consideration of events such as climate change, economic change (e.g., a shift from an agricultural economy), siltation of reservoirs, and identification of endangered species. Without altering the law, this approach uses the fickle nature of the resource itself as the basis for avoiding rigid rules.

Despite the strong role of tribal and private entities in the allocation of water, keeping Reclamation in the driver's seat undermines the full potential for coordination promised by creation of the MRCC. The dominance of federal reclamation policy, which is slow to adapt to changing circumstances, may prevent flexible adaptation to change and tailoring of solutions to the specific cir-

¹⁷⁶ Current federal policy requires ratification of tribal water right settlements by Congress. In addition, any provision for a new action by a federal agency and for federal funding in a settlement requires congressional authorization and appropriation. Authorization is generally included in a bill for ratification. *See, e.g.*, H.R. 795, 106th Congress (1999), *Chippewa Cree Tribe of the Rocky Boys Reservation Indian Reserved Water Rights and Water Supply Enhancement Act of 1999*, available at <http://thomas.loc.gov> (last visited Apr. 16, 2003).

¹⁷⁷ Fort Belknap Compact, art. IV.C.11., MONT. CODE ANN. § 85-20-1001 (2002).

cumstances facing the Milk River Basin.¹⁷⁸ The strength in the process used on the Milk River is the ability to tailor solutions to specific local problems. Placing the dominant role of water allocation and management in the hands of an entity whose policy is set at the national level may prevent full use of that strength.

Nevertheless, there are compelling reasons to maintain national level control over a project built with federal dollars. Requirements such as consultation under the Endangered Species Act and the National Environmental Protection Act would remain intact with federal control. A better compromise, however, might be realized if these national requirements were made applicable to the MRCC through the pending federal legislation approving the compact, thereby allowing governance of the water distribution system to evolve. Daily management of water allocation by the MRCC would require changes in the agreement which allows dedication of technical staff by its members.

The dilemma between the need to integrate disparate management entities within a single water basin and the strong institutional bias against altering the traditional power structure is certainly not unique to the Milk River Basin.¹⁷⁹ In the Milk River, as elsewhere, the political difficulty of changing the traditional roles of the various governmental entities was insurmountable.¹⁸⁰ A decision to subject management of a reclamation project to control of a committee with private, tribal, and state members raises red flags throughout reclamation country. A state like Montana with one representative in the United States

¹⁷⁸ For example, unlike many reclamation projects, use of project water in the basin does not exceed district contracts. However, some of the land originally identified by Reclamation for irrigation turned out to be the least efficient to irrigate. Although many farmers have retired these lands in favor of others, without compliance with Reclamation Act requirements for reclassification of land these exchanges are illegal. Reclassification is an expensive and time consuming process and prevents rapid reallocation of water as circumstances change or new understanding of the land is achieved. Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Rights Compact Commission (June 24, 2002).

¹⁷⁹ Robert W. Adler and Michele Straube, *Watersheds and the Integration of U.S. Water Law and Policy: Bridging the Great Divides*, 25 WM. & MARY ENVTL. L. & POL'Y REV. 1, 64-65 (2000) (analyzing four watershed programs: the Colorado River Basin Salinity Control Program; the San Francisco Bay-Delta (CALFED) Program; the Central and South Florida (Everglades) Project; and the Chesapeake Bay Program, noting that all of these efforts "promote intergovernmental coordination rather than transfer authority from one level of government to another").

¹⁸⁰ Telephone Interview with Susan Cottingham, Program Manager, Montana Reserved Water Rights Compact Commission (Aug. 1, 2001).

House of Representatives is unlikely to achieve congressional approval for that change. Therefore, it is understandable that the negotiators avoided the controversy. Although the move toward basin-wide management evident in the creation of the MRCC is an important step, it may fall significantly short due to continued reliance on the pre-existing structure governing control over water.

(2) *Review of Applications for New Storage*

The compact gives the MRCC the authority to veto applications for new storage in the basin beyond the new storage contemplated by the compact.¹⁸¹ The MRCC may allow new storage in the basin if it “will result in a net increase in available water supply” in the basin.¹⁸² The compact accomplishes the long awaited closure of the entire basin, including tributaries, to new appropriations of water.¹⁸³ Under Montana law, however, a water use permit is not needed for new storage; it is needed merely for application of the water stored to a beneficial use. During negotiation, public concerns were raised on two points: (1) new storage high in the basin could limit flow downstream that could be captured by existing reservoirs and tribal storage; and (2) until tribal storage and the new approach to coordination are in place, it is impossible to determine whether new storage could enhance or harm conditions in the basin.¹⁸⁴

By requiring application to the MRCC and allowing review on a case-by-case basis as understanding of the effect of development of tribal water on the basin grows, the storage provision introduces another element of flexibility to water management in the Milk River Basin. More importantly, the criteria for approval of new storage requires assessment of a proposed project in the context of the water supply in the basin as a whole rather than merely its effect on the consumptive water rights adminis-

¹⁸¹ The Compact contemplates up to 60,000 acre-feet of new storage capacity from the Milk River, new storage on People’s Creek on the Reservation, and possible modification to existing storage within the Reclamation Project.

¹⁸² Note that any project in the basin meeting this criteria remains subject to all applicable environmental regulation under art. V.A.13., MONT. CODE ANN. § 85-20-1001 (2002).

¹⁸³ Fort Belknap Compact, art. III.I., MONT. CODE ANN. § 85-20-1001 (2000); *see also supra* note 39.

¹⁸⁴ Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Rights Compact Commission (Feb. 14, 2002).

tered by a single entity.¹⁸⁵ There is a growing recognition of the need to incorporate basin-wide planning and consequences in development decisions.¹⁸⁶ The incorporation of criteria that include basin-wide consequences in the water development decisions by the MRCC is a step in that direction.

(3) *Oversight of Loan Program*

The settlement establishes a loan program intended to be funded by state and federal appropriations and overseen by the MRCC for projects that will alleviate water shortage.¹⁸⁷ Studies by the Bureau of Reclamation indicate that efficiency improvements in water use in the Milk River Basin can contribute to reduction in water shortage.¹⁸⁸ As noted above, there is some disagreement over whether on-farm efficiency improvements will actually improve water supply.¹⁸⁹ All efficiency improvements, however, may include collateral benefits that improve the ability of irrigators to operate and conditions in the basin as a whole. In ranking loan applications for efficiency improvements, the MRCC must consider related benefits such as improvements in water quality, habitat, water use efficiency, management, and recreation.¹⁹⁰

A provision of the Montana Water Use Act allowing the use of the saved water (referred to as salvaged water) to expand irrigation is a major impediment to the use of efficiency improvements to alleviate water shortage in Montana.¹⁹¹ Intended to provide incentive for the implementation of conservation measures and to increase cultivation of land, the salvage provision does little to improve water supply for other water users or habitat. Due to the severity of water shortage in the Milk River Basin, the settlement eliminates the right to use water salvaged by any project funded by the MRCC loan program or any project not funded through the loan program that results in salvaged water that may alleviate shortage in the Milk River Basin.¹⁹²

¹⁸⁵ See *supra* note 183.

¹⁸⁶ Getches, *supra* note 6, at 541.

¹⁸⁷ Fort Belknap Compact, art. IV.C.10, MONT. CODE ANN. § 85-20-1001 (2002).

¹⁸⁸ Dalton, *supra* note 142.

¹⁸⁹ *Id.*; see also Greiman, *supra* note 141.

¹⁹⁰ Fort Belknap Compact, art. IV.C.10.a.(3), MONT. CODE ANN. § 85-20-1001 (2002).

¹⁹¹ MONT. CODE ANN. § 85-2-419 (2002).

¹⁹² Fort Belknap Compact, art. III.I.3., MONT. CODE ANN. § 85-20-1001 (2002).

Incentive to participate in the loan program does not end with the elimination of the ability to expand irrigation. Numerous non-water related benefits can be realized through implementation of efficiency improvements.¹⁹³ For example, it is far easier to spread water on a lazer leveled field than one with irregularities. Similarly, it is far easier to move water down a smooth canal than one choked by weeds or with irregular changes in slope. Presented to irrigators in the proper light, elimination of the ability to expand irrigation should not reduce interest in the loan program.

The elimination of the expansion of irrigation from salvaged water in the Milk River Basin is a major step in Montana water policy. The previous law had as its driving force not only the use of incentives to implement efficiency, but more importantly the goal of expanding irrigated acres. This shift to allocation of salvaged water to alleviate shortage represents a recognition that, at least in the Milk River Basin, the limit of that expansion has been reached. Given that the basin was identified as short of water by the United States in 1908¹⁹⁴ and the State in 1983,¹⁹⁵ this recognition is long overdue.

(4) *Coordination of a Common Database*

Historic lack of enforcement of water rights on the Milk River stems in part from lack of information. The number of entities with jurisdiction to allocate water and the overlap of different types of water rights applicable to the same tract of land render it difficult for any one entity to provide oversight on where and when water can be diverted to a specific field.

The system to record water rights in Montana was mandated by the Montana Constitutional Convention in 1972. The new constitution includes the requirement that the legislature "establish a system of centralized records of all water rights."¹⁹⁶ The system established by state law to fulfill the constitutional mandate is achieved through adjudication of all water rights. This system records attributes of a water right including the quantity

¹⁹³ Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Rights Compact Commission (Feb. 14, 2002).

¹⁹⁴ *Winters*, 207 U.S. at 566.

¹⁹⁵ See *supra* note 39.

¹⁹⁶ MONT. CODE ANN. § 85-2-101(2) (2002); see also MONT. CONST. art. IX, § 3(4).

and time of use; the purpose of use, including acres irrigated; the priority date; the source of water; and the location of the place of use.¹⁹⁷ Although this record provides the legal basis for determining if a water right may be satisfied at a particular time given the priorities and attributes of all the other water rights on the same source, it does not provide all the answers. In a basin as complex as the Milk River it does not provide a ready answer to whether, on a particular day, under particular conditions of water flow, with a particular amount of water released from a reservoir, a particular headgate may remain open. Furthermore, the water rights for an entity with authority to distribute water (e.g., an irrigation district or a tribe) tend to be recorded in the aggregate (e.g., 125 cfs may be diverted to irrigate 10,000 acres within specified boundaries). To provide someone with the authority to enforce water distribution on the Milk River with sufficient information to open and close headgates on a daily basis requires more than a mere statement of a water right.

The settlement directs the MRCC to coordinate development of a common database that records daily diversions.¹⁹⁸ These instructions would appear vague had the parties not already laid the groundwork for development of the database in the course of preparation for negotiation. Developed initially by the staff for the Compact Commission with substantial assistance by the irrigation districts and Reclamation, a Geographic Information Systems database is now being implemented on computers provided by Reclamation to the Tribes, the irrigation districts, and DNRC.¹⁹⁹ The database provides the detailed information on daily diversion and use necessary for the enforcement discussed below.²⁰⁰ As a collateral benefit, it is rapidly becoming a tool for more efficient management of water within the canals and fields of some irrigation districts.²⁰¹ Numerous scholars consider that most problems with water supply in the West have more to do with inefficient management and distribution and less to do with

¹⁹⁷ MONT. CODE ANN. §§ 85-2-224, -234 (2002).

¹⁹⁸ Fort Belknap Compact, art. IV.C.3.d., MONT. CODE ANN. § 85-20-1001 (2002).

¹⁹⁹ Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Rights Compact Commission (June 25, 2002).

²⁰⁰ *Id.*

²⁰¹ Telephone Interview with Bill Greiman, *supra* note 194. The database and its use are the brainchild of Mr. Greiman.

actual shortage.²⁰² The Milk River will provide an excellent field laboratory to test these theories. The question, however, remains: How to use this carefully organized information to enforce water rights? The answer: An entity with enforcement authority across jurisdictional boundaries is required.

b. The Milk River Water Commissioner

Planning, coordination, and technology are of little use to a downstream irrigator, whether tribal or individual, with a headgate opening to a dry stream. An irrigator will be the first to point this out when asked to support a settlement. Enforcement is key to achieving support for any settlement on a complex system.

The Fort Belknap Compact provides enforcement through the parties' petition for appointment of water commissioners by a state district court.²⁰³ The water commissioners are responsible for measurement and distribution of water from the mainstem of the Milk River on a daily basis.²⁰⁴ Commissioners and their counterparts within the delivery systems of irrigation districts (ditch riders) are a familiar part of seasonal river traffic in the arid West. Therefore, the approach is not unusual. What is unusual is the agreement to use a state court forum and to give the commissioners authority to open and close both tribal and private headgates. Understanding this solution requires a brief examination of existing law pertaining to integrated administration of tribal and private water rights following adjudication. Unfortunately, there is no such existing law. One line of reasoning says administration is governed by the McCarran Amendment. Another line of reasoning says administration is governed by case law on tribal/state regulatory jurisdiction.

The McCarran Amendment provides: "Consent is given to join the United States as a defendant in any suit (1) for the adjudication of rights to the use of water of a river system or other source, or (2) for the administration of such rights. . . ." ²⁰⁵ Whether the language in clause 2 gives a state (1) the authority over daily administration of adjudicated tribal water rights, (2)

²⁰² See, e.g., MACDONNELL, *supra* note 6, at 250; Getches, *supra* note 6, at 541; Olen Paul Matthews et al., *Marketing Western Water: Can a Process Based Geographic Information System Improve Reallocation Decisions?*, 41 NAT. RESOURCES J. 329, 336 (2001).

²⁰³ Fort Belknap Compact, art. VII.B.3-8, MONT. CODE ANN. § 85-20-1001 (2002).

²⁰⁴ Fort Belknap Compact, art. VII.B.3., MONT. CODE ANN. § 85-20-1001 (2002).

²⁰⁵ 43 U.S.C. § 666(a) (1986).

merely the authority to file suit should a problem occur, or (3) whether the administration provision is applicable to tribal water rights at all, is a matter of debate. In a deeply divided opinion, the Wyoming Supreme Court concluded that change in use of the tribal water right on the Wind River Reservation may only occur under state law.²⁰⁶ Prior to this Wyoming ruling, the Ninth Circuit concluded that under the reasoning in Supreme Court cases pertaining to state/tribal regulatory jurisdiction, Tribes have jurisdiction over water in a drainage located wholly within a reservation,²⁰⁷ but the state has regulatory jurisdiction over non-Indian water use on a reservation when the water source is located in part off the reservation.²⁰⁸

Thus, the choices in court appear to be: (1) total state control of administration; (2) checkerboard state/tribal jurisdiction to administer water on the same source, dependent on the reservation boundary; or (3) checkerboard state/tribal jurisdiction to administer water on the same source, dependent on the status of the irrigator as a tribal member. None of these solutions are satisfactory. The legal basis for total state authority is highly suspect given the Ninth Circuit rulings. More importantly for negotiations, it would be politically impossible for tribal negotiators to concede such an important point in settlement. Neither of the checkerboard solutions provide comfort to a downstream irrigator faced with a 120-day growing season and no water. Any suit against a diverter in another jurisdiction will begin with the question of in whose court the suit should proceed. By the time that decision is made, the short irrigation season will have ended.

The joint filing by the Tribes, State, and the United States for appointment of a water commissioner eliminates the checkerboard problem and the problem of control by an agency of a single governmental player in the basin. The parties seeking court appointment have equal say in the contents of the court order directing the activities of the commissioner. Court appointment

²⁰⁶ *In re General Adjudication of All Rights to Use Water in the Big Horn River System*, 835 P.2d 273 (Wyo. 1992) (Big Horn II). Despite the unfavorable ruling, the Shoshone and Arapaho Tribes chose not to appeal the decision to the U.S. Supreme Court out of concern that the current Court's unfavorable view of tribal sovereignty could result in an opinion with adverse consequences for all of Indian Country. Katharine Collins, *Water: Fear of Supreme Court Leads Tribes to Accept an Adverse Decision*, in *WATER IN THE WEST: A HIGH COUNTRY NEWS READER* 251-54 (Char Miller ed., 2000).

²⁰⁷ *Colville Confederated Tribes v. Walton*, 647 F.2d 42 (9th Cir. 1981).

²⁰⁸ *United States v. Anderson*, 736 F.2d 1358 (9th Cir. 1984).

provides a greater degree of control and a more immediate forum for any challenge to the exercise of those activities than available within the agency.

None of this explains the resort to state court. That feature may be explained as a mere product of convenience. Montana law already provides a detailed system for district court appointment of a water commissioner.²⁰⁹ Use of the existing system eliminates the need to create a process out of whole cloth. Concern that the Tribes may be conceding an important jurisdictional issue by agreeing to a state forum should be viewed in the context not merely of what the Tribes give up but of what they gain. Over 100,000 acres are irrigated from the mainstem of the Milk River off the Reservation. In agreeing to a state forum, the Tribes have also obtained agreement to an enforcement mechanism that gives them a substantial voice in the court order governing how water is distributed to those 100,000 acres.

Debates over jurisdiction to administer tribal water often lead to discussion of tribal sovereignty. The source and scope of tribal sovereignty is illusive. Although courts refer to its source as an "inherent power,"²¹⁰ it is meaningless unless exercised.²¹¹ When sovereignty is exercised over internal affairs concerning members of the sovereign nation, it is rarely controversial. It is at the boundaries where the sovereign rights of one government abut those of another that the true measure of sovereignty is revealed. At that boundary, the government that truly exercises its own sovereignty may be the one that reaches an agreement giving it some influence over the actions of a government whose decisions affect its resources.²¹²

The Fort Belknap Indian Community has exercised its sovereignty by joining Montana and the United States in choosing a method of enforcement for water distribution which gives the Tribe a voice extending to the entire Milk River. The record of its implementation on the Milk River and the judgment on whether the compact negotiators chose well remains to be seen.

²⁰⁹ MONT. CODE ANN. § 85-5-105 (2001).

²¹⁰ See, e.g., *Talton v. Mayes*, 163 U.S. 376 (1896) (concluding that the Fifth Amendment of the U.S. Constitution does not apply to the action of a tribal government because the source of the power of that government is inherent and is not derived from the federal Constitution).

²¹¹ Professor Robert Miller, Lecture at Lewis & Clark School of Law (Feb. 2002).

²¹² *Id.*

3. Drought

The final tool under the authority of the MRCC is a means to reallocate water during a drought. The Fifth Amendment of the Constitution, which prohibits the taking of private property for a public purpose without compensation,²¹³ combined with the western system of water rights described above, has a chilling effect on reallocation of water on the basis of efficiency, relative need, or as conditions and demand changes. Nothing prevents voluntary reallocation.

The compact establishes a water bank for voluntary reallocation of water during periods of critical water shortage.²¹⁴ The water bank operates through the purchase of water by the MRCC from water users who voluntarily agree to forego the right to irrigate a particular parcel of land in a year Reclamation identifies as likely to experience critical water shortage.²¹⁵ The cause of the shortage may be low precipitation, fish and wildlife needs, or delivery system outage due to an unexpected failure or natural disaster.²¹⁶ The MRCC may then reallocate banked water to a critical need or allow it to remain in storage.²¹⁷ Criteria for consideration by the MRCC in contemplating a particular offer for temporary water banking include whether the proposed retirement will actually contribute to the alleviation of the shortage and whether there are additional resource benefits, including those to water quality and habitat, by the proposed banking.²¹⁸

A wide variety of reallocation programs, referred to in their governing statutes as a “water bank,” have developed recently in the West.²¹⁹ A water bank functions not as a true market for

²¹³ U.S. Const. amend. V.

²¹⁴ Fort Belknap Compact, art. IV.C.8., MONT. CODE ANN. § 85-20-1001 (2002).

²¹⁵ Fort Belknap Compact, art. IV.C.8.a., MONT. CODE ANN. § 85-20-1001 (2002).

²¹⁶ *Id.*

²¹⁷ Fort Belknap Compact, art. IV.C.8.d., MONT. CODE ANN. § 85-20-1001 (2002).

²¹⁸ Fort Belknap Compact, art. IV.C.9., MONT. CODE ANN. § 85-20-1001 (2002).

²¹⁹ The term “water bank” has been applied to a variety of institutional mechanisms for water transfer and storage. *See, e.g.*, Dellapenna, *supra* note 6, at 360-62 for a discussion of the following “water banks”: Arizona has established a “water bank” to provide for replacement of pumped groundwater with water from the Central Arizona Project. ARIZ. REV. STAT. §§ 45-2401 to 45-2471 (West 2001).

Texas and Idaho have established “water banks” to allow the “depositing” of unused water with a state entity, thus avoiding forfeiture, and the sale or leasing of the water to another use by the state entity. TEX. WATER CODE §§ 15.701 to 15.708 (West 2001); IDAHO CODE §§ 42-1761 to 42-1764 (West Supp. 2000).

water, allowing unrestricted buying and selling between consumers, but as a management tool involving the purchase of water by a single governmental entity for reallocation to other uses, including non-market uses.²²⁰

Despite numerous attempts at a variety of water transfer mechanisms, this method of reallocation of water remains relatively unused. Reasons identified include: (1) the prior appropriation doctrine, which creates rights to continue existing uses of water;²²¹ (2) political barriers to change due to the interconnected nature of investments dependent on the existing distribution and use system;²²² (3) high transaction costs resulting from institutional barriers such as the legal requirement of no injury to any other water users from the transfer;²²³ and (4) insufficient data and models to predict the effect of transfers and thus allow managers to assess whether a proposed transfer will violate the no injury rule.²²⁴ Each of these concerns with water transfer are discussed in turn in the context of the Fort Belknap Compact.

a. *The Barrier of Prior Appropriation*

The Milk River water bank avoids conflict with the entitlement aspect of prior appropriation because participation is voluntary. Additionally, banking of water is limited to temporary transfers during periods of drought. First, by making water transfer purely

California established a drought water bank for transfer of water through an intermediary—the State Department of Water Resources—during critical shortage. Established initially on an emergency basis after five years of drought, the Order was later passed into state law. S.B. 970, April 20, Cal. 1999 (passing Exec. Order No. W-3-91). See also, Andrew P. Tauriainen, *California's Evolving Water Law: The Water Rights Protection and Expedited Short-Term Water Transfer Act of 1999*, 31 MCGEORGE L. REV. 411, 414 (2000); and Brian E. Gray, *The Market and the Community Lesson from California's Drought Water Bank*, 1 West-NW 17 (1994) (analyzing the legal issues associated with water transfer under the California drought water bank).

²²⁰ Dellapenna, *supra* note 6 (asserting that due to high transaction costs and substantial external effects caused by transfers, there is no true market for water. Instead, the author describes the various forms of “water banking” as the use of economic incentives for management.).

²²¹ Dellapenna, *supra* note 6, at 346.

²²² Janis M. Carey & David L. Sunding, *Emerging Markets in Water: A Comparative Institutional Analysis of the Central Valley and Colorado-Big Thompson Projects*, 41 NAT. RESOURCES J. 283, 324 (2001).

²²³ *Id.* at 305. Under Montana law, the no injury requirement is that the change will not “adversely affect the use of the existing water rights of other persons.” MONT. CODE ANN. § 85-2-402(2)(a) (2002).

²²⁴ Matthews et al., *supra* note 203, at 329.

voluntary, the water bank cannot be challenged under the Fifth Amendment takings provision. Second, the temporary nature of the transfer assures that the water right will not only remain in the name of the water right holder as a matter of law, but as a matter of equity or politics, beneficiaries of the transfer will not develop a reliance on the additional water. Based on projections from historic records, a critical shortage is expected one in every five years.²²⁵

One possible concern is that a voluntary system will never generate sufficient participation to cover critical needs.²²⁶ The reality of water availability in the Milk River when a critical shortage occurs means that many irrigators will experience a shortage.²²⁷ Given the choice between no water and no water plus money, irrigators indicated at public meetings during negotiations that they would choose the money.²²⁸

b. Dependent Investments

By providing for limited irrigation retirement only in critical years, the Milk River water bank avoids permanent loss to local economies. Interdependent investments in regions like the Milk River include not just the water user's investment in her farm but the investment of the surrounding community in items such as inventory in farm implements and the provision of farm labor.²²⁹ Economic loss in these sectors is minimized by the temporary nature of the retirement. The subsidy provided by the water bank program covers unavoidable costs, such as yearly required payments by irrigators to irrigation districts and Reclamation, and county taxes, all based on assessment of irrigated acreage. Therefore, in addition to making up for lost income to the irrigator, the communities may be better off than under prior condi-

²²⁵ Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Rights Compact Commission (Feb. 14, 2002).

²²⁶ See, e.g., Cary and Sunding, *supra* note 222 (analyzing the difference between water marketing programs in the Central Valley, California and the Big-Thompson Project, Colorado, to understand why certain programs generate few transfers).

²²⁷ A critical shortage occurred in the Milk River in 1988. Water available from the Reclamation Project was 50% of need. In an average year, Project supply is generally 80% of need. Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Rights Compact Commission (Feb. 14, 2002).

²²⁸ Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Rights Compact Commission (Feb. 14, 2002).

²²⁹ Cary & Sunding, *supra* note 223, at 325.

tions of drought where some farms generated insufficient income to meet these obligations.

c. Transaction Costs

The transaction costs associated with water transfers are reduced in the Milk River water bank by providing a single entity as the clearing house for deposit and reallocation of water²³⁰ and by limiting transfers to within the basin.²³¹ Nevertheless, certain transaction costs remain. The MRCC first ranks applications for grants to bank water (using such factors as the degree to which the particular retirement will assist in alleviating shortage and on secondary benefits to other resource values).²³² The Montana Department of Natural Resources (the entity designated to manage the funds for the grant program) may then issue the grant if the applicant has a valid water right and a legal right to transfer the water.²³³

Under Montana law, a legal right to transfer water requires a showing of no injury to other water users.²³⁴ Critics of “no injury” rules argue that the requirement imposes unreasonable barriers to transfers.²³⁵ The criticism fails, however, to recognize one of the primary functions of no injury rules. No injury determinations provide a process for determining the equivalence between the existing use of a water right and a new use, thereby preventing transfer of a larger right than actually existed. However, in the absence of detailed and highly accurate modeling (discussed below) it is nearly impossible to determine if a new point of diversion or new type of use is actually equivalent to, and thus within the limits of the prior right.²³⁶ Asking other

²³⁰ Compare the limited success of water marketing programs in which buyers and sellers must find each other (e.g., the Central Valley and Big-Thompson Projects described by Cary and Sunding, *supra* note 223), with the success of those with a central clearing house (e.g., the California Drought Water Bank described by Tauriainen, *supra* note 220).

²³¹ See, e.g., Dellapenna, *supra* note 6 (discussing the fact that the lack of facilities to convey water from seller to buyer will prevent development of a true “market” for water).

²³² Fort Belknap Compact, art. IV.C.9., MONT. CODE ANN. § 85-20-1001 (2002).

²³³ Fort Belknap Compact, art. IV.C.9.c., MONT. CODE ANN. § 85-20-1001 (2002).

²³⁴ MONT. CODE ANN. § 85-2-402 (2002).

²³⁵ See, e.g., Cary and Sunding, *supra* note 223, at 305.

²³⁶ Much of the criticism of no injury rules focuses on the barrier the rules present to transferring water to instream flow. However, it should be noted that in states that allow a water right for instream flow, such as Montana, change in use is just as likely to harm an instream flow right as a third party right. For example, moving a

water users on a system who have knowledge of the detailed way in which water is distributed and used on a daily basis serves the purpose of providing a context for the determination that the new use equals the old use. Given this information function, it is neither likely nor prudent for states to eliminate no injury rules. The transaction cost imposed by this requirement is unavoidable.

d. Using Technology to Reduce Transaction Costs

Developments in information management and modeling may assist managers in making determinations of no injury, thus reducing transaction costs. Consider the problem faced by the MRCC, not only by the no injury hurdle, but also by requiring a determination of whether “the proposed water banking will alleviate significant short-term water shortage in the Milk River Basin.”²³⁷ Similar to a no injury determination, this requires an assessment of both the effect of foregoing the former diversion and the loss of any return flow it would have generated. Geographers at the University of New Mexico point out that these types of determinations require an ability to model the change both spatially and temporally on a scale appropriate for the decisions being made.²³⁸ Current methods of modeling, however, such as those used to evaluate water supply for negotiations on the Milk River, do not resolve information on a fine enough scale in either space or time. Such resolution is necessary to access the daily management issues that must be considered in order to determine the third party and environmental effects of temporary retirement of a single parcel of irrigated land.²³⁹ The University of New Mexico researchers advocate development of Geographic Information System (GIS) based models to achieve this end.²⁴⁰

A GIS model integrates data (such as diversion rate, rainfall, crop needs) by geographic location through a process analogous

diversion point upstream reduces flow in the intervening stretch of river even though no change in net depletion of water may occur. The Montana Department of Fish, Wildlife and Parks holds instream flow rights on several of the tributaries to the Milk River that could be harmed by a change in diversion point. Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Rights Compact Commission (June 25, 2002).

²³⁷ Fort Belknap Compact, art. IV.C.9.a.(2), MONT. CODE ANN. § 85-20-1001 (2002).

²³⁸ Matthews et al., *supra* note 203, at 331-32.

²³⁹ Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Rights Compact Commission (Feb. 14, 2002).

²⁴⁰ Matthews et al., *supra* note 203, at 368.

to map overlays.²⁴¹ GIS is currently used primarily as a tool to relate geographic information and not as a means to model the effect of a change in factors at one geographic location. The potential, however, does exist.²⁴² The detailed GIS database described above under development for the Milk River may lay the groundwork for further development of a predictive model.²⁴³

e. Subsidy

It is necessary to discuss the fact that the Milk River water bank relies on payments to irrigators to forego the right to irrigate in years that are so short of water that damage to fisheries or impacts on drinking water supply occur.²⁴⁴ Payments will be made from a fund that will be established through state and federal appropriations. This subsidy is likely to draw critical questions. Why pay irrigators to stop diverting water when their diversion will cause, for example, serious environmental harm? Why pay irrigators receiving water from a reclamation program built with federal dollars?²⁴⁵ Subsidy opponents argue that no "title" to water includes the right to use that water in a manner that amounts to a nuisance. Limiting use to prevent harm to others who rely on the shared resource is simply one of the obligations a water right holder assumes when obtaining a use right to a public resource.²⁴⁶ The counterargument considers a water

²⁴¹ *Id.* at 366.

²⁴² *Id.* at 368.

²⁴³ Telephone Interview with Bill Greiman, Agricultural Engineer, Montana Reserved Water Rights Compact Commission (Feb. 14, 2002).

²⁴⁴ Because municipal needs in the Milk River are relatively small, impacts on drinking water due to low flows are more likely to be due to poor water quality than actual water shortage.

²⁴⁵ Irrigators in the Milk River Project have repaid the initial federal investment in the federal project. Nevertheless, low interest rates and extended repayment periods amount to substantial taxpayer subsidy of the Project. *See, e.g.*, Joseph L. Sax, *Selling Reclamation Water Rights: A Case Study in Federal Subsidy Policy*, 64 MICH. L. REV. 13 (1964) (arguing the benefits from sale of water from a Reclamation project should go to the project, not the individual); Raymond L. Anderson, *Windfall Gains from Transfer of Water Allotments within the Colorado-Big Thompson Project*, 43 LAND ECONOMICS 265 (1967) (arguing that individual profits from sale of water from a Reclamation project are necessary to provide incentive to transfer water).

²⁴⁶ *See, e.g.*, Melinda Harm Benson, *The Tulane Case: Water Rights, the Endangered Species Act, and the Fifth Amendment*, 32 ENVTL. LAW 551, 559 (2002).

right as an absolute property right that can be allocated to another use only on payment of just compensation.²⁴⁷

Given that the right to use water is merely a use right, that water is a shared resource, that the Montana Constitution specifies both state ownership of water for the benefit of the people²⁴⁸ and the right to a “clean and healthful environment,”²⁴⁹ it is unlikely that the absolute property rights argument will prevail in Montana. More importantly for this discussion, neither the nuisance or property rights legal arguments address the practical reality faced by inhabitants of a water basin like the Milk River.

Without federal assistance, the changes necessary to the current system of water allocation in the West are unlikely to occur.²⁵⁰ As a practical matter, westerners cannot continue to use water in a manner that is so detrimental to water quality that it destroys the water’s value for any other use²⁵¹ or so harmful to riparian and fisheries habitat that it destroys many of the amenities that brought them to the West.²⁵² At the same time, in pursuing a policy of federal development of water in the early 1900s, combined with below-cost grazing leases to the same farmers receiving irrigation water, the nation built a house of cards. After an initial attempt to recover the cost of reclamation projects from irrigators, Congress started down the subsidy path by extending repayment periods, charging some of the project costs to hydro-power, and by recalculating fees on the basis of ability to pay.²⁵³ Current Milk River irrigation district and reclamation mainte-

²⁴⁷ *Tulare Lake Basin Water Storage District v. United States*, 49 Fed. Cl. 313, 318-319 (2001).

²⁴⁸ MONT. CONST. art. IX, § 3 (1972).

²⁴⁹ MONT. CONST. art. II, § 3 (1972).

²⁵⁰ MACDONNELL, *supra* note 6, at 252-253.

²⁵¹ Freshwater fish are considered by the Biological Resources Division of the United States Geological Survey to be the single most endangered vertebrate group in the United States. Holly Doremus, *Water, Population Growth, and Endangered Species in the West*, 72 U. COLO. L. REV. 361, 366 (2001). Of the 68 freshwater fish listed under the Endangered Species Act in the West, 50 have agriculture listed as a factor in their decline. Michael Moore, Aimee Mulville, & Marcia Weinberg, *Water Allocation in the American West: Endangered Fish Versus Irrigated Agriculture*, 36 NAT. RESOURCES J. 319, 321, 328 (1996).

²⁵² The Environmental Protection Agency reports that more than one third of the nation’s rivers are use-impaired due to poor water quality. Sarah B. Van de Wetering & Robert W. Alder, *New Directions in Western Water Law: Conflict or Collaboration?*, 20 J. LAND RESOURCES AND ENVTL. L. 15, 19 (2000) *citing* U.S. ENVTL. PROTECTION AGENCY, REPORT TO CONGRESS, NATIONAL WATER QUALITY INVENTORY, 1996 (1998).

²⁵³ MCCOOL, *supra* note 44, at 68; Andrews & Sansone, *supra* note 14, at 176-77.

nance costs alone exceed the calculated ability of irrigators to pay.²⁵⁴ Furthermore, whether the water is released for irrigation or for instream flow, the maintenance costs are incurred.²⁵⁵ Whether they are paid directly by taxpayers under a policy to change the use of the water or by the irrigator through a taxpayer funded grant program, the Project maintenance cost is the same.

State, federal, and Tribal parties to the Fort Belknap negotiations avoided the legal issue of whether a right to water is an absolute property right. Instead, they made the policy decision that in incurring those costs a preference was given to maintain the existing way of life in the Milk River Basin. Given the reality that state legislative and congressional approval of an agreement requires local support, and more importantly, that any agreement without local support will be nearly impossible to implement on a daily basis, it is difficult to argue that they could have made any other choice.²⁵⁶ In addition, through establishment of the MRCC and the grant and loan program, the parties gave the basin the institutional tools necessary to work and to contemplate change in the economic base in the valley.

The temporary transfer program established as the Milk River water bank will be an interesting experiment in water reallocation. The ability, however, to alleviate many of the problems in the basin through only temporary transfer is a direct function of the wide variation in water supply on the Milk River and the relatively constant level of demand (e.g., lack of any growing urban center). Water basins experiencing growing urban or habitat demands may find it necessary to explore programs that use a mixture of temporary and permanent retirement of certain water uses.

²⁵⁴ Telephone Interview with George St. George, Economist, United States Bureau of Reclamation (Feb. 15, 2002); *see also*, Andrews & Sansone, *supra* note 14, at 176-77 (noting that under the repayment terms, Reclamation project irrigators "may end up paying little more than current operating expenses").

²⁵⁵ Prior to the transfer of water from the St. Mary's River to the Milk River, the Milk River often ran dry in summer. *See* Natural Flow and Water Consumption, *supra* note 51. Thus, the current aquatic life in the Milk River is artificially supported by the interbasin transfer, and maintenance of instream flows in summer would require releases from Project reservoirs.

²⁵⁶ *See supra* Part III for an evaluation of the constraints imposed on solutions by choosing a political process to resolve disputes over water allocation.

CONCLUSION

In many ways the Fort Belknap Compact is just a bandaid. It continues the reliance on the Milk River Project. It establishes a process intended to shore up a project that may have outlived its usefulness. However, it does so by working within an existing infrastructure, recognizing not only that the cost, huge subsidy, and environmental damage caused by damming the West make it unlikely that large new projects will be built but also that the inefficiency of projects built in the early 1900s provide considerable room for changing operations and use to meet current needs. Although it remains to be seen whether funds obtained to implement the compact will be spent on projects that improve the efficiency of water use in the basin and reduce environmental costs, the compact does establish institutions that set the stage for the residents of the valley itself, in the spirit of John Wesley Powell, to resolve future water problems within the basin. The compact does this by setting up a system of coordination between disparate governmental entities, thus providing a forum for future dialogue on the direction of the valley with respect to water. The compact sets the stage for solving some of the problems associated with fluctuating supply by reducing demand during drought rather than building yet more supply off the reservation (albeit with the assistance of subsidies). Finally, the compact provides a mechanism to remove over a century of inequity between subsidized non-Indian agriculture and relative neglect of development and maintenance of irrigation on Indian land.

The Fort Belknap Compact is a temporary solution to water use problems indeed, as is any that continues the reliance on the subsidized harnessing of the West's rivers. It is, however, a major institutional step beyond the solutions offered by the existing doctrines of prior appropriation and reserved water rights and the political barriers to coordination between the two. As pointed out by many farmers during the course of negotiations, irrigated agriculture is a dying business in valleys like the Milk River. Future generations may no longer be willing to pay the prices required by this hard life. What the compact recognizes and sets the stage for, is that the answer to what comes next must be generated through a dialogue among those involved locally in water use. This approach recognizes that any attempt at wholesale reformation of federal and state water policy risks creating even larger problems than those driving people to negotiate to-

day. The Milk River is not the same as the Central Valley of California. The Fort Belknap Reservation is not the same as the Flathead Reservation of Montana. The cookie cutter approach to solving western water problems has failed for over 100 years. It is time to try a new path. Though the solutions must continue to evolve if westerners ever hope to develop a sustainable economy in the rural West, the groundwork has been laid for a dialogue and a process to do so. The Montana process may indeed represent one of the forerunners of a new era in water distribution and management in the West.