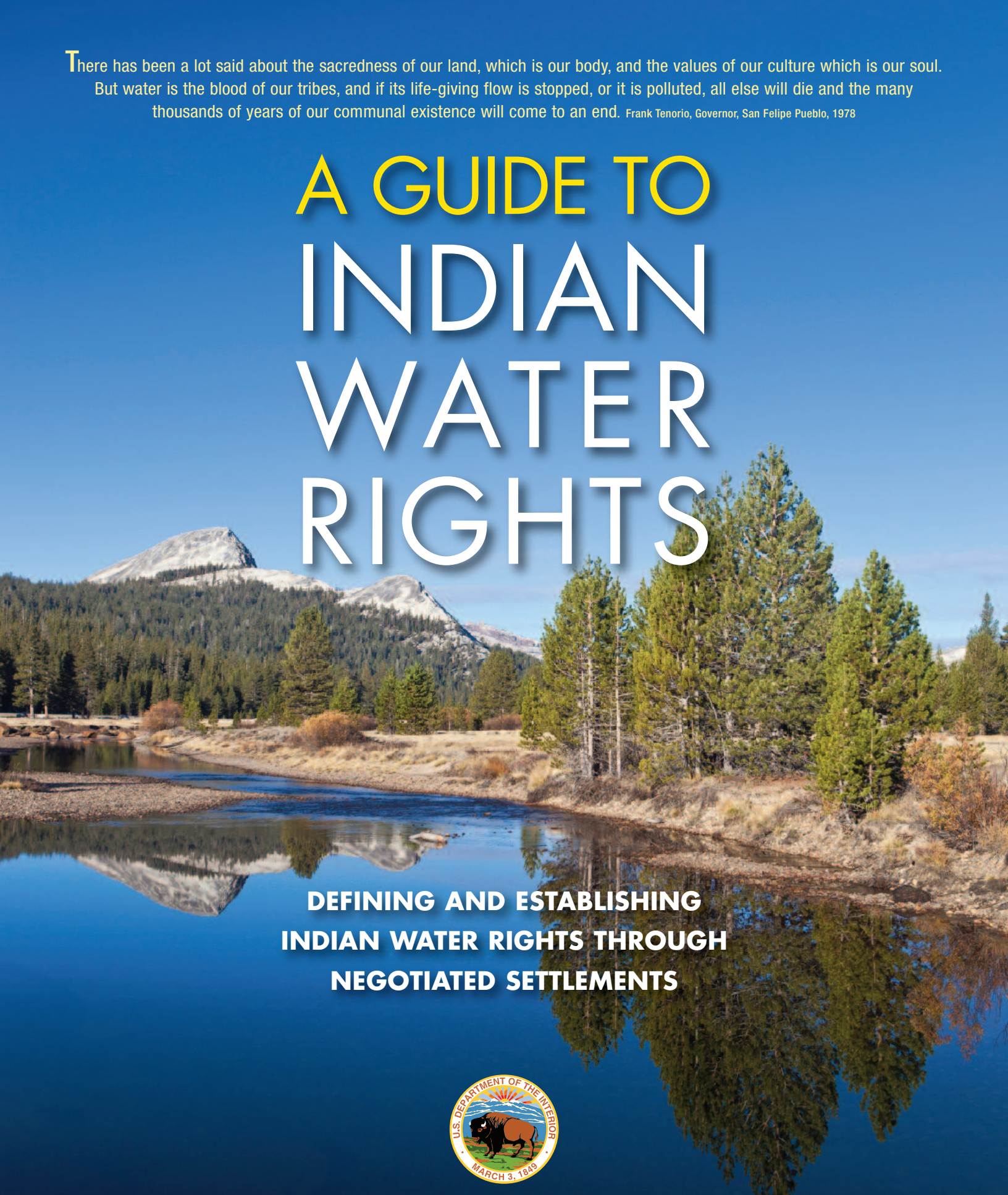
There has been a lot said about the sacredness of our land, which is our body, and the values of our culture which is our soul. But water is the blood of our tribes, and if its life-giving flow is stopped, or it is polluted, all else will die and the many thousands of years of our communal existence will come to an end. Frank Tenorio, Governor, San Felipe Pueblo, 1978

A GUIDE TO INDIAN WATER RIGHTS



DEFINING AND ESTABLISHING INDIAN WATER RIGHTS THROUGH NEGOTIATED SETTLEMENTS

Department of the Interior • Secretary's Indian Water Rights Office

THE SPIRITUAL AND SOCIAL MEANINGS LINKED TO INDIAN WATER RIGHTS

The more than 550 Indian tribes across the United States are extraordinarily diverse in their history and cultures, but share a spiritual connection to water that can be a challenge for non-Indians to understand and respect. Indians and non-Indians alike recognize water as an economic engine of development and a life-sustaining necessity for any society. An often stronger dynamic from the Indian perspective is the powerful spiritual aspect of water, its sacred meanings, and its importance in supporting the cultural life of tribal communities.

This Guide is intended to provide information to help Indian tribes and non-Indian stakeholders learn about Indian water rights and the role of the United States Government on behalf of Indian tribes in water rights issues, particularly legal settlements. Indian tribal leaders and members, Federal and state agencies, local communities, stakeholders and individuals need to understand and respect the legal, political, and factual basis of Indian water rights.

"CIRCLE OF LIFE" IMAGES IN INDIAN CULTURE OFTEN REFLECT THE SPIRITUALITY OF SACRED WATERS.

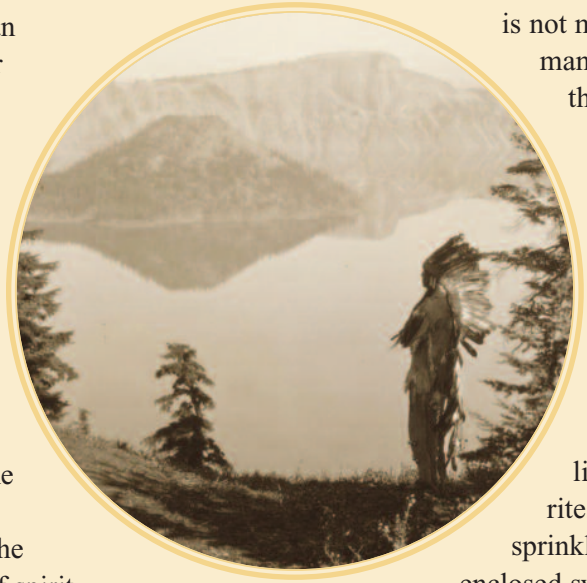
Indians hold spiritual values about water that may not be found in the mainstream of non-Indian culture. An overview of the spiritual and cultural meaning of water to Indians is important in understanding the Indian perspective when entering into water claims. This understanding sets the stage for delving into the legal history, current processes and considerations involved in Indian water rights settlements.

Water is frequently a key aspect of the spiritual history and heritage of a tribe. Water figures in many of tribal stories about the creation of the world, how tribal ancestors came to be on the earth, the place of humans in the universe, the spiritual forces that course through the natural world, and how the actions of spirit guides, heroes and ancestors show the ways to live productively and harmoniously today.

A CROW SWEAT LODGE
MUSEUM OF THE AMERICAN INDIAN

Indian creation stories often include super-human beings who rise out of water to provide "original instructions" or teachings and to make the earth hospitable to humans so they can catch fish, hunt game, raise grains and prosper. These stories have been passed down over thousands of years, and they have become interwoven with beliefs, rituals, pilgrimages, prayers, and celebrations that remain an integral part of tribal spirituality and everyday life. These stories produce a more personal and intimate relationship with the sacred in daily life, based on kinship and understanding of the local ecology and web of relationships. Land and water, and the life that exists on and within them, are considered sacred and personal.

While for non-Indian cultures water is often considered an object, to many Indians all created forms within a landscape have a spiritual essence. Water is a sacred, life-sustaining source and a way of connecting with the earth. Water has a spiritual nature and is not merely a material or a symbol. To many tribes the water is the reality of that spirit and embodies it. By being in contact with the spirit within water, an Indian can absorb and become one with the power and purity of that spirit. This holiness within the water must not be taken for granted, dismissed or abused with pollution.



PHOTOGRAPH COURTESY OF EDWARD S. CURTIS COLLECTION

An example of the use of water in ritual tribal and individual life is the sweat lodge purification rites of many tribes. When the water is sprinkled on the hot rocks within the enclosed sweat lodge, the resulting steam becomes the purifying sacred breath of life and becomes one with the participant.

OTHER EXAMPLES OF INDIAN SACRED WATER

- A tradition of the Salish Tribe of Idaho is that the free-flowing Lochsa River, where they have fished salmon, gave voice to many of the sacred songs they perform in their ceremonies. The belief is that from the earliest times the Creator's gift of salmon in the Lochsa and Selway Rivers shaped the culture and economy of the Nimiipuu (Nez Perce) and other plateau peoples. Ceremonies, customs and the role of men and women revolved around fish and fishing, and the waters were bound within that relationship. Salmon was to the plateau people just as the buffalo was to the plains Indians.
- The fresh water springs among the arroyos of Arizona personify and remind the western Apache how to treat other people and have a good life.
- Several tribes in northeastern California believe that the lakes and springs of the Medicine Lake Caldera and Highlands area are part of a sacred site that has strong healing energy, the power to heal and renew. For 10,000 years they have used the waters of the Highlands for ceremonies and cleansing rituals.
- The elevated land mass of Black Mesa in northeast Arizona is believed by some to be a sacred site with spiritually important springs. Hopi villages are named after the springs they have depended on throughout their history, and these springs are considered alive and sacred, figuring prominently in Hopi spiritual and cultural life.
- Generations of Zuni Indians in northwestern New Mexico have lived for 1,500 years near Salt Lake, which is believed by some to be the home of the Zuni Salt Mother deity and the source of sacred salt that Tribe members gather for ceremonies and believe to be the flesh of the Salt Mother.
- A purpose of the Cherokee ritual of "Going to Water" is to cleanse the spirit as well as the body. The ritual is performed at the new moon, before special dances, after bad dreams or during illnesses. At sunrise Cherokee men, women and children face the east, step into a river or creek, and dip under the water seven times. When they emerge they are rid of bad feelings and ready to begin anew, with a clear mind.
- Tribes sharing the Columbia River basin salmon fisheries for thousands of years have evolved spiritual beliefs and traditions honoring the Great Spirit's provision of the fish. The belief is that when the Creator was preparing to bring forth people onto the earth, He called a grand council of all the animals and plants. He asked each for a gift for these new creatures – a gift to help the new humans survive, since they would be quite helpless and require much assistance. The very first to come forward was Salmon, who offered his body to feed the people. The second to come forward was Water, who promised to be the home to the Salmon. In accordance with their sacrifice, these two receive a place of honor at traditional feasts throughout the Columbia Basin. These ceremonies begin with a blessing on and the drinking of water, followed by a prayer of thanksgiving on and the serving of the salmon. This ceremony reinforces the central role that salmon and water play in the health and culture of the tribal people in the Columbia Basin.
- Many ancient tribal stories emphasize the importance of water, and there are many celebrations of water gods and spirits performed all across Indian Country each year.

> *When we use water in the sweat lodge we should think of Wakan-Tanka (the Great Spirit or Great Mystery) who is always flowing, giving His power and life to everything; we should even be as water which is lower than all things, yet stronger even than the rocks.*
>
> Black Elk [Hehaka Sapa], Lakota Sioux Holy Man

THE LEGAL SIGNIFICANCE OF SACRED WATER

Many Indian uses of water for spiritual purposes were ongoing before subsequent other uses, and this helps reinforce Indian claims on water resources. This spiritual character of water was often ignored in the development, interpretation and analysis of water law. To some, the tradition of the spiritual use of water doesn't neatly fit within the economics of water supply and demand. This tradition and use has often been dismissed by non-Indians as having lesser importance in settling water claims, an attitude that is offensive to many Indians. Sometimes in deciding Indian water claims, courts may fail to recognize that Indians believe that sacred waters are essential to Indian spirituality and practices, and believe that the cultural life of the tribe suffers when the natural state of these waters is disturbed or their use is denied.

Settling water claims outside the courtroom rather than litigating them may be more comprehensive and may take into account the spiritual life force beliefs of the tribe in addition to the purely economic aspects of water rights. This can open a pathway for non-Indians seeking use of water to better appreciate the Indian perspective.

A consideration when pursuing a water claim through negotiated settlement is the ability to achieve the tribe's goal without subjecting tribal communities to governmental interference or public scrutiny of ceremonies and traditions that are considered sacred and private, and that can instead be discussed behind closed doors during negotiations.

While pursuing water claims, tribes often articulate the spiritual aspects of their relationship with the lakes, streams, aquifers, springs and even seas which provide the water and fish they accessed since long before non-Indians arrived. These core beliefs, environmental, and spiritual values help sustain tribal unity and determination through typically long and difficult legal action and negotiations.

When the tribes communicate these living belief systems, ancestral linkages to the water, and cultural foundations, the non-Indians may begin to understand all the dimensions of the Indian claim. Mutual understanding may help defuse some of the conflicts between the value systems of Indians and non-Indians when it comes to valuing and using water resources. All parties to a water claim may then better perceive water bodies through a spiritual lens rather than simply economics.

WHEN EDWARD S. CURTIS TOOK THIS PHOTOGRAPH IN 1910 HE CAPTURED AN ICONIC IMAGE "THE FISHERMAN – WISHHAM" (I.E. WISHRAM) OF A TLAKLUIT INDIAN, STANDING ON A ROCK LEDGE ALONG THE COLUMBIA RIVER, FISHING WITH A DIP NET ON THE END OF A LONG POLE, MUCH AS THE WISHRAM PEOPLE HAD FISHED FOR THOUSANDS OF YEARS. TODAY THE FISH AND THE WATER REMAIN PART OF THE CREATION STORIES, CELEBRATIONS, AND CONTEMPORARY SPIRITUAL PRACTICES OF THE TRIBAL PEOPLE IN THE PACIFIC NORTHWEST.

PHOTOGRAPH COURTESY OF
EDWARD S. CURTIS COLLECTION

INDIAN WATER RIGHTS FROM 1790 TO TODAY

The United States Constitution in Article 1, Section 8, Clause 3 states that Congress has primary authority over Indian affairs: "Congress shall have the Power…to regulate Commerce with foreign Nations, and among the several States, and with the Indian tribes." Congress gave substance to that assignment through a series of laws beginning in 1790 that protected Indian land and water from non-Indian encroachment and state interference.

Federal Indian law evolved – and tribal land and water rights were defined – over the decades of the 19th Century through various statutes, treaties, Presidential Executive Orders, and court cases. In some periods Indian water rights were ignored, undermined, disallowed, or eliminated. Indian tribal lands were severely reduced by various treaties, relocations and allotments of land to individual Indians. Allotments often resulted in Indians selling their land to non-Indians, which fragmented reservations. More land was lost in takings during the Civil War and the Indian wars. In 1871, Congress ended the making of treaties. After that date the Federal government used agreements, statutes and executive orders to settle issues with the tribes. The General Allotment Act of 1887, also known as the Dawes Act, resulted in the further breaking up of many Indian reservations into allotments under a policy of "civilization and assimilation" of Indians. All these actions collectively reduced the communal Indian land base and the waters within it by an estimated 90 million acres.

ARTICLE I, SECTION 8, OF THE UNITED STATES CONSTITUTION DESCRIBES CONGRESSIONAL POWERS OVER INDIAN AFFAIRS: "TO REGULATE COMMERCE WITH FOREIGN NATIONS, AND AMONG THE SEVERAL STATES, AND WITH THE INDIAN TRIBES."

The Indian Reorganization Act of 1934 was intended to improve the economic status of Indians by ending the loss of tribal lands and helping tribes to acquire additional acres and repurchase former tribal lands. The policies of the Indian Reorganization Act were partly reversed in the 1950s through a policy that terminated the special relationship between the Federal government and more than 100 Indian tribes. The policy pendulum swung again when Congress enacted the Indian Civil Rights Act of 1968, the Menominee Restoration Act of 1973, and other actions restoring the special status of a substantial number of the tribes. The Indian Self-Determination Act of 1975 and the Tribal Self-Governance Act of 1994 prevail today in support of Indian sovereignty, self-determination, and control of tribal land and related resources, including water.

The legal and political basis of Indian water rights is complex. In general, Indian reserved water rights claims pertaining to their Federal Indian reservations are based on Federal law rather than state law. Federally reserved Indian water rights typically are vested property rights which cannot be lost simply by nonuse or abandonment. These reserved rights are usually very early in priority and sizeable in quantity since they reserve sufficient water to ensure the needs of Indian reservations for both present and future uses. Only Congress can extinguish Indian water rights. The Federal role in protecting the Federally reserved water rights is based on the United States ownership of the reservation land the water rights serve. Courts have determined that when the Government established Indian land reservations, the water sufficient to achieve the purposes of the reservation was implied even if not clearly stated.

A CROW ENCAMPMENT "ON THE RIVER'S EDGE" WAS PHOTOGRAPHED IN 1908 BY EDWARD S. CURTIS BUT SUGGESTS A SCENE OF "TIME IMMEMORIAL."

PHOTOGRAPH COURTESY OF EDWARD S. CURTIS COLLECTION

DIVERSITY OF WATER RIGHTS

Indian water rights claims vary in character by region of the country. In the Southwest they include rights to consumptively use water for farming irrigation and a variety of other purposes. In the Pacific Northwest, in addition to consumptive use rights, many tribes have won in-stream flow rights based on their reserved right to fish. In many regions, the gathering of plants and fruit are closely aligned with water rights based on traditions and practices that long pre-dated the arrival of non-Indians.

From the Colonial period onward property-based riparian (rivers and streams) water rights remain dominant in the eastern half of the nation where water has been plentiful. Generally, under riparian rights all landowners whose property adjoins a body of water have the right to make reasonable use of it. State laws typically define the extent of the rights. If there is not enough water to satisfy all users, water is allocated in proportion to frontage on the water source. Riparian rights can only be sold or transferred with the land. Water usually cannot be transferred out of the watershed and cannot be denied to downstream riparian rights owners through diversion canals or building of dams.

Water was not as plentiful in the more arid western states and territories, and it was not seen as a resource to be left unused. The increasing settlement of the West by non-Indians soon created disputes over water between holders of state-based water rights and Indian tribes holding reservation-based water rights. In the West, water rights were generally allocated by the states and territories under the principle of "prior appropriation" and are not tied to land ownership. In the prior appropriation system the principal of "first in time, first in right" gave a water user priority in the pecking order of water rights. Water users who came along later had junior priority and would have a right to whatever water the senior rights holders left them. None of the rights holders had to own property adjoining the water source, as in the riparian system in the Eastern states. Any prior appropriation water right holder could lose the right to that water by nonuse or abandonment.

Oklahoma, Nebraska and California have a dual system of riparian and prior appropriation rules. Within those "hybrid" systems, riparian rights are typically superior to prior appropriation rights. Federally reserved water rights, however, are based on ownership of the land – including Indian reservations – by the United States Government. State-based riparian and prior appropriation laws and regulations do not apply to Federal reservations of land and water. The "reserved rights doctrine" applies to any Federal land, including Indian reservations as well as national forests, national parks, and military installations. Indian reserved water rights arise from Federal land ownership and not water usage. Indian reserved water rights may be asserted at any time and are not lost or reduced during shortages or when abandoned or not used.

Indian water rights usually are senior rights because their effective dates will be either the date when an Indian reservation was established or "time immemorial." If the water usage predates establishment of a reservation and has been determined to be part of the tribe's ancient ("aboriginal") land base, it is said to have a "time immemorial" priority.

The water rights of Native Alaskans are a singular situation. The Alaska Native Claims Settlement Act (ANCSA) of 1971 was the largest land claims settlement in United States history. ANCSA was intended to resolve the long-standing issues surrounding Native Alaskan land claims and to stimulate economic development. The settlement extinguished Alaska Native claims to the land by distributing titles to more than 45 million acres among 12 Alaska Native regional corporations and more than 200 local village corporations. A thirteenth regional corporation was later created for Alaska Natives who no longer resided in the state. The Metlakatla Indian Community (Annette Island Reserve) for Tsimshian Alaska Natives is the only reservation in the state similar to those in the lower 48 states. Several parcels of tribal trust land in Southeast Alaska are similar to reservations for many purposes.

ANCSA did not address the matter of Indian water rights. Alaska's current water law is contained primarily in the 1966 Alaska Water Use Act, which established the prior appropriation system and is administered by the state Department of Natural Resources. The Act was amended in 1986 to set procedures for administration and judicial determination of Federal reserved water rights. In Alaska, a water rights application must be filed prior to putting the water to use, and the right is attached to the land where it is used and will be passed on with sale of land unless specifically exempted. The water permit for the amount of water actually used is issued for a fixed period of time that may be extended. A water right is perpetual as long as the use remains unchanged, with the exception of instream flow reservations, which must be reviewed every ten years. Alaska and Federal law protect many aspects of Native Alaskan subsistence, including fishing rights and access to navigable waterways.

KEY COURT RULINGS

Over the past 200 years, the nation's courts began to establish a foundation for Indian water rights law. Two Supreme Court rulings early in the 20th Century were significant in developing Indian water rights law.

In 1905, in *United States v. Winans*, the Court decided that certain water rights of tribes were necessary in order for them to exercise rights to fish at their "usual and accustomed places" off the reservation, as guaranteed to them in treaties with the U.S. Government. These rights include crossing and using private property for their fishing. Subsequent water rights claims and interpretations of the *Winans* decision by other courts have determined these rights include the need for sufficient stream flows to sustain fish. The *Winans* decision also was seen to support hunting and gathering rights. The importance of the *Winans* decision is seen in Indian fishing rights that continue today in such areas as the Pacific Northwest salmon fisheries, the Great Lakes, and Alaska.

In 1908, in *Winters v. United States*, the Supreme Court ruled that in creating the Fort Belknap Reservation in Montana, the Federal government must have wanted the Indians there to have sufficient water to succeed in farming their homeland, which was the purpose of the treaty. The Court said water rights were implied though not specifically mentioned in the treaty. The case was triggered when waters of the Milk River above the reservation were diverted by non-Indians who had arrived and set up irrigation after the reservation was established. The settlers claimed water rights based on state water law standards. They also said that since water was not mentioned in the treaty, the Indians were not entitled to water rights. The Court instead said the priority for water rights, now referred to as "*Winters rights,*" were with the Indians and they did not have to use their water to keep those rights. Also importantly, the Court said that agreements and treaties should be understood in the way tribal leaders would have understood them. The Court said that aspects of agreements and treaties left vague in wording should be resolved in favor of the Indians. *Winters* ruled that the reserved water rights of Indians are primary whether the reservation was established by executive order or statute, and regardless of when a territory became a state.

Over the more than 100 years since the *Winters* case, other court interpretations and decisions based on it have developed into a "*Winters Doctrine*" for determining Indian reserved water rights based on the purpose of the Indian reservation. The *Winters* decision created "paper water" rights but did not identify a method for specifying exactly how much water a reservation would need to fulfill its purpose, nor any future needs. *Winters* merely stopped the non-Indians from diverting water. Court cases after *Winters* for many years followed the same pattern, but eventually it was clear that there would need to be ways to determine how much water a reservation needed.

"PAPER WATER" RIGHTS BECOME "WET WATER" RIGHTS

An important step in the development of the *Winters Doctrine* came in 1963 in the *Arizona v. California* case decision by the Supreme Court. This case resulted in a method for determining the actual quantity of water to be awarded to a reservation to fulfill its purpose. The case concerned the division of Colorado River water among the seven states within the upper and lower basins. The United States entered the case on behalf of several tribes and asserted claims for full and permanent allocations of water rights to the tribes. The Court decided that the quantity of water reserved for the tribes would be based on "Practicably Irrigable Acres" (PIA) rather than actual currently irrigated acres so that future agricultural needs could be included.

The PIA concept developed out of the historic circumstances where tribes were settled onto reservations that were to become permanent homelands established to encourage a farming lifestyle requiring fewer acres than the previous hunting/gathering lifestyle of many tribes. PIA is determined based on (1) lands physically capable of sustained irrigation and (2) lands irrigable at a reasonable cost. Both involve extensive technical studies and may be subject to manipulation.

If a tribe has always farmed rather than being hunter/gatherers a reserved water right may also include a determination of "Historically Irrigable Acres" (HIA), which is based on how many acres were traditionally farmed. HIA does not take into account growth of the tribal population or other future economic uses of water. A tribe's reserved water rights claim may include HIA plus PIA plus water for homeland needs beyond agriculture, such as for drinking water and economic development.

PIA has been a centerpiece of dozens of lawsuits seeking to establish quantities of reserved water rights, but PIA is not always the deciding factor in quantification because some reservations have very little irrigable land. PIA also is inadequate to determine water needed for

fishing tribes in the Pacific Northwest. In such instances, the courts may examine purposes of a reservation beyond agriculture. A court may consider the tribe's history of and cultural need for water, the nature of the land and associated resources of the reservations, the tribe's economic status and the tribe's current and projected population. When the purpose of a reservation has been to establish a permanent "homeland" for Indians, some courts have found the water rights need to be more expansive, reserving water to make the homeland "livable," maintain the way of life, and adopt new ways. These factors extend well beyond water for agriculture, fishing, hunting and gathering. Some tribes have claimed water is needed for new economic development projects and uses, new circumstances and modern opportunities.

Some courts also have determined that groundwater, not just surface water, is included within *Winters rights*. As more cases have been decided, the rulings have helped sort out some of the intricacies of water rights on Indian lands. The United States Supreme Court has limited the Federal government's ability to reserve tribal water rights to no more than the quantity of water necessary to fulfill the "primary purpose" of a reservation. This has enabled lower courts to interpreted future as well as present uses to be within a reservation's primary purpose.

Some courts have allowed transfers and marketing of Indian water to non-Indians and off-reservation users such as communities, farms and industries not affiliated with the tribes but whose payments can help the tribes survive until they can put the water to their own uses.

Federally reserved *Winters rights* have generally applied only in the Western states, but a significant example of how they may be applied in a riparian rights state is the Seminole Water Rights Compact. This is a settlement between the Seminole Tribe, the State of Florida, and the South Florida Water Management District. Congress approved the Compact when it passed the Seminole Indian Land Claims Settlement Act of 1987. The Compact, which recognized and defined Federal water rights for the Tribe, was the first of its kind in an eastern riparian state.

In some instances, courts have upheld water rights granted to Indians by other sovereign nations that had jurisdiction over them prior to the United States. For example, in a New Mexico case the court ruled that Pueblos retained their vested rights to water because the Indians previously had been Mexican citizens with water rights and were afforded extension of those rights by the Treaty of Guadalupe Hidalgo. Under some interpretations of that treaty, which ended the Mexican-American War of 1846-48, the United States agreed to respect property rights recognized by Mexico and allow the Indians of the Pueblos to become U.S. citizens with full rights, including vested water rights granted to the Pueblos under Mexican law.

COMMUNITIES, FARMS AND INDUSTRIES NOT AFFILIATED WITH TRIBES BENEFIT WHEN COURTS AND SETTLEMENTS ALLOW TRANSFERS AND MARKETING OF SURPLUS INDIAN WATER. WATER FROM NAVAJO LAKE AND OTHER SOURCES IN NORTHWEST NEW MEXICO, FOR EXAMPLE, IS USED BY THE CITIES OF GALLUP AND FARMINGTON.

PHOTOGRAPH COURTSY OF
U.S. BUREAU OF RECLAMATION.

LITIGATION VS. SETTLEMENT

The conflict between Indian water rights and non-Indian water uses typically has played out in the courtroom, usually in "general stream adjudications" (trials) or other actions to establish title to water. General stream adjudications generally result in years of litigation and continued uncertainty.

Federal courts have jurisdiction to hear Indian water rights claims cases, whether they arise as part of interstate suits or when the United States brings action on behalf of a tribe. Historically the states lacked jurisdiction over Indian water rights, and Federal and tribal governments could not be compelled to appear in state proceedings. Congress changed this in 1952 with the McCarran Amendment, which allows the states to bring the Federal government and tribes into state suits to determine and administer water rights in river systems. The result has been that Indian water rights cases in recent decades have mostly been heard in state courts.

Tribes have argued that state courts may have a political bias in favor of non-Indian claimants, particularly when judges must campaign for election by popular vote. States may have already allocated water to non-Indians before courts take up Indian reserved rights. To address such concerns, the Supreme Court cautioned that the rulings of the state courts and state administration of water rights are subject to judicial review by Federal courts. State courts must use Federal law to determine tribal reserved rights. Federal courts also have asserted their jurisdiction by intervening in certain situations that involved Federal actions or the taking of water rights.

Regardless of where lawsuits originate and what courts hear them, these cases are large, slow moving, impact perhaps hundreds or thousands of water users on a designated stream system, involve Federal and state laws, and often address complex legal questions. These cases require extensive technical work such as inventories of water resources and studies of how water sources interact and flow (hydrology). The cases take decades to complete, and become extremely costly to all parties involved. Even when Indians win their water rights in court, they often will not receive funding for water development projects or delivery systems. Ways Indians can use their water may be limited, for example, to agriculture.

While a case drags on in court, non-Indians are likely to continue their use of water from the source being contested. Meanwhile, the uncertainty as to who is entitled to how much water continues, stymying economic development for Indians and non-Indians alike. Water uses

A PEACEFUL SCENE ALONG THE MILK RIVER IN MONTANA. MUCH OF THE INDIAN WATER RIGHTS LITIGATION AND SETTLEMENT LAW OF THE PAST 100 YEARS FLOWS FROM PRECEDENTS AND INTERPRETATIONS OF THE *WINTERS V. UNITED STATES* SUPREME COURT RULING IN FAVOR OF THE FORT BELNAP RESERVATION. PHOTOGRAPH COURTESY OF USDA NRCS

that began after the Indian priority date are jeopardized even if they are beneficial for communities and industries important to Indians. Litigation may not settle all the issues and how the rights holders are to proceed in implementing a ruling. That may lead to more litigation and more years of uncertainty.

For more than two centuries various Federal and state policies, treaties, Executive Orders, consent agreements, laws, wars and Acts of Congress have complicated Indian law and how Indian water rights are determined and defined. Accelerating development in the West, water shortages, drought, and global warming have added pressure to get water rights decided as soon as possible. These factors have created a shift toward greater collaboration among local, state, Indian and Federal officials who see the need for water management and conservation on a watershed scale.

To encourage such cooperation a fair, timely and satisfactory process other than litigation was needed, and it has evolved in the last 30 years. The Reagan Administration established the Federal policy that negotiated settlements were preferable to litigation. Over the subsequent 10 years various settlements were developed that established a policy and process framework that was published in the Federal Register in 1990 as the Criteria and Procedures for Participation in the Federal Government in Negotiations for

the Settlement of Indian Water Rights Claims. The criteria brought focus and flexibility to how settlements should proceed. What then evolved in the first Bush Administration was a structure designed to enable simultaneous negotiation of as many as 20 settlements.

Negotiated settlements of water rights issues have displaced litigation in most disputes. As a result, decisions in favor of Indians have become more frequent and begun to be enforced more stringently. Tribes, non-Indians with water claims, state and Federal officials generally agree that legally binding settlements of claims and issues are a more productive and complete way forward. The reasons settlements are preferred include:

- Negotiation, in addition to defining the extent of tribal water rights, allows the parties to develop creative, mutually-beneficial solutions to shared water use problems.
- Settlements give tribes and states certainty and control over the outcome of water rights cases.
- Settlements usually build more positive, less adversarial relationships between states, tribes and the Federal government, and better understanding between Indians and non-Indians.
- Settlements create administrative systems for cooperatively managing water for more efficient, environmentally beneficial use, even in times of drought.
- Settlements may include funding for development of water infrastructure projects such as storage and delivery systems.
- Settlements may permit Indians to market unused water to increase supplies for all users.
- Settlements create "wet water" through quantification of Indian rights.
- Settlements usually, though not always, are faster and less costly to complete.
- Settlement participants know what they are getting, they are not at the mercy of a court ruling that creates winners and losers and may not go in their favor due to obscure or rigid legal rules and precedents.
- Settlements may include important, but less tangible cultural and spiritual considerations, such as access to sacred water sites outside the reservation.
- Settlements finally resolve disputes that have lasted many decades and have been a barrier to socio-economic development for the tribes.
- Administration of settlements often creates organization and forums that promote dialog and cooperation that likely would not happen at the conclusion of a court case.
- Settlements help the Federal government deliver on treaty promises and obligations that went unfulfilled for decades while non-Indians not only used water rightfully belonging to Indians, but were aided by taxpayer-financed Reclamation projects that left Indians out of the benefits.
- Even after settlements are completed, the negotiations processes can be reinstated should new water issues arise.

RIGHTS TO WATERS OF THE COLORADO RIVER HAVE BEEN CONTESTED IN DOZENS OF SIGNIFICANT LAWSUITS AND SETTLEMENTS. CLIMATE CHANGE AND INCREASING USE OF THE WATER WILL MAKE THOSE RIGHTS EVEN MORE VALUABLE AND IMPORTANT IN THE FUTURE.

PHOTOGRAPH COURTESY OF THE NATIONAL PARK SERVICE.

Litigation typically precedes the settlement process, may continue parallel with settlement talks, or is resorted to when settlement talks fail. Without a case in court there is little compulsion to negotiate. And without a court proceeding, binding the parties to a settlement and enforcing it may not have teeth. The Seminole Compact was negotiated without litigation, a remarkable achievement showing that water rights settlements can be sorted out if all parties are sincere and flexible.

THE PATH TO SETTLEMENT

The Federal role in the settlement process starts in the Department of Interior. The DOI has a high-level team devoted to Indian water rights settlements. Included are the Counselor to the Deputy Secretary, the Chair of the Working Group on Indian Water Settlements (Working Group), the Assistant Secretaries of Indian Affairs and Water and Science, the Commissioner of Reclamation, the Office of the Solicitor, and the Secretary's Indian Water Rights Office (SIWRO). Representatives of the Office of Management and Budget and the Fish and Wildlife Service often are included.

The SIWRO manages the DOI Indian water rights program, working under the leadership of the Chair of the Working Group. BIA plays a role in coordinating different activities involved in a settlement and funding technical studies in hydrology, water inventories, and other research basic to establishing water claims. The U.S. Geological Survey technical staff also may be called upon to provide support.

THE CROW TRIBE-MONTANA WATER RIGHTS COMPACT SIGNING CEREMONY WAS A MILESTONE IN IMPLEMENTING THE CROW TRIBAL WATER RIGHTS SETTLEMENT ACT OF 2010.

Before appointing a negotiating team, a tribe's proposed water rights claims will be evaluated to find answers to questions, including:

- Is there pending court case?
- Is there a means to bind necessary parties to the settlement, such as a court decree?
- What is the scope of the harm to the Tribe and to Federal Trust resources?
- Are parties necessary to a settlement committed to the process?
- What is the level of factual and legal development of the tribal water claim?
- Are the parties willing and able to commit to sharing settlement costs?
- What is the level of public interest in settlement?
- Can the dispute be promptly resolved or is a lengthy negotiation likely?
- Are there other DOI interests or disputes that also might be resolved?
- Are DOI personnel and funding resources available to support negotiations?

When there is a court case involved, the United States participates in the case on behalf of the tribe through the Department of Justice (DOJ) Indian Resources Section because the reserved water right of the Indian reservation land is at issue. Negotiating a settlement may be more streamlined when court proceedings have developed the case, established the claims of the Indians and others, completed the technical studies, and identified impacted parties and interests. The BIA may assist tribes by providing funds for attorneys and experts to conduct the technical studies needed by the tribe to support its claim and the hydrology of the streams and groundwater.

If the DOI decides to provide a negotiating team, its members will know the watershed, the tribe and other parties involved, natural resources in the area, and other issues that pertain. A representative of the DOJ will be included in the team, as will representatives from other Federal agencies having an interest in the negotiations. The team will interact with settlement parties, explain Federal policies on settlement and, when possible help mold the parameters of a settlement.

The SIWRO provides one Federal voice for policy direction and works directly with the Team Chair. The negotiations may be under confidentiality seal while ongoing. Negotiations may include all key parties or progress may be blocked by a disgruntled one. Settlements must protect the water rights of those who have Indian allotment land held in trust by the United States. Settlements may involve many years of negotiations, technical studies, and public involvement.

Once a tribe, the state, and other parties have agreed to a settlement, the agreement is submitted to the Working Group. Then the Office of Management and Budget is briefed on the agreement, which also must be in compliance with Administration policies. The agreement is reviewed for funding structure, budget schedule, and cost sharing. Federal funding often is contingent on cost-sharing by the states and non-Indian parties who will benefit from the settlement.

ENACTING THE SETTLEMENT

After any changes are made, the Administration has given the settlement support, the parties have signed it, and court approval is obtained if it is a litigation case, a water settlement agreement will be incorporated into a bill in coordination with the appropriate Congressional district delegations and committees. There may be hearings to clarify certain aspects of the law and the funding of the settlement. The assistance of a Congress member in helping guide the legislation can be important. Settlements may vary from multi-party agreements to compacts among the state, tribe, and the Federal government, with enforcement built into the legislation enacting the settlement.

Many settlements include funding for tribes to develop the infrastructure to use their water rights. This funding may offset compromises the tribe has made, such as giving up some of its water quantities in return for Federal funding to build needed drinking water infrastructure, water supply projects, and/or tribal fishery restoration projects. The settlement also may include the Tribe waiving any breach of trust claims against the Federal government. Tribes receive benefits as determined by Congress for the rights they, and the United States as trustee, may give up as part of the settlement.

After the President has signed the law authorizing the settlement and funding, the SIWRO coordinates implementation. This may involve revising the settlement to conform it to stipulations within the law Congress passed. Additional agreements needed for implementation may need to be drafted. The DOI Secretary then signs off on all the documents. If a court case has been involved the settlement parties must return to court to express any objections or to state their acceptance. The court can then enter a final decree and judgment.

SIWRO oversees implementation, primarily through Federal implementation teams, which function much like the negotiation teams but with a focus on helping the Indian tribe and other parties implement the settlement. If construction is involved in the settlement it is often handled by the Bureau of Reclamation as project manager. Construction usually must be completed by a specific date. The implementation phase may last between 5 and 15 years.

Future funding of settlements may be more efficient by 2020 when the Reclamation Water Settlement Fund takes effect. Indian and non-Indian advocates have urged increased Federal support of settlement costs without over dependency on the BIA budget or severely impacting Bureau of Reclamation operations. Meanwhile significant funding is being sought for Reclamation's Indian Water Rights account to implement several settlements.

PLANNING A CLAIM

Settlements require long and hard work to create and implement. Tribes need to understand and develop consensus around the goals of the claim, examine earliest uses of the water and future needs, inventory the water resources, determine what infrastructure is needed and its cost-benefit analysis. Tribes can strengthen their bargaining position if their water quantity and priority issues have been determined by a court before entering negotiations.

Tribes should assess what data they need to support their position, what expert consultants will be helpful, and whether the available consultants and expert witnesses will be respected and perceived as unbiased and credible. The identities and holdings of Indians and non-Indians who own allotments of reservation land and its water rights should be documented.

A COMPREHENSIVE WATER CODE AND CONTINGENCY PLANNING FOR CLIMATE CHANGE ISSUES WILL HELP TRIBES MANAGE THEIR WATER RESOURCES.

PHOTOGRAPH COURTESY OF USDA NRCS

Tribes need to identify the technologies and financing available for implementation of a settlement, the administrative levels and skill sets needed to manage the resources, and what training will be required to handle the new responsibilities and work involved. As climate change increases the number and magnitude of droughts, as the snow pack and runoff shrink, and as development pressures put even more stress on water supplies, tribes will need to plan for how they will address those issues locally through water management.

Tribes will need to create a comprehensive water code to assist them in managing and regulating their water use, balancing agricultural and other water needs, and preventing groundwater overdraft. As a tool to protect water quality and quantity, the code will be highly technical and will need to be customized to the tribe's geography, climate, water availability, social responsibilities, and financial resources. Code development and implementation will require specific data sets on the water resource, a trained staff, an understanding of legal requirements, and sources of administrative funding.

LEADING IN CONSERVATION AND WATERSHED MANAGEMENT

Tribes also need to evaluate the implications and potential benefit of three important legislative acts in helping them make their case. Through their stated water management goals and implementation strategies, tribes can demonstrate leadership in the increasingly important areas of environmental protection, conservation, and watershed management. In planning their settlement water projects, tribes can include a focus on comprehensive watershed planning, cooperation, and environmental stewardship consistent with their spiritual heritage and values.

INDIAN WATER RIGHTS OFTEN ENHANCE FISHERY STREAM FLOWS AND CLEAN WATER
PHOTOGRAPH COURTESY OF U.S. BUREAU OF RECLAMATION

The Endangered Special Act (ESA) may be invoked to oppose or to support implementation of Indian water rights. If species are already stressed by water use, the additional load of Indian uses may be curtailed. On the other hand, Indians may include in their plans the conservation practices that will preserve critical habitat endangered species need to survive. ESA also may support tribes asserting in-stream flow rights to protect tribal fisheries when decreases in flow or water temperatures would harm species.
The Fish and Wildlife Service and the National Marine Fisheries Service have ESA regulatory authority.

The Clean Water Act (CWA) has provisions that similarly support planning for tribal water systems that enhance water quality. The CWA is administered by the U.S. Environmental Protection Agency (EPA) and was created to "restore and maintain the chemical, physical and biological integrity of the nation's waters." CWA goals are carried out through government-to-government (Federal to State, for example) partnerships. In 1987, Congress passed legislation enabling the EPA to also treat Federally recognized tribes as states. If approved by EPA under a stringent application process, tribes can develop and enforce their own water quality standards on their reservations as a sovereign right. This may be an objective tribes would want to consider as part of their water rights settlement and develop as negotiations progress.

To establish their own water quality standards and program under CWA, a tribe must prove they have developed expertise and management capabilities equal to, if not better than, non-Indian governments. Having met those qualification requirements, the tribe can apply for EPA programs, including grants, management programs and permits. The EPA recognizes that "water quality management serves the purpose of protecting public health and safety, which is a core governmental function, whose exercise is critical to self-government."

Tribal water quality standards may be even more stringent than those of Federal and neighboring non-Indian governments, and can be an important tool in protecting groundwater as well as streams from contamination. Indian reservations face daunting threats from pollution outside and within their borders by mines, industries, and disposal sites that have for decades produced hazardous wastes migrating into groundwater, streams, air and land. The ability to assure the purity of their waters that are essential for spiritual and ceremonial uses is another benefit for the tribes, along with the potential grant funding of water quality programs and projects. Tribes considering their own "Treated as State" CWA standards will want to weigh the benefits of setting their own standards along with the risk of creating opposition within the state and non-Indian community. An option is to adopt the same standards as the state or adopt a set of core Federal EPA standards.

The Safe Drinking Water Act is another law with implications for Indian water rights settlements, water development, and water quality protection. The Act enables the EPA to better protect aquifers used for drinking water supplies, especially if an aquifer is the sole source of drinking water. To spread the cost and expand the expertise needed for programs under the Act, some tribes have worked out mutually-beneficial pollution control and water quality cooperative or consortium programs with other governments or tribes.

Because their spiritual and cultural heritage includes great respect for all natural things, Indians are more likely to be able to value, seek and achieve balance between economic development and environmental protection. Tribal tradition and heritage can be a powerful unifying force enabling sometimes tough decisions and trade-offs for the good of all. Tribes have the opportunity to create unified water policy tailored to their specific needs as nations, and to simultaneously integrate issues such as land use, water resource allocation, conservation, environmental protection, and water quality control.

HYDROLOGY IS KEY TO WATER CLAIMS AND WATERSHED MANAGEMENT

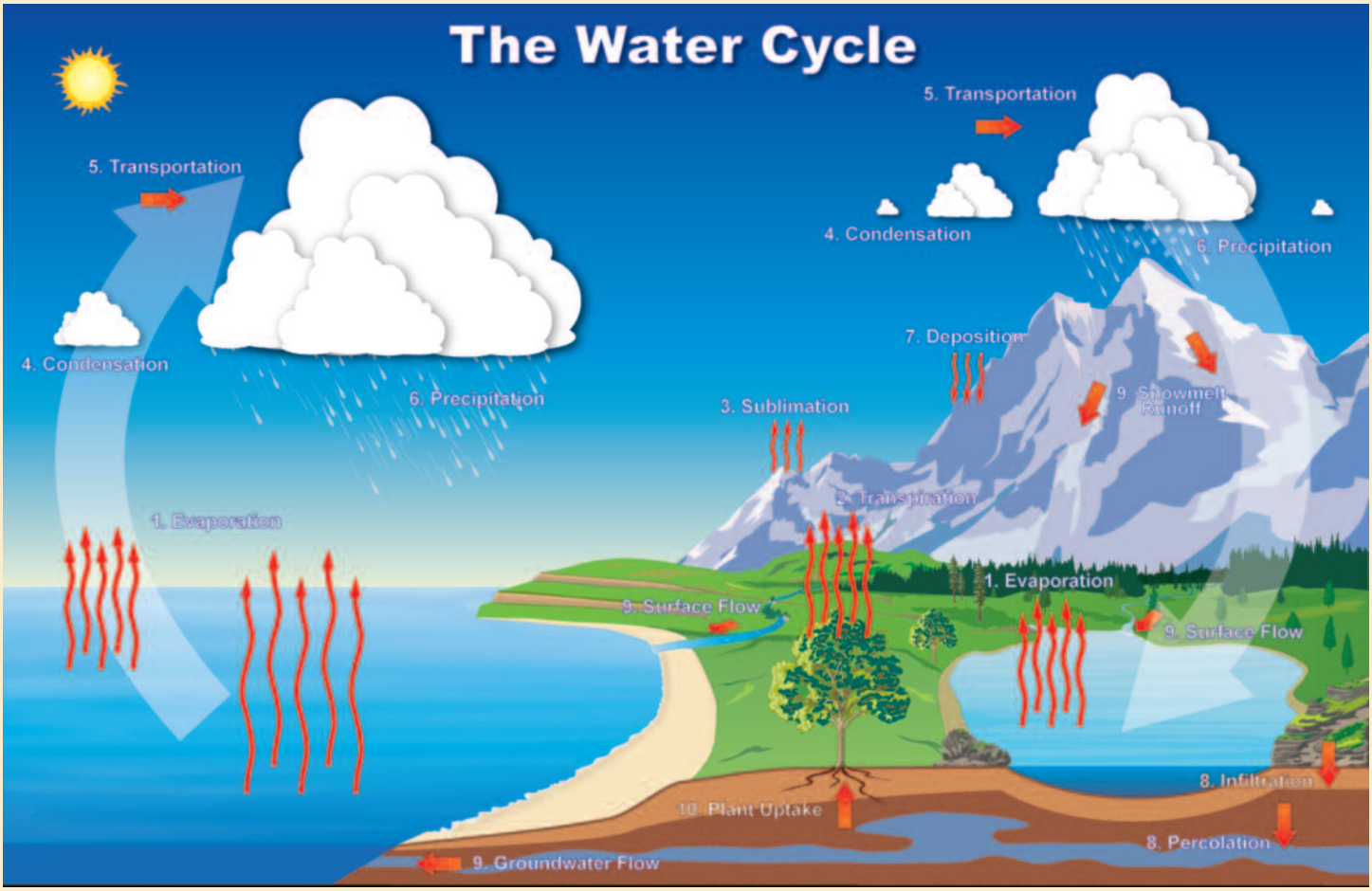
Hydrology is the study of the movement, distribution, and quality of water. Hydrologists understand the hydrologic (water) cycle, water resources, and watershed geography and geology. Many hydrologists are also environmental engineers and understand how to conserve and sustain water resources. Understanding the water cycle through and around a reservation is essential for development of the water claim and also for effective management of the tribal water and watershed.

One of the most important elements of an Indian water rights claim is the technological study that establishes the sources and amounts of water included in the claim. These hydrology studies usually are prepared for the tribe by scientists with the Bureau of Indian Affairs or other qualified expert technicians. The hydrology study must be thorough, credible in court cases, and address all the questions that typically arise during the claim process.

Water is constantly in motion and moves through Earth's systems in a cyclic fashion taking many forms as it travels. The water cycle is often shown as a simple circular movement starting when the sun's energy evaporates water from oceans, lakes, rivers and soil. This water vapor cools in the atmosphere, condenses and falls as precipitation (dew, rain, snow, sleet, hail). Over land it infiltrates (sinks into) the ground surface where it may stay in the soil or seep into groundwater and aquifers. Water travels underground in aquifers and pockets of groundwater, and it seeps through the spaces between grains of soil, sometimes rising to the surface as artesian springs. Humans may pump the water to the surface for drinking and irrigation. Plants are a major mover of water.

THE WATER CYCLE IS OFTEN SHOWN AS A SIMPLE CIRCULAR MOVEMENT STARTING WHEN THE SUN'S ENERGY EVAPORATES WATER FROM OCEANS, LAKES, RIVERS AND SOIL.

ILLUSTRATION COURTESY OF NATIONAL WEATHER SERVICE JETSTREAM PROJECT



Roots and leaf collars collect water for distribution throughout the plant. Most of it travels to the cells in the leaves where it is easily evaporated in the process of evapotranspiration. Precipitation also pools into runoff that travels into streams and eventually back to the ocean, beginning the cycle again.

Water may change its state from a liquid to a gas to a solid (ice), back and forth, as it travels through the cycle. The actual path water follows can be varied and complex and may not follow the exact path shown by a diagram. That is why a hydrology study often reveals pathways and water sources that may not be readily apparent.

A watershed is the area of land drained by a system of streams and rivers, and it has become the basis for establishing geographic boundaries for water resources management and policymaking. The hydrologic cycle of that watershed reveals how any land use practice or abuse of a water resource can impact the quantity and quality of water throughout the watershed. Comprehensive water planning and management protects the water resource. The hydrology study creates an inventory of water resources within the reservation watershed so that water inflow, storage and outflow can be better monitored, managed and balanced.

The interconnectedness of surface water and groundwater has become a focal point in Indian water rights lawsuits and claims. Tribes developing claims must know the locations and quantities of groundwater, its geology, storage and movement. In many locations groundwater originates as surface water, but the opposite also can be true. Groundwater systems can serve as a storage reservoir for surface water. In certain geological situations groundwater sustains stream flow. An unfortunate negative indicator of this interdependency is when surface water pollution ends up in groundwater. Both resources must be responsibly managed for the health of the watershed.

New technologies such as drip irrigation in agriculture and the use of buffer zones in conservation and erosion control contribute to more comprehensive and environmentally sustainable water management strategies. Coupled with traditional Indian cultural and spiritual values, these technologies and strategies can make Indians better stewards of watershed resources.

State and Federal laws and regulations may impact some proposed uses of water on the reservation, depending on the water resources and their hydrology. Tribal sovereignty may blunt the impact of some non-tribal laws, but others such as dam safety regulations, Federal requirements regarding safe drinking water, endangered species, and clean water may require inspections, permits, and other interactions with regulators outside the tribe. Tribal leaders and water managers would likely find it beneficial for their water codes to harmonize with these laws and regulations for the health and safety of Indians and non-Indians alike. Reservations in multiple states may find that different state regulations apply for the same project if it crosses state lines. As tribes assess their water use options and procedures, they will want to consider how Federal and state regulations impact the use of water in homes, communities and industries on the reservation.

CLIMATE CHANGE, POPULATION GROWTH, AND INDUSTRIAL DEVELOPMENT ARE AMONG FACTORS MAKING WATERSHED MANAGEMENT AND CONSERVATION MORE IMPORTANT THAN EVER IN INDIAN COUNTRY.

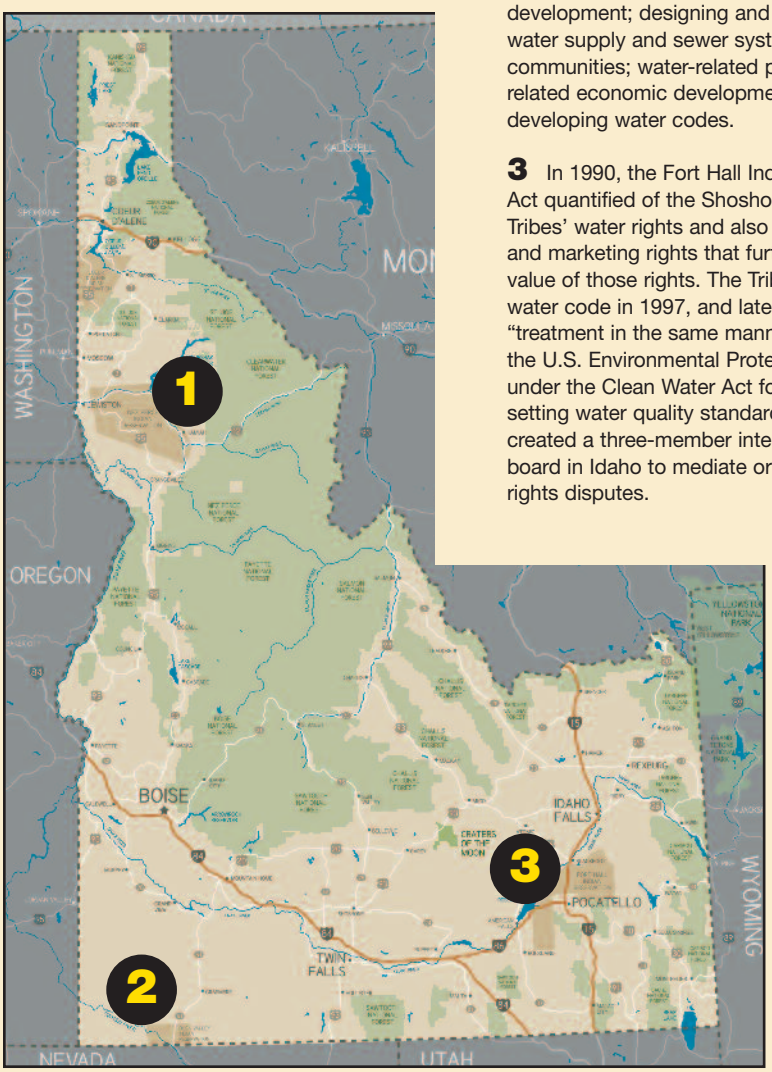
PHOTOGRAPH COURTESY OF USDA NRCS

WASHINGTON

1 In 1905, in *United States v. Winans*, the Supreme Court decided water rights and sufficient stream flows were necessary for tribes to fish at their "usual and accustomed places" off the reservation, based on the Treaty with the Yakima of 1855. Hunting and gathering rights were included.

2 In 2007 and 2009, the ruling in *United States and Lummi Indian Nation v. Washington Department of Ecology* established the Tribe's reserved rights to surface water on and groundwater in the Lummi and Sandy Point Peninsulas. After extensive and creative negotiations the settlement divided water based on the aquifer's actual safe yield rather than the practicably irrigable acreage plus domestic needs.

A 1905 SUPREME COURT RULING SET A PRECEDENT FOR RESERVING INDIAN FISHING, HUNTING AND GATHERING RIGHTS.

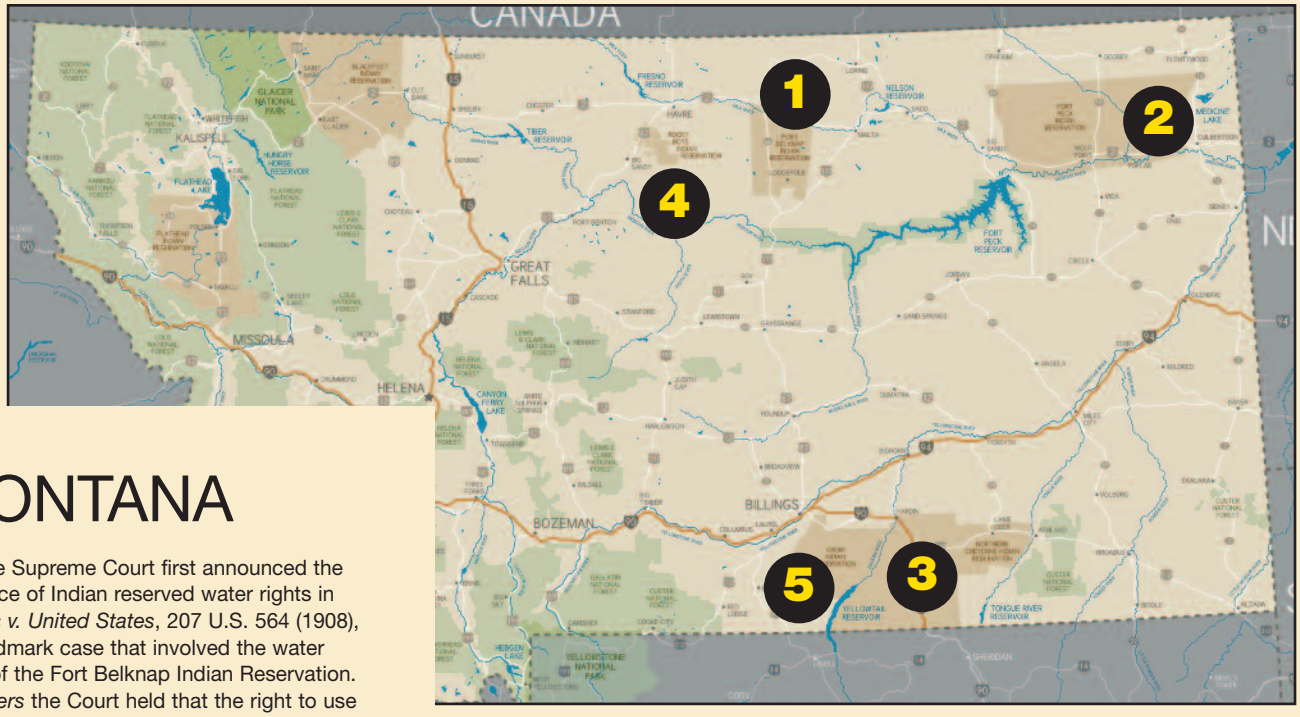


IDAHO

1 In 2004, the Snake River Water Rights Act resolved the Nez Perce Tribe's on-reservation, off-reservation springs and fisheries water claims in the Snake River basin in Idaho. The Act included additional and protected flows for Snake River salmon runs under the Endangered Species Act. The Act increased the Tribe's role in the management of its water and other natural resources, including two fish hatcheries. There were 150,000 individual water rights claims in the Snake River Basin, but the Nez Perce have lived there for 10,000 years and had treaties with the U.S. Government dating to 1855. The Act does not alter any of the Tribe's treaty fishing, hunting, gathering and pasturing rights.

2 In 2009, the Shoshone-Paiute Tribes of Duck Valley Reservation Water Rights Settlement Act established the Tribes' rights to water from the East Fork Owyhee River, water storage at Wild Horse Reservoir, and a water rights development fund that includes improvements to the Duck Valley Indian Irrigation Project. The Act includes restoring or improving fish or wildlife habitat, fish or wildlife protection, water resource development, or agricultural development. Also, water resource planning and development; designing and constructing water supply and sewer systems for tribal communities; water-related projects and other related economic development projects, and developing water codes.

3 In 1990, the Fort Hall Indian Water Rights Act quantified of the Shoshone and Bannock Tribes' water rights and also provided storage and marketing rights that further enhance the value of those rights. The Tribes enacted a water code in 1997, and later were granted "treatment in the same manner as a state" by the U.S. Environmental Protection Agency under the Clean Water Act for purposes of setting water quality standards. The Act also created a three-member intergovernmental board in Idaho to mediate or resolve water rights disputes.



MONTANA

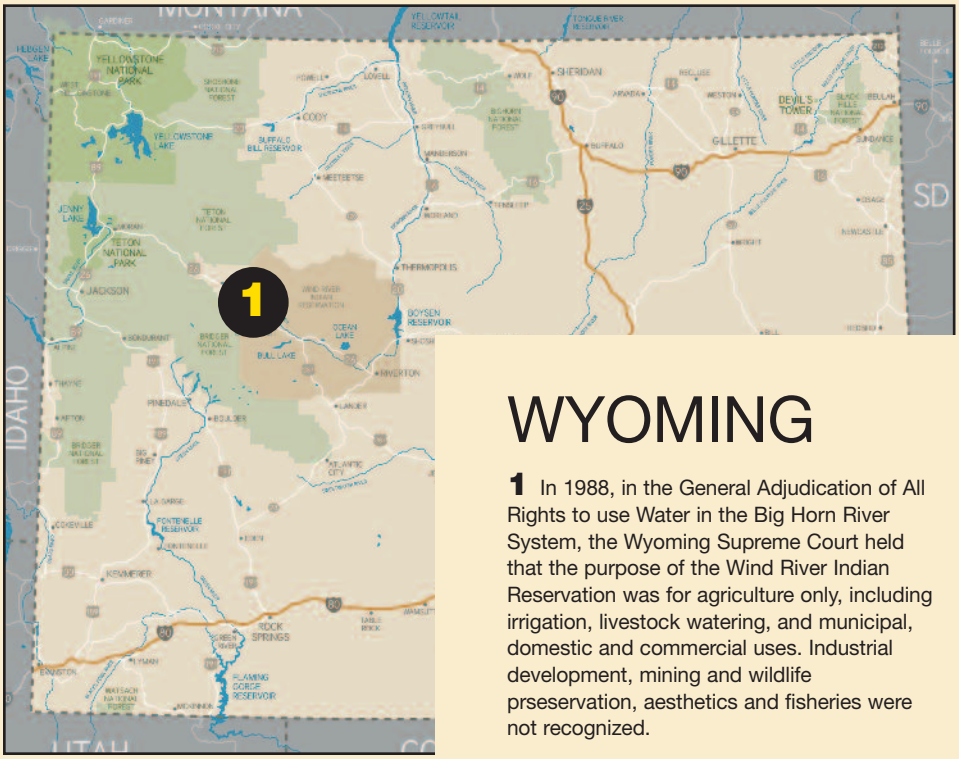
1 The Supreme Court first announced the existence of Indian reserved water rights in *Winters v. United States*, 207 U.S. 564 (1908), the landmark case that involved the water rights of the Fort Belknap Indian Reservation. In *Winters* the Court held that the right to use the waters of the Milk River was impliedly reserved to the Assiniboine and Gros Ventre Tribes of the Fort Belknap Indian Reservation in the Agreement of 1888 establishing the Fort Belknap Reservation because the purpose of its establishment was to create a homeland for the Tribe based on an agricultural economy.

2 In 1985, the Fort Peck-Montana Compact quantified the Assiniboine and Sioux Indians of the Fort Peck Reservation tribal reserved water right to divert 1,050,472 acre-feet per year from the Missouri River for any purpose authorized by the Tribes.

3 In 1992, the Northern Cheyenne Indian Reserved Water Rights Settlement Act ratified a water rights compact between the Tribe and Montana that included provisions for water from Big Horn Reservoir, a tribal water code, water marketing, and enhancement of fish and wildlife habitat. Planning, design, and construction of the Tongue River Dam Project was funded.

4 In 1999, the Chippewa Cree Tribe of the Rocky Boy's Reservation Indian Reserved Water Rights Settlement Act included state funding of water quality and monitoring projects.

5 The Crow Water Rights Settlement Act of 2010 addresses two pressing needs on the Crow Reservation: safe drinking water and rehabilitation of the Crow Irrigation Project. Additional projects authorized by the Act will for the first time place the Tribe firmly in control of their natural resources and ensure the delivery of a safe and sanitary supply of water for tribal members.

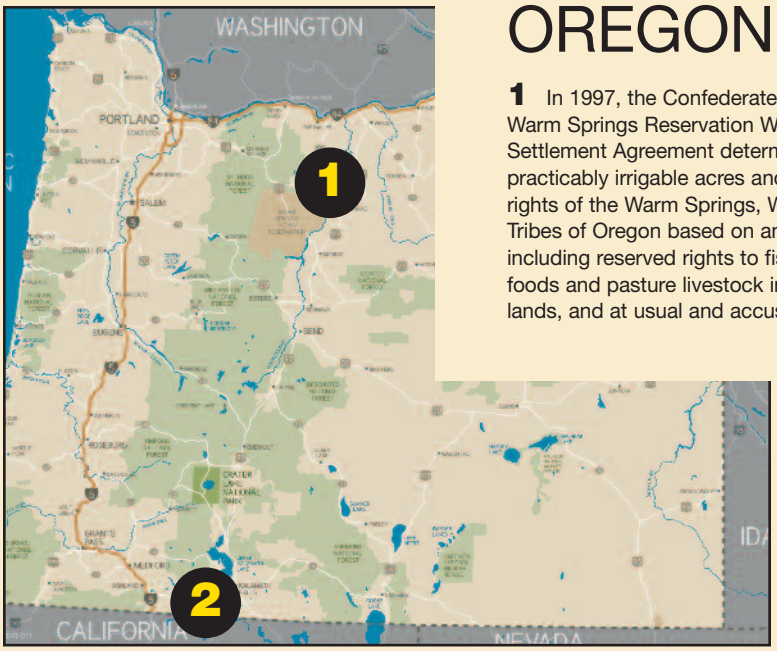


WYOMING

1 In 1988, in the General Adjudication of All Rights to use Water in the Big Horn River System, the Wyoming Supreme Court held that the purpose of the Wind River Indian Reservation was for agriculture only, including irrigation, livestock watering, and municipal, domestic and commercial uses. Industrial development, mining and wildlife prseservation, aesthetics and fisheries were not recognized.

THE 1908 SUPREME COURT RULING IN *WINTERS V. UNITED STATES* WAS A LANDMARK CASE THAT HAS IMPACTED INDIAN WATER RIGHTS LAW FOR MORE THAN 100 YEARS.

WATERS OF THE WIND RIVER INDIAN RESERVATION. PHOTOGRAPH © BY JAMES G. HOWES, 1988.



OREGON

1 In 1997, the Confederated Tribes of the Warm Springs Reservation Water Rights Settlement Agreement determined the practicably irrigable acres and stream flow rights of the Warm Springs, Wasco and Paiute Tribes of Oregon based on an 1855 treaty including reserved rights to fish, hunt, gather foods and pasture livestock in the ceded lands, and at usual and accustomed places.

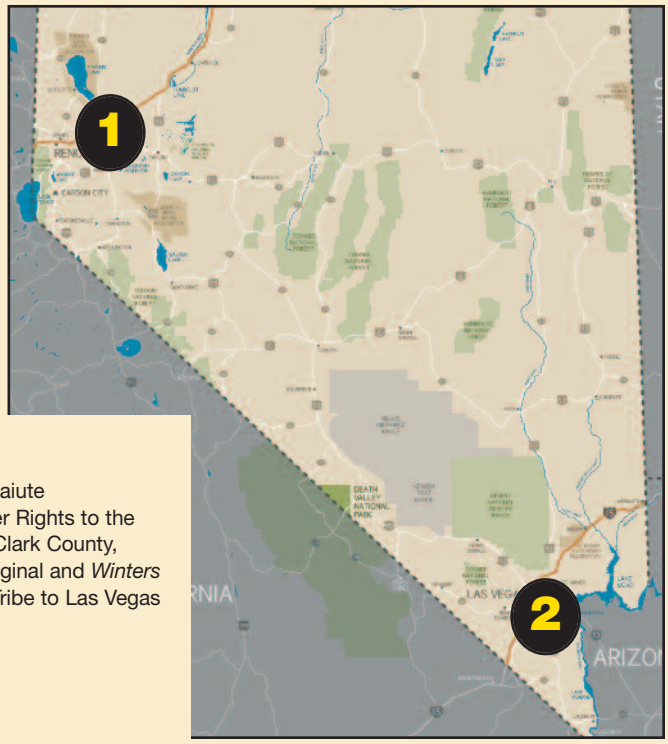
2 In 1983, in *United States v. Adair*, the U.S. Ninth Circuit Court recognized that Indian water rights can be "time immemorial" regardless of the date of a reservation. This affirmed the right of Tribes in the Klamath Basin of Oregon to hunt, trap, fish and gather edible plants as they had for more than a thousand years and as promised in an 1864 treaty.

THE LOWER KLAMATH BASIN.
PHOTOGRAPH COURTESY OF DAVE MENKE, U.S. FISH & WILDLIFE SERVICE

CALIFORNIA

1 In 2008, the Soboba Band of Luiseno Indians Settlement Act ended 150 years of conflict and struggle between the Soboba Band and its neighbors over the limited water resources in California's San Jacinto River Basin. The Act requires water agencies to recharge the groundwater basin over many years to achieve equilibrium and to assure the Soboba Band's water rights. The Soboba also received funds for economic and water development, land, imported water for the aquifer, and endangered species habitat.

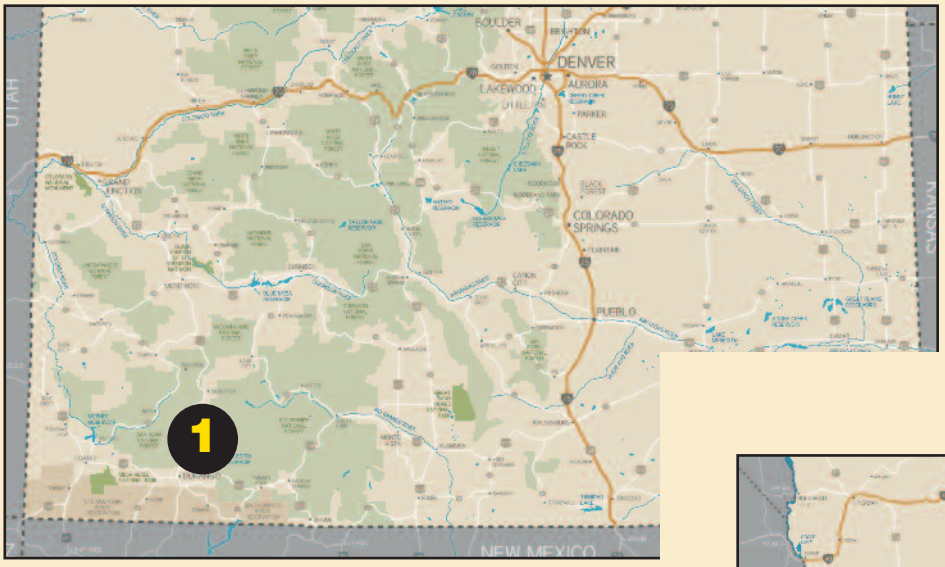
2 In 1988, the San Luis Rey Indian Water Rights Settlement Act provided for the settlement of water rights claims of the La Jolla, Rincon, San Pasqual, Pauma, and Pala Bands of Mission Indians in San Diego County. The Act also authorized the lining of the All American Canal to reduce seepage loss and conserve water for all users, and other projects.



NEVADA

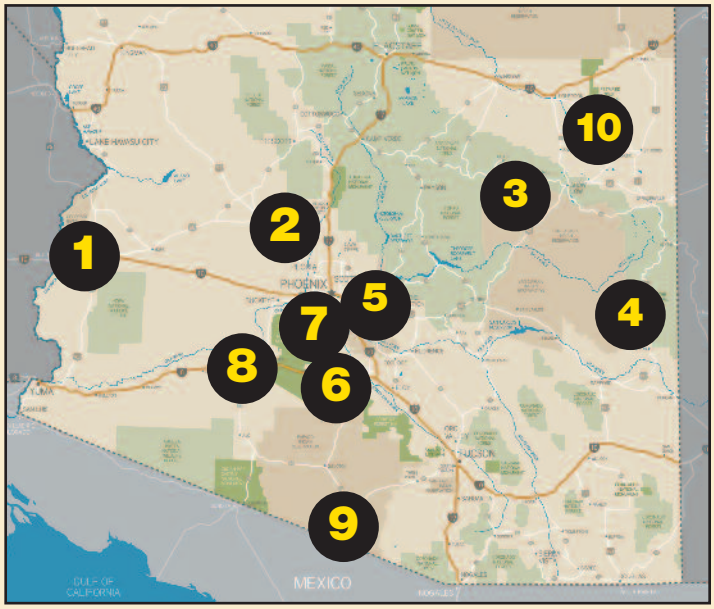
1 In 1990, the Truckee-Carson-Pyramid Lake Water Rights Settlement Act and the Fallon Paiute Shoshone Indian Tribes Water Rights Settlement Act established water allocations for the Fallon Paiute-Shoshone Tribe and the Pyramid Lake Paiute Tribe, including Pyramid Lake fishery rights, along with allocating Truckee River, Carson River, and Lake Tahoe waters between the States of California and Nevada.

2 In 1999, the Las Vegas Paiute Determination of Groundwater Rights to the Las Vegas Artesian Basin in Clark County, Nevada established the aboriginal and *Winters* reserved water rights of the Tribe to Las Vegas artesian water.



COLORADO

1 In 1988, and in subsequent amendments, the Colorado Ute Indian Water Rights Settlement Act provided water from the Bureau of Reclamation's Animas-La Plata Project for municipal and industrial uses by the Ute Mountain Ute and Southern Ute Indian Tribes. The project also created Lake Nighthorse and a pipeline from Farmington to Shiprock, New Mexico to carry water to the Navajo Nation.



ARIZONA

1 In 1963, in *Arizona v. California*, the Supreme Court set the standard for arriving at "wet water" rights for reservations as the quantity of water needed for "Practicably Irrigable Acres" (PIA) so that future agricultural needs could be included. The decision addressed the water rights of several tribes along the Colorado River, but has been widely applied.

2 In 1994, the Yavapai-Prescott Indian Tribe Water Rights Settlement Act established the Tribe's groundwater rights and use of water from Arizona's Granite Creek, along with marketing of the Tribe's Central Arizona Project water to Scottsdale.

3 The White Mountain Apache Tribe Water Rights Quantification Act of 2010 will bring a clean and safe supply of drinking water to the reservation community and enable the Tribe to manage and control its water resources. The Act mandates construction of a rural water system and directs the transfer of ownership and control of the system to the Tribe once it is fully operational.

4 In 1992 and as amended in 1996, 1997 and 2004, the San Carlos Apache Tribe Water Rights Settlement Act determined the Tribe's rights to water from the Central Arizona Project and the Salt, Gila and Black Rivers, and authorization to lease water to certain counties off the reservation.

5 In 1990, the Fort McDowell Indian Community Water Rights Settlement Act determined the Community's rights to water from the Central Arizona Project and the Verde River, authorizing the leasing of water to certain counties and guaranteeing minimum flows to the Community.

IN 1963 THE SUPREME COURT DECIDED THE MEANING OF PRACTICABLY IRRIGABLE ACRES INCLUDED FUTURE WATER NEEDS OF TRIBES

6 In 2004, the Gila River Indian Community Water Rights Settlement Act awarded the Community groundwater and surface water from three rivers and the Central Arizona Project, including leasing authority, plus funding means to improve the Community's farming operations.

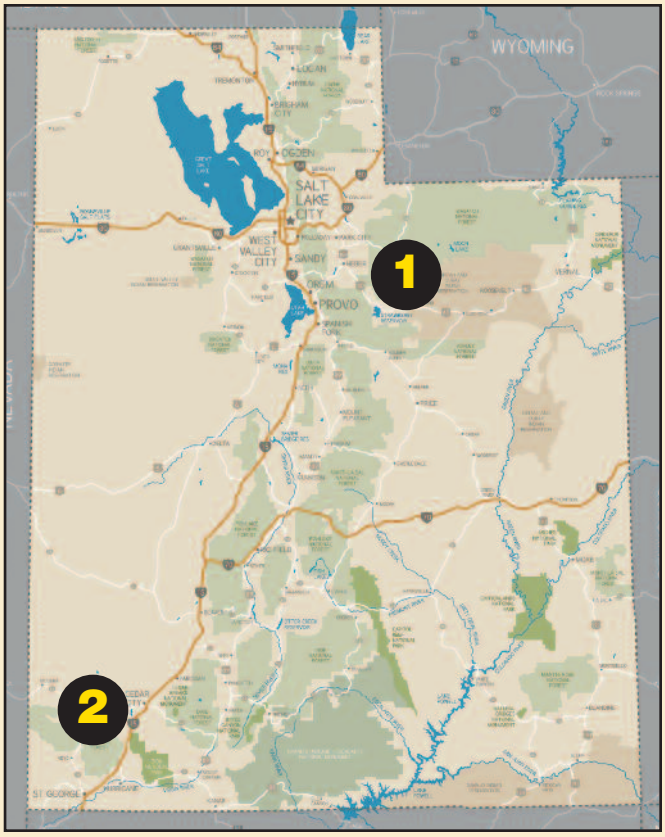
7 In 1978 and as amended in 1984 and 2000, the Ak-Chin Indian Community Act determined rights to water from the Central Arizona Project (CAP) and the Colorado River, along with authorization to lease any unused CAP water to specific off-reservation counties and communities.

8 In 1988, the Salt River-Pima Maricopa Indian Community Water Rights Settlement Act gave the Community an annual entitlement of water plus storage rights behind Bartlett and modified Roosevelt Dams. The Salt River Project (SRP), Phoenix and suburban cities, and water districts were parties to the settlement allocating Salt and Verde Rivers water, groundwater, and Central Arizona Project water. The Community has leased some water to the Phoenix valley cities.

9 In 1982 and as amended in 1992 and incorporated into the Arizona Water Rights Settlement Act of 2004, the Southern Arizona Water Rights Settlement Act determined the water claims of the San Xavier and Shuck Toak Districts of the Tonoho O'odham Nation (Papago Tribe). The Act determined rights to groundwater, Central Arizona Project (CAP) water, and the sale or exchange of effluent from Tucson. The 2004 Act added groundwater protection and storage of CAP water, and also incorporated the Gila River Indian Community Water Rights Settlement Act of 2004 and changes to the CAP.

10 In June 2003, the Zuni Indian Tribe Water Rights Settlement Act established the Tribe's rights to water from the Little Colorado River and underground water for wetland restoration at the Zuni Heaven Reservation. The Act also grandfathers existing surface and groundwater uses in the area, including long-standing religious and sustenance activities.

INDIAN WATER RIGHTS SETTLEMENTS TYPICALLY INCLUDE FUNDING FOR NEEDED WATER DEVELOPMENT ENVIRONMENTAL AND AGRICULTURAL PROJECTS.



UTAH

1 In 1992, the Ute Indian Rights Settlement Act provided the Northern Ute Tribe of the Unitah and Ouray Indian Reservation with $49 million for agricultural development, $29.5 million for recreation and fish and wildlife enhancement, and $125 million for economic development to compensate the Tribe for diversion of its waters in previous decades and the U.S. Government's failure to meet construction obligations for a tribal reservoir.

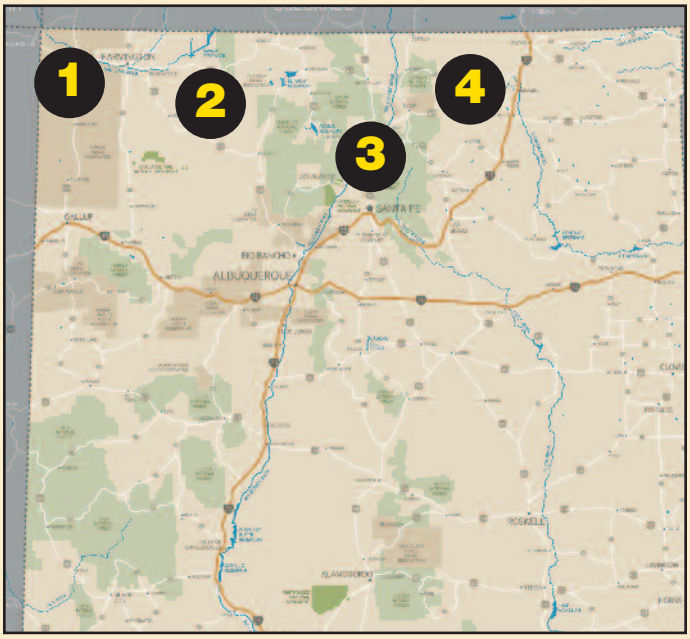
2 In 2003, the Shivwits Band of the Paiute Indian Tribe of Utah Water Rights Settlement Act funded the St. George Water Reuse Project and the Santa Clara Project pressurized pipeline for irrigation, conserving water currently lost through seepage and evaporation. The Act opens the door for tribal economic development.

NEW MEXICO

1 In 2008, the Northwestern New Mexico Rural Water Projects Act included funds for pipelines to deliver water to the Navajo Nation, the City of Gallup and the Jicarilla Apache Nation, and to rehabilitate ditch systems.

2 In 1992 and amended in 1996 and 1998, the Jicarilla Apache Tribe Water Rights Settlement Act determined the Tribe's water from the Navajo Reservoir or River and the San Juan-Chama Project, and authorized the Tribe to sell, exchange, lease, or temporarily dispose of water not in use. The Act funded a water resources development trust fund for the operation, maintenance, and replacement costs for the San Juan-Chama Project.

3 In 2010, the Aamodt Litigation Settlement Act ended one of the oldest ongoing cases in the Federal court system, and confirmed the water rights of San Ildefonso, Pojoaque, Nambe and Tesuque Pueblos. The settlement ensures that the Pueblos will have a safe and reliable supply of water and promotes regional management of water resources representing a real shift towards cooperation and collaboration among historically antagonistic parties.



4 The Taos Pueblo Indian Water Rights Settlement Act of 2010 solidifies and makes permanent water-sharing arrangements between the Pueblo of Taos and neighboring communities. The settlement also protects and restores the Pueblo's Buffalo Pasture, a culturally sensitive and sacred wetland, authorizes the Pueblo to market water, and establishes a Taos Pueblo Water Development Fund.

ANCIENT ABORIGINAL WATER RIGHTS OF PUEBLOS AND MEXICAN LAW HAVE BEEN FACTORS ASSERTED IN SOME CLAIMS OF INDIANS IN NEW MEXICO.

LOOKING AHEAD

The application of *Winters rights* principles from the Western states to traditionally riparian states in the East is likely to increase in the coming years. As water shortages due to droughts and reduced snow melt impact the eastern half of the nation, more attention is being paid to whether *Winters rights* are applicable. The Seminole compact established *Winters rights* in a riparian state, but the compact was negotiated and did not involve a court case. No judge has yet ruled on *Winters rights* in riparian states. Scholars believe *Winters rights* can fit within riparian systems, though there may be limitations not otherwise applicable in prior appropriation states.

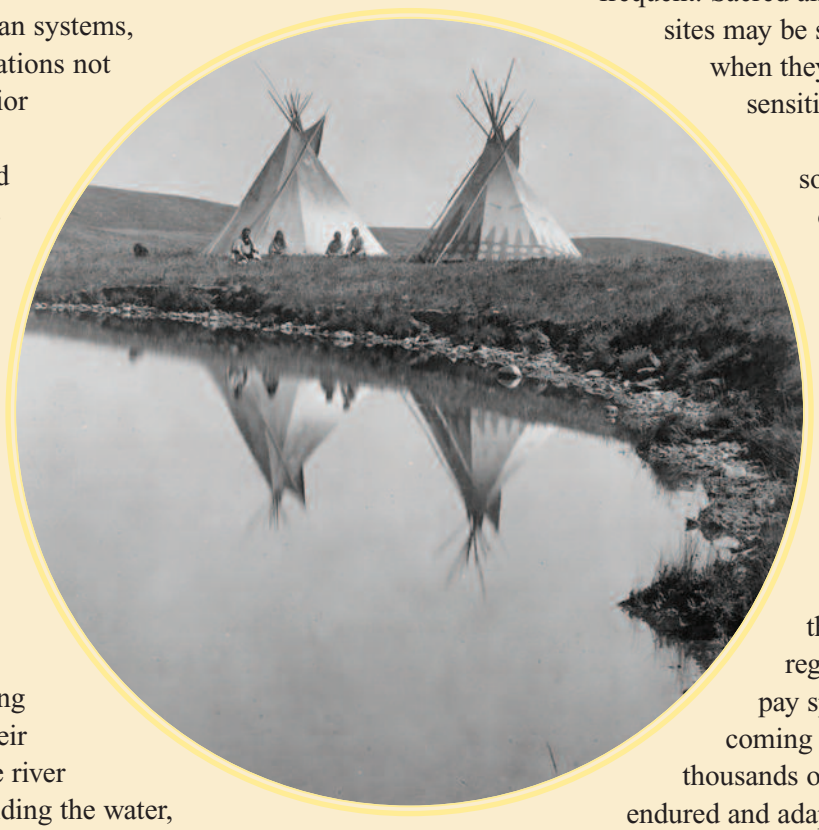
In spite of the time and cost required, Indian tribes have secured more than 30 water rights settlements since 1978. Dozens more tribes are either in various stages of the negotiation process or are waiting until they have the resources to begin the settlement process. Many other tribes are just beginning to recognize the importance of understanding the nature and extent of their water, the hydrology of the river systems and aquifers providing the water, and the extent of the competing uses that for so long have taken and used Indian water.

Growing populations and the impact of climate change on water supplies will make water and water rights more valuable in the coming years. This will create more incentive for tribes to enter negotiations toward settlement, quantification and development of their water. Finality of water rights throughout the nation will better enable states and tribes to manage economic development and water resources with the flexibility climate change is likely to require.

Climate modeling studies indicate much of the western United States may expect average temperatures to rise significantly, particularly in the Great Plains and Alaska. Flows of rivers and streams Indians depend upon will be reduced and will affect the exercise of water rights. Variations in Pacific Ocean temperatures may change the migration path of salmon returning to spawn, affecting whether fish pass through traditional harvesting areas. Although rainfall will increase in some areas, so will evaporations due to higher temperatures.

Tribal communities depend on their environment for many types of resources and economic activity such as agriculture, forest products, and tourism, which are likely to be impacted as warm extremes become more frequent. Sacred and historically significant sites may be significantly affected when they are located in weather sensitive locations.

Economic diversification, some of it made possible by development and conservation of water resources, may reduce some of the climate change vulnerability. Tribal governments will take greater control of and responsibility for their lands if given increased jurisdiction to manage their own environmental regulation, but will have to pay special attention to the coming water issues. For thousands of years Indians have endured and adapted to changes in natural cycles and social pressures, and that is sure to once again hold true through the next set of challenges.



PHOTOGRAPH COURTESY OF EDWARD S. CURTIS COLLECTION

THIS SHINING WATER THAT MOVES IN THE STREAMS AND RIVERS IS NOT JUST WATER BUT THE BLOOD OF OUR ANCESTORS... EACH GHOSTLY REFLECTION IN THE CLEAR WATER OF THE LAKES TELLS OF EVENTS AND MEMORIES IN THE LIFE OF MY PEOPLE. THE WATER'S MURMUR IS THE VOICE OF MY FATHER'S FATHER.

CHIEF SEATTLE, CHIEF OF THE SUQUAMIS

GLOSSARY OF INDIAN WATER RIGHTS TERMS

Aboriginal Water Rights – When a tribe has been enjoying the use of water or fishing sources for hundreds or thousands of years prior to the arrival of non-Indians those rights are said to be "time immemorial" and predate all other water rights.

Acre foot – The volume of water required to cover one acre of land to a depth of one foot (43,560 cubic feet or 325,851 gallons).

Adjudication – The purpose of a water right adjudication is to catalog and confirm through the court all water rights and to which property those water rights belong, binding all property owners and parties to the court decree of those water rights.

Allotment – An Indian allotment refers to land owned by individual Indians and either held in trust by the United States or subject to a statutory restriction on alienation. Most allotments were originally carved out of tribal lands held in common.

Aquifer – The area below the Earth surface that contains groundwater. A confined aquifer has impermeable layers above and below. An unconfined aquifer has the water table as its upper boundary and is recharged mostly by surface water seeping downward.

Artesian Aquifer – A confined aquifer that is capable of releasing water to the surface. Some creeks or ponds are fed by artesian springs.

Beneficial Use – The application of water necessary to accomplish the purpose of the appropriation, without waste. Some common types of beneficial use are agriculture, municipal, wildlife, recreation, and mining.

Canons of Construction – In Indian law, any uncertainty about the meaning and language of treaties is to be resolved in favor of the Indians and interpreted by courts from the perspective of the Indians and what they were seeking to achieve and thought the treaty meant.

Consumptive Use – Consumptive use represents the difference between the amount of water diverted and the amount of the return flow to the system (e.g., surface stream or underground basin). It is that amount by which the total resource is depleted.

Dispersion – a natural process in which pollution moves into groundwater.

Evaporation – The process in which heat energy from the sun changes liquid water into water vapor.

Evapotranspiration – The process in which a plant loses moisture through its leaves to evaporate into the air as vapor, much as a person's sweat passes through pores to the surface where it can evaporate.

Field Capacity – The volume of water a freely drained soil can hold for long periods of time.

Groundwater – Water located beneath the earth's surface in soil pore spaces and in the fractures of rock formations. Groundwater accumulates from the Earth's surface naturally and eventually flows back to the surface at springs, seeps and wetlands, usually feeding streams and rivers.

Historically Irrigable Acres – A measure used to quantify Indian water rights based on the number of acres a tribe has traditionally farmed. HIA does not take into account growth of the reservation and future water needs.

Hydrology – The science of the characteristics and movement of water in the environment.

Indian Water Rights Settlement – A legally binding agreement among all parties, including an Indian tribe and the United States acting in its capacity as trustee, who have negotiated and agreed to the quantities and priorities of their respective water rights. Many Indian water rights settlements are approved in Federal legislation enacted by the United States Congress and signed into law by the President.

Infiltration – Water movement into the soil.

Instream Flow – Water in streams or rivers that preserves and enhances fish, wildlife, recreation, and water quality but is not consumed for purposes such as irrigation or drinking.

Junior Rights – Water rights that are more recent than older more senior rights.

Litigation – A lawsuit or court case intended to resolve legal issues. Litigation of Indian water rights can often last for decades and be extremely costly due to the technical issues and potentially thousands of competing claims to be resolved.

McCarran Amendment – The 1952 Federal law that allows state courts rather than Federal courts to handle court cases involving Federal reserved water rights, including Indian water rights.

Mechem Doctrine – A court ruling from *New Mexico v. Aamodt* stating that Pueblos retained their aboriginal rights to water because the Pueblo Indians were Mexican citizens prior to becoming part of the United States and as such were guaranteed their water rights under Mexican law when the Treaty of Guadalupe Hidalgo was signed, ending the Mexican-American War.

Overdrafting – Taking more water out of an aquifer, usually for irrigation or industrial purposes, than natural rainfall and snowmelt can replace (recharge).

Overland Flow – Water measured in cubic-feet-per-second, that runs off the land to rivers and streams when the soil can no longer absorb it (infiltration).

Paper Water Rights – A court decree describing water rights in terms of quantity and priority but without provision for an actual appropriation of water towards a beneficial use.

Percolation – Water movement through the soil.

Practicably Irrigable Acreage (PIA) – The amount of arable (farmable) land that can be economically irrigated on a reservation. The PIA standard is used to determine the quantity of water a reservation may be entitled for agricultural purposes. PIA usually takes into account the future growth of population and water needs for agriculture but does not consider other needs such as industrial or recreational economic development.

Precipitation – Water deposited on the Earth surface as rain, snow, sleet or hail.

Prior Appropriation Water Rights Doctrine – The general principle that water rights are not connected to land ownership, and can be sold or mortgaged like other property. The first person to use a quantity of water from a water source for a beneficial use has the right to continue to use that quantity of water for that purpose. Subsequent users can use the remaining water for their own beneficial purposes but cannot diminish the rights of previous users. "First in time, first in right."

Priority Date – The date of establishment of a water right.

Riparian Water Rights Doctrine – All persons owning land adjoining a body of water have the right to make reasonable use of it. These rights cannot be sold or transferred other than with the adjoining land, and water cannot be transferred out of the watershed. Riparian rights include access for swimming, boating and fishing; build docks, piers and wharfs; and use the water for domestic purposes. Rights depend upon "reasonable use" as it relates to other riparian owners to ensure that the rights of one owner are weighed fairly and equitably with the rights of adjacent owners.

Riverine – Groundwater that is an integral part of the surface flow of streams and rivers.

Senior Rights – Water rights that have been established first and are older than junior rights.

Time Immemorial – The water priority right that is applied when water uses and practices predate the creation of a tribe's reservation. For example, the water reserved to maintain fisheries for tribes historically depending on fishing carries a priority date of time immemorial.

Transpiration – The process in which water vapor returns to the atmosphere through plants.

Tribal Homeland Standard – The measure of water rights for a tribal homeland is specific to the needs, wants, plans, cultural background, and geographic setting of a reservation.

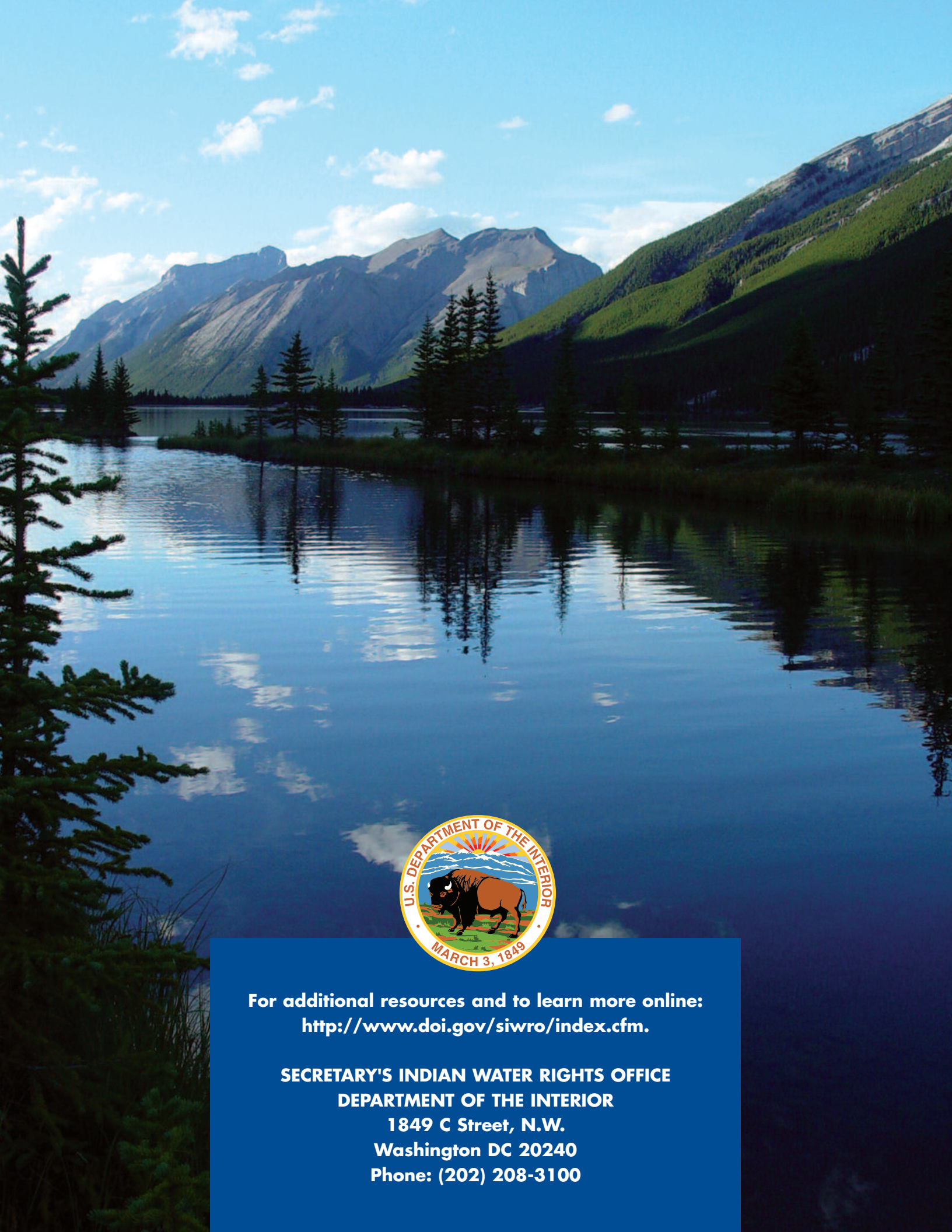
Usufructuary Rights – Tribal off-reservation hunting, fishing and gathering rights established through heritage and treaties and not lost when Indian land was ceded to the Government.

Watershed – The area of land drained by a stream or river or by a system of streams and rivers.

Water Table – The depth at which soil pore spaces or fractures and voids in rock become completely saturated with water. Typically this is the depth a water well must be drilled.

Wet Water Right – A wet water right is one that is accompanied by an actual appropriation of water towards a beneficial use.

Winters Rights Doctrine – The Federally reserved water rights of Indian tribes as determined by the 1908 Supreme Court case *Winters v. United States*, based on the principle that the United States and the Indian tribes reserved sufficient water to fulfill the purposes of the reservation when the reservation was established.



For additional resources and to learn more online:
http://www.doi.gov/siwro/index.cfm.

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