

Water Rights, Water Quality & Water Solutions 💋 in the West

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TRIBAL WATER MARKETING



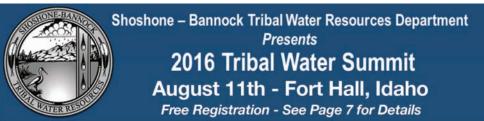
AN EMERGING VOICE IN WESTERN WATER MANAGEMENT

by Brett Bovee (WestWater Research), Jeanette Wolfley (Univ. of New Mexico School of Law), Elese Teton and Gail Martin (Shoshone-Bannock Tribes Water Resources Department)

INTRODUCTION

Significant strides have been made in Idaho over the past few years towards longerm sustainable water resources management. In August 2014, the State of Idaho signed he Final Unified Decree for the Snake River Basin Adjudication, culminating a 27-year process of identifying and evaluating all water rights in an area covering over 85 percent of the state. Finalizing such a vast water right adjudication is a feat that few Western tates have been able to realize. In June 2015, a historic settlement agreement was reached between the Surface Water Coalition (SWC) and the Idaho Ground Water Appropriators IGWA), which represent two of the largest organized groups of water users in Idaho. The agreement followed a decade of litigation regarding the protection of senior-priority surface water rights held by SWC from the un-curtailed uses of junior-priority groundwater ights held by IGWA members. Importantly, Idaho has long recognized the hydrologic connection between surface water and groundwater sources and uses, and has administered all water rights conjunctively. The settlement agreement between SWC and IGWA provides a mitigation plan for addressing the impacts of groundwater pumping on Snake River flows, and one component of the mitigation plan is that "IGWA will provide 50,000 cre-feet of storage through private lease(s) of water from the Upper Snake Reservoir system, delivered to SWC...." (Settlement Agreement, 2015).

Both the SRBA and the IGWA agreements have led to another important event that has recently taken place in the Idaho water world. In May, the Shoshone-Bannock Tribes (Tribes) and IGWA entered into a multi-year water lease agreement, which will help IGWA meet the 50,000 acre-foot obligation written in its mitigation plan. This lease agreement between the Tribes and IGWA is important because it is a view into the future of Western water management, a view which is not seen by looking to the past. In this view, we see a number of notable elements: (1) groundwater uses conjunctively managed and administered with surface water uses; (2) fairly complicated modeling and technical work informing water management and court decisions; (3) out of court settlements and multistakeholder collaboration, resolving water use conflicts; and (4) a Tribal water right being marketed to fill a critical gap in regional water supplies. While all of these elements are worthy of an expanded discussion, this article focuses on the last point.



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Tribal Water arketing eallocation	Over the past four decades, tribal water rights have continued to be resolved, primarily through settlement agreements, providing tribes in the Western states with firm quantities of water to use on their reservation lands and, in some cases, to lease off-reservation. The quantified but under-utilized water rights of tribes represent an important and often over-looked aspect of Western water management. These tribal water marketing transactions provide a means for reallocating water throughout the West so that it will be put to the most valuable uses. This article provides some context for tribal water marketing, looking at common tribal perspectives towards marketing their hard-fought water rights and how tribal water marketing has come to be utilized. While realizing that every tribe has unique circumstances, the story of the Shoshone-Bannock Tribes is presented as a case study in tribal water marketing.
eservation History	BRIEF HISTORY The Shoshone-Bannock Tribes are two distinct tribes which today are recognized as one federally recognized tribe, located on the Fort Hall Reservation. Historically, the Tribes traveled as hunter-gatherers during the spring and summer seasons, and often camped in the winter. The Fort Hall Bottoms along the Snake River, adjacent to the present-day American Falls Reservoir, was a commonly used winter site. Fort Hall was established as a trading post in 1834, which strained tribal and settler relations. The Fort Hall Reservation was established by Executive Order in 1867, and the 1868 Treaty of Fort Bridger confirmed the Executive Order. Forced cessation of Reservation lands followed, which removed roughly a third of the original Reservation land base to allow for the development of Pocatello and settlement of the
Irrigation Project	surrounding area. The present-day Fort Hall Reservation covers approximately 546,500 contiguous acres. The Reservation is located on the Snake River Plain in southeastern Idaho and reaches across four counties: Bannock, Bingham, Caribou, and Power. The Tribes principal governing body is the Fort Hall Business Council, which is responsible for Tribal governmental duties and powers. The total Reservation resident population is approximately 5,800, comprised of both Tribal members and non-Indians. There are 5,830 enrolled Tribal members according to the Tribal Enrollment Office's January 2014 records. As was the case with many Western tribes, the US government invested in an irrigation project on the Fort Hall Reservation, in an effort to assimilate and make Indians into farmers, and to provide for homesteaders emigrating onto reservation lands. Initial surveys for the Fort Hall Irrigation Project (FHIP) were undertaken in 1889, and most of the initial construction activities on the main project canals started in the 1890s. A large water right was purchased at this time by the US government from the Idaho Canal

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Copyright© 2016 Envirotech Publications, Incorporated As was the case with many Western tribes, the US government invested in an irrigation project on the Fort Hall Reservation, in an effort to assimilate and make Indians into farmers, and to provide for homesteaders emigrating onto reservation lands. Initial surveys for the Fort Hall Irrigation Project (FHIP) were undertaken in 1889, and most of the initial construction activities on the main project canals started in the 1890s. A large water right was purchased at this time by the US government from the Idaho Canal Company. The project initially suffered from insufficient capacity in the canals and poor reliability under the purchased water right. In 1907, legislation was passed to fund the construction of Blackfoot Dam and an improved canal system. The project problems persisted, with continued capacity constraints and a failure of Blackfoot Dam in 1912. At this time, approximately 30,000 acres of the FHIP were able to receive adequate irrigation water supplies. The irrigated land base grew to 50,000 acres after an expansion of the project canals, repairs at Blackfoot Dam, and further rehabilitation in 1920s and 1930s. Construction of the FHIP was largely complete by 1937, and a survey of the FHIP land base recorded 47,044 irrigated acres in 1941. Several smaller irrigated areas served by tributary creeks on the Reservation, which had been previously developed by Tribal members, were subsequently added to the FHIP as minor units in 1948.

An additional area of irrigable Reservation ground known as the Michaud Flats was first considered to be part of the FHIP in 1922, but was abandoned due to a lack of sufficient water supplies from project sources. The lands were then planned to be developed as part of a new US Bureau of Reclamation (Reclamation) project known as Michaud Flats, which would utilize storage space from Reclamation reservoirs in the Upper Snake River system that were constructed as part of the Minidoka Project. The Reservation lands were later separated out as a new unit of the existing FHIP. The Michaud Unit, encompassing 21,000 irrigated acres, was authorized for construction in 1954 and completed in 1977. The 1954 authorizing legislation provided the project in exchange for a waiver by the Tribes and US government to water rights arising out of the Fort Hall Bottoms area of the Reservation. The water supply for the Michaud Unit was to include contract storage space in Reclamation reservoirs as well as groundwater pumping. This was later solidified under a 1957 Memorandum of Agreement between Reclamation and the Bureau of Indian Affairs (BIA) known as the Michaud Contract. This Contract provided 2.8059% of the storage capacity in American Falls Reservoir and 6.9917% of the capacity in Palisades Reservoir for use on the Michaud Unit. Together, these two reservoir contracts amount to approximately 130,800 acre-feet.

TRIBAL WATER SETTLEMENT: THE 1990 AGREEMENT

The State of Idaho initiated the Snake River Basin Adjudication in 1987 as an ambitious effort to determine all water rights in the state's largest river basin. The Federal reserved water rights of the Shoshone-Bannock Tribes were of primary interest to the State of Idaho, in part because of the potential

	size of their water right claims in the Upper Snake River Basin and in part because of the State of
Tribal	Wyoming's experience with the Wind River Reservation water rights under the <i>Big Horn</i> adjudication. The
	Big Horn case was expensive and time-consuming for all parties, soured relations between the tribe and
Water	State of Wyoming, and left many issues unresolved. In short, it was an experience that the State of Idaho
Marketing	wanted to avoid repeating. The Tribes were less certain of the merits of a negotiated settlement, due to a
0	long history of broken promises and distrust. The Tribal leadership eventually agreed to start the settlement
Negotiated	process, and a Memorandum of Understanding was drafted in 1985 to "commence good faith, government-
Settlement	to-government negotiations" and these negotiations were later joined by the US government (on behalf of
Settlement	the Tribes) and the Committee of Nine representing various water users in the Upper Snake River Basin. In only five years after negotiations were initiated, the parties crafted the 1990 Fort Hall Indian Water Rights
	Agreement. This Agreement was approved in 1990 by Congress, the Idaho legislature, and the Tribal
	membership. The terms of the 1990 Agreement were formalized in the SRBA under a 1995 partial final
	consent decree and then under the 2014 final unified decree.
	The 1990 Agreement provided the Tribes with the ability to market some of their water rights to off-
Off-Reservation	Reservation water uses. This type of open-ended water marketing provision was fairly unprecedented in
Uses	tribal water rights settlements, and it was not conceived without conflict. The State of Idaho and Upper
	Snake River Basin water users were generally opposed to Tribal water marketing because of its potential
	to impact junior-priority water right holders and reservoir storage refill. The Tribes argued for the ability
Tribal	to market their water rights because it provided opportunities to utilize their water rights to the maximum
Marketing	extent and could provide needed revenue sources for the Tribes. Also, the Tribes sought equity, as water
	marketing was fairly established as a potential use of a water right in Idaho. Following unregulated water leasing from the 1930s to the 1970s, the State legislature formalized water marketing in 1979 through the
	Idaho Water Supply Bank and regional Rental Pools. The compromise written in the 1990 Agreement
Water Bank	was that the Tribes could market their Federal contract storage rights held in American Falls and Palisades
	reservoirs to off-Reservation uses through a Tribal Water Bank, and could market any of their other water
	rights to beneficial uses within the Reservation boundaries.
"Two Rivers"	Another compromise concerned limitations imposed on off-Reservation water marketing by the Tribes.
Policy	Idaho has long had a "two rivers" policy for water right administration, which divides the Snake River at
5	Milner Dam, with the objective of maximizing water uses in the Upper Snake River Basin and providing
	a zero minimum streamflow at Milner. The Tribes argued that they should be able to market their water
	rights anywhere within the State of Idaho, which included potential hydropower or environmental flow leases below Milner Dam. These potential leases were not just hypothetical, as instream flows for salmon
	species was an emerging concern for Federal agencies, hydropower companies, and many Idaho water
	users. The compromise written in the 1990 Agreement provided that the Tribes could market the American
Hydropower	Falls Reservoir storage water anywhere in the Snake River Basin in Idaho, including below Milner Dam.
&	Any such water rentals below Milner Dam would also be free from any storage refill penalties that were
Environmental	imposed on other water users at
Leases	the time of the 1990 Agreement.
Leases	The Palisades Reservoir storage space was limited to marketing
	in the Snake River Basin above
	Milner Dam. In exchange for allowing Tribal marketing
	IGWA Groundwater Districts
	agreed to seek Congressional
	Palisades Reservoir legislation providing the Idaho
	Water Resources Board with the
	remaining uncontracted storage
Storage Use	American space in Ririe and Palisades
Limitations	Falls Reservoir, and to forgive repayment obligations associated
	average yield of this uncontracted
	space was estimated to be
	Poir Hail Indian approximately 45 000 acre-feet
	Reservation which is similar to the 46,931 acre-
	feet of space in American Falls
	Reservoir provided to the Tribes

under the 1990 Agreement.

	PERSPECTIVE ON TRIBAL WATER MARKETING
Tribal	
Water	Significant efforts were made during the negotiations leading up to the 1990 Agreement to provide the
	Tribes with the ability to market their water rights outside of the Reservation. Such efforts were incredibly
Marketing	forward-thinking at the time, to enable the Tribes to help meet regional water demands in the Snake River Basin and also benefit the Tribes in the process.
	It is important to understand, however, that Native American cultures and beliefs about the sacredness
	of water often conflict with the non-Indian commodification of water for marketing and financial gain. For
	many tribes, including the Shoshone-Bannock, their creation story is tied to water and water is an integral
Sacredness	part of their traditions and ceremonies. Tribal cultures are rooted in protecting and preserving water,
of Water	preventing overexploitation of water dependent resources, and understanding the interdependence and
	relatedness of all living things. "Water is life" is a common phrase among tribal communities to express
	the multi-faceted aspects of water in their culture, ranging from their creation story, to water's healing
Cultural Aspects	properties and ceremonial importance, to an understanding of its critical place in both human and non-
	human survival. From this spiritual tribal point of view, it is difficult for tribal leaders to recognize and
	accept the non-Indian concept of owning water and an individual possessing water rights — and even more
	challenging to accept the potential marketing of such a right.
	Indeed, the Shoshone-Bannock Tribal membership questioned the inclusion of water marketing in
	their water rights settlement agreement. Tribal members voiced concerns about the loss of the Tribal water rights through a water sale, the inability to use water for environmental purposes, State oversight over their
Water	water marketing, and, perhaps most of all, treating water like a commodity instead of a sacred life-giving
Commodity	being. These concerns were discussed at Tribal Council meetings at the time of the 1990 Agreement, and
5	they persist today, even after the Shoshone-Bannock Tribes have been marketing a portion of their water
	rights for many years. It is likely that water marketing will always be difficult for tribes to fully come to
	terms with, and that tribes will inherently view "the idea about water marketing [as] an Anglo concept that's
	totally foreign to the tribes" (Bradley, 2016).
	There also persists some legal uncertainty as to whether a tribal water right can be marketed for uses
Off-Reservation	outside of the reservation. The unanswered legal questions include topics such as state administration of
Issues	federal water rights under a transfer, the ability to temporarily transfer and use a federal reserved water
	right outside the area of federal land reservation, and regulatory limits on tribal water right transfers. Some view the marketing of Indian water as contrary to the notion of reserved water rights, a doctrine
	that provides that water rights were created to fulfill the purposes of the reservation, and should be used
	there. Under federal law, tribes must have Congressional approval to market their water because tribes
	can transfer interests in reservation real property only if Congress consents. Although the courts have not
Reserved Rights	specifically ruled on the transferability of tribal water apart from the lease of land, the right to use water is
0	an interest in real property and the validity of the transfer, even temporarily, would seem to be subject to
	Congressional approval. In many tribal water settlements, Congress has authorized the use of tribal water
	rights for off-reservation marketing, usually under strict conditions. But for those tribes whose water rights
	have been resolved in court decree, such as the Colorado River tribes in Arizona v. California, the question
	of marketing a federal reserved water right to off-reservation uses remains largely unanswered and will
	likely take further Congressional authorization.
US Support	It is appropriate for the United States to support the tribes' ability to market their water rights. The current federal Indian policy is one of promoting self-determination, including economic self-sufficiency
11	and the right of self-government. Implementation of such policies can only have meaning if tribes have the
	ability to use their natural resources productively.
	Each tribe must weigh policy considerations, the benefits of marketing, and its potential impact on its
	community and way of life before water is marketed. That said, there are a number of tribes in the Western
	US marketing a portion of their reserved water rights to off-reservation uses. Some tribes are considering
	water marketing as a means for providing benefits to the tribal government and membership, without
Marketing	sacrificing existing water uses on the reservation. The direct benefit of water marketing is income to the
Benefits	tribe, furthering economic development and tribal self-sufficiency, on-reservation capital investments,
	and supporting the exercise of self-governance and government functions. Indirect benefits may include
	better management of water resources and addressing water supply problems, providing water to a desired purpose, building relationships with local governments to address regional water supply deficits, and
	assisting non-Indian businesses and communities.
	At present, it is estimated that approximately 14 tribal governments are currently marketing some
Leases	portion of their water rights through lease agreements, with an associated annual volume of about 260,000
	acre-feet and an annual value of \$19 million. The nature of current water marketing varies considerably

Tribal Water Marketing Lease Rate Factors	across tribes, from one-year leases to satisfy instream flows to long-term lease agreements that were written into the Tribe's water settlement to help meet municipal water demands. As with most water rights, the lease rate under these tribal lease agreements varies widely from \$10 up to \$3,000 per acre-foot. The lease rate is reflective of a number of factors, including location (water market), lease term, type of water use, water supply reliability, and volume. The scale of tribal water marketing will likely increase, as western river systems become ever-more stressed in trying to meet demands with available water supplies. Currently, resolved tribal water rights amount to roughly eight million acre-feet per year, which is a substantial volume of water rights considering that such rights are often the most senior-priority rights in their respective river basins. A large portion of these water rights have not historically been exercised, and could induce another layer of water stress and conflict when they are exercised, or could be viewed as a
Water Supply Gaps	resource to meet water supply gaps while also providing great benefits to tribes. Many of the West's major river basins, such as the Colorado, Rio Grande, Columbia, and Missouri all have large tribal water rights to be considered. For the Colorado River system, the Ten Tribes Partnership has been an active voice calling for both greater consideration of tribal water rights in planning studies and greater flexibility in using tribal water transfers to help meet known water supply deficits in the basin.
	HISTORY OF THE TRIBAL WATER BANK
Contract Storage Rights	The Shoshone-Bannock Tribes obtained the ability to market a portion of their federal reserved water rights in the 1990 Agreement. Such marketing to off-Reservation uses was to be carried out through the creation of a Tribal Water Bank, which was comprised of the Tribes' federal contract storage rights in American Falls and Palisades reservoirs, amounting to approximately 130,800 acre-feet of storage space. Importantly, water from the Tribal Water Bank was allowed to be rented to any beneficial use and was largely free from oversight and regulation by the State of Idaho. Limitations on where water could be rented were a compromise of the agreement previously discussed in this article. In the 1990 Agreement, the purposes of the Tribal Water Bank were listed as: (1) to put the Tribal water rights to beneficial use; (2) to provide a source of water supply for new and supplemental water uses; (3) to provide a source of Tribal
Bank Purposes	funding for improving water facilities and efficiencies; (4) to provide a mechanism for the Tribes to realize
Surplus Storage	the value of their Federal contract storage rights; and (5) to provide for the continuation of good-faith cooperation among the government parties. As described below, the Tribes have definitely realized these purposes since the Tribal Water Bank began operating. As written in the 1990 Agreement, the Tribal Water Bank is intended to market surplus Federal contract storage water rights held by the Tribes, after satisfaction of on-Reservation uses. Currently, there are two such uses: (1) pumped diversions from the Portneuf River to serve the southern portion (approximately 13,800 acres) of the Michaud Unit, through an exchange that is written in the Michaud Contract; and (2) direct-flow diversions from the Snake River that are in excess of the Tribes' water right from this source. On an annual basis, the Tribes must first deduct these estimated on-Reservation water uses from its storage allocation, in order to understand the storage volume potentially available for lease under the Tribal Water Bank.
Instream Flows	The first water lease agreement was entered into in 1998 between the Tribes and Reclamation, to provide reservoir storage releases of 38,000 acre-feet per year for instream flow augmentation purposes. Reclamation had been managing a flow augmentation program since 1995 to provide 427,000 acre-feet per year of instream flows in the Snake River system, in response to a 1995 Biological Opinion about the decline of salmon and steelhead species. The Tribes were uniquely positioned to provide storage releases for instream flow purposes below Milner Dam, because such releases from American Falls Reservoir would not be penalized for refill in the following year, as was the case with all other storage space-holders in the Upper Snake River Basin. Starting in 1988, the rules governing leases of reservoir storage space in
Refill Penalty	the Upper Snake River Basin have penalized storage account holders who lease their water for uses below Milner Dam by making such storage space the last to fill in the subsequent year, or effectively changing the priority date of that particular storage account to be the most junior priority of all storage accounts. The lease agreement was for a term of five years, with the first storage release from the Tribal Water Bank occurring in 1999. After the first three years, a significant drought occurred in Idaho and the Tribes
Lease	were unable to provide any water from the Tribal Water Bank in the years 2002 through 2004. During this
Provisions	period, the larger of the Tribes' two storage reservoir accounts, Palisades Reservoir with a storage volume of 83,800 acre-feet, received no new annual fill. The lease agreement was amended in 2003 to provide the Tribes with more time and flexibility in providing the contracted water (76,000 acre-feet) under the remaining two years of the agreement. The Tribes were able to lease 13,000 acre-feet in 2005, and fulfilled the agreement with leases of over 40,000 acre-feet per year in both 2006 and 2007.

Tribal	The Tribes undertook a comprehensive water resource management planning effort in 2006 and 2007, and a part of that effort was the development of a Tribal water marketing plan. The water marketing plan recommended that the Tribes take several actions to improve the marketability and value of the Tribal
Water	Water Bank, and identified several potential lessees besides the Reclamation flow augmentation program.
Marketing	Water marketing efforts continued after the plan, and the Tribes identified a new higher-value lessee. In
Marketing	2008, the Tribes entered into a one-year lease with Idaho Power Company (IPC) to provide storage releases
Maulas Cara Dlan	from the Tribal Water Bank for hydropower production and flow augmentation in the Lower Snake River.
Marketing Plan	This was followed in 2009 by a five-year lease agreement between IPC and the Tribes. Similar to the
	Reclamation lease agreement, the Tribal Water Bank, and specifically American Falls Reservoir, offered
	IPC a unique storage supply for hydropower uses below Milner Dam, because it was not impacted by refill
Idaho Power	penalties. The Tribes also represented perhaps the only entity in the Upper Snake River Basin who was
Leases	offering to commit storage space under a multi-year lease agreement. The lease agreement provided for
200000	the annual release of up to 45,716 acre-feet, subject to water availability and water uses on the Reservation.
	The initial success of the lease agreement prompted the Tribes and IPC to enter into a two-year extension in
	2011, covering the years 2014 and 2015. Due to hydrologic conditions and water accounting problems, the
	Tribes did not receive a sufficient storage allocation in 2013 and 2014 to provide for the full amount of the
	lease agreement.
	In 2015, IPC elected not to renew the lease agreement with the Tribes. Possible reasons for not
	renewing the lease might be the low cost of alternative fuel sources combined with the new Langley Gulch
Changing	natural gas plant which went online in 2012, concerns about reliability of storage releases due to the years
Circumstances	2013 and 2014, and the addition of other renewable energy sources such as wind. As a result, the Tribes
	embarked on a new round of water market analysis and outreach in 2015. In general, significant changes
	have occurred in the Upper Snake River Basin water world since Tribal water marketing was initiated in
	1998, particularly with regard to stricter administration and potential curtailment of groundwater users
	across the Eastern Snake Plain Aquifer. In addition, agricultural commodity prices have been favorable,
	the Idaho dairy industry has consistently grown, and instream flow augmentation obligations from the
	Upper Snake River water users were solidified under the Nez Perce water settlement (2004 Snake River
	Agreement). Collectively, all of these factors mean that surplus water is becoming a rarity in the Upper
	Snake Basin and the value of water has increased in step.
	Discussions between the Tribes and IGWA started in April 2015, regarding a long-term lease to satisfy
Long-Term	anticipated obligations under IGWA's settlement agreement with the Surface Water Coalition. A draft term
Lease	sheet was generated in June 2015 that considered the rental of Palisades Reservoir storage space under the
Conditions	Tribal Water Bank instead of a "wet water" lease, but these ideas were abandoned as other options were pursued. Talks resumed in earnest in February 2016 and a draft term sheet was agreed upon in March 2016.
	Following this, the IGWA Board and the Tribal Business Council approved the lease agreement in April and
	May, respectively. The lease agreement is for a five-year term for an annual volume of up to 45,000 acre-
	feet, subject to water availability in the Tribes' storage accounts and specific on-Reservation water uses.
	The agreement also provides for a continuation after the initial five-year term, and flexibility for IGWA to
	rent additional volumes of water and/or carry over unutilized leased water if sufficient storage space exists
	in the Tribal storage accounts.
	BENEFITS OF TRIBAL WATER MARKETING
	The Tribal Water Bank has provided significant benefits to the Tribes, and particularly to water
	resource management efforts of the Tribes. It has increased the regulatory jurisdiction of the Tribes over
Resource	water resources on the Reservation, promoted tribal self-sufficiency, and enabled the Tribes to better protect
Management	and preserve their water resources. Since the Tribal Water Bank started marketing water in 1999, the
U	Tribes have received \$15.3 million of lease income, which has been used by the Tribal Water Resources
	Department (TWRD) and other Tribal programs such as education. This revenue has helped to build
	a robust Tribal water department from scratch, and to sustain TWRD annual operations. The Federal
	government contribution under the 1990 Agreement was \$7 million as a trust fund to establish and operate
	a comprehensive Tribal water management program. The intent was to maintain the principal of the
	Federal award and only utilize the annual interest. Water leasing revenue has allowed the TWRD to better
	carry out this intent.
	The TWRD has made impressive accomplishments since its inception in 1998. The Department has
Water Resources	grown to a staff of 11 full-time employees, ranging from professional engineers and field technicians, to
Department	water quality specialists and support staff. An appointed five-member Water Commission is responsible for overseeing water use administration on the Reservation. The TWRD has invested significant money into
	water resources monitoring on the Reservation, currently operating 45 streamflow (or canal flow) gaging
	sites, 75 groundwater level sites, 145 irrigation pump flow meters, and numerous water quality monitoring
	sites, 75 groundwater reversites, 145 infigation pump now meters, and numerous water quarty monitoring sites. Operating these sites includes initial development, regular site visits and maintenance, and data post-
	sites. Operating these sites menutes initial development, regular site visits and maintenance, and data post-

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Tribal	processing. In addition, TWRD operates several groundwater and surface water monitoring sites on the Reservation in cooperation with the Idaho Department of Water Resources. The Tribes gained Treatment a State status in 2008 for administering Sections 303(c) and 401 of the Clean Water Act on the Reservation
Water	and the TWRD conducts regular water quality monitoring across the Reservation. Following passage of t
Marketing	Tribal Water Code in 2007, the TWRD is also the water use administrator on the Reservation, charged wit issuing permits for use of the Tribal water rights and taking actions during droughts. The TWRD issues
Water Code	permits for well drilling, water uses, septic systems, and other water related activities on the Reservation. Looking towards the future, the TWRD has also invested significantly in conducting modeling and planning studies to better protect and manage the Tribes' water rights and Reservation water resources. Probably the most visual representation of how far the TWRD has come, is the Department's new office
	building which was renovated and expanded in 2011 to include modern facilities and warehouses for equipment.
New Frontiers	Building on past accomplishments, the TWRD is pushing forward on several new frontiers. The TWRD has recently completed, or is in the process of completing, technical studies on: potential hydropower within the FHIP, climate change impacts on water supply availability, improved fish passage at irrigation check dams, greater water use efficiency within the Michaud Unit, attracting water-intensive industries to the Reservation, and a host of other subjects. The TWRD is also planning to invest in infrastructure within the FHIP, focused on increased efficiency and automation.
Value of Water	It is safe to say that the TWRD has changed people's perspective about how a Tribal agency can successfully manage water resources. From a comprehensive monitoring program to strategic planning, the TWRD has built a water management program in 17 years that is on par with those of the State and Federal government. The Tribal water marketing program has certainly benefited this effort, providing th financial resources to purchase equipment, hire and train staff, and deal with the unexpected setbacks that are all but certain. In the process of marketing their water rights, the Tribes may also be changing people perspective about the value of water in Eastern Idaho, which is likely a benefit to all Idaho water users.
	CONCLUDING THOUGHTS
	The recent lease agreement between the Tribes and IGWA is an important milestone, because it represents something we are likely to see more of, in terms of future water management in the Western US. The lease agreement came about as Idaho water users deal with long-standing but often ignored problems relating to overuse of water resources, a storyline that is likely to be repeated in many other places. Tribes and states can benefit if they join in seeking optimal solutions to water supply issues, including the voluntary marketing of Indian water. Cooperation will lead to solving practical water problems with practical solutions, instead of prolonged disputes.
	Shoshone – Bannock Tribal Water Resources Department Presents
	2016 Tribal Water Summit
	Managing Tribal Water in a New Era
	www.tribalwatersummit.com
	2016 Tribal Water Summit August 11, 2016 — Sho-Ban Hotel & Event Center — Fort Hall, Idaho
REGISTER BY JULY 22nd	The Western US is facing a new era of water challenges, whether it is dealing with drought, mitigating climate change, or dealing with realities of water use conflicts. Tribes are at the center of this challenge, holding large water rights and acting as local water managers. This summit brings together Tribal voices and subject-matter experts to discuss the challenges and opportunities that Tribes are facing. The summit will go beyond Tribal water right basics, and provide unique content on how Tribes are managing water in this new era.
	There is no cost to attend this workshop. Registration closes July 22nd. Summit website: www.tribalwatersummit.com
	For any questions or inquiries about this summit, please contact the Shoshone-Bannock Tribal Water Resources Department: Elese Teton = 208/ 239-4580 or Gail Martin = 208/ 239-4583

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Tribal Water Marketing Cultural Beliefs	The Shoshone-Bannock Tribes successfully negotiated for flexibility in leasing some of their water rights through a Tribal Water Bank. Over the past 17 years, the Tribal Water Bank has provided for various instream flow uses in Idaho. In the process — and by re-investing much of the water lease revenue back into the Tribal water department — the Tribes have established a firm foothold on protecting their water rights into the future, and developed impressive capabilities to manage water resources on the Reservation. As a case study, tribal water marketing has been very successful for the Shoshone-Bannock Tribes. However, there will likely remain an inherent distaste for water marketing by many tribes and tribal leaders, based on their cultural beliefs and practices. Balancing these conflicting beliefs is not easy, but an overarching goal might be for tribes to continue to meet their obligations to protect and preserve water resources, blending their cultural traditions and identity with a modern program of water monitoring, planning, and management. Tribal water marketing programs may help achieve such a goal. FOR ADDITIONAL INFORMATION: ELESE TETON, Shoshone-Bannock Tribes, 208/ 239-4580 or eteton@sbtribes.com
	 References Arizona v. California. Original decision 373 U.S. 546 (1963). Indian water rights decided in 460 U.S. 605 (1983), 466 U.S. 144 (1984), 531 U.S. 1 (2000). Big Horn Adjudication. In Re General Adjudication of All Rights to Use Water in Big Horn River System, 753 P.2d 76 (Wyo.1988), affd subnom. Wyoming v. United States, 492 U.S. 406 (1989), reh.denied, 492 U.S. 938 (1989). Bovee, B. Establishing and Preserving Tribal Water Rights in a Water Stressed West, American Water Resources Association IMPACT publication. July 2015. Bradley, R. How I rented a piece of a river in a never-ending western drought, The Guardian. April 2016. Funke, H. Why Do the Tribes Have a Water Bank in the Water Agreement, Sho Ban News. February 1991. Landry, C. and Quinn, C. Untapping Tribal Waters, Tribal Water Marketing Expanding, The Water Report. January 2007. Settlement Agreement. June 30, 2015. Settlement Agreement Entered Into June 30, 2015 Between Participating Members of the Surface Water Coalition and Participating Members of the Idaho Ground Water Appropriators, Inc. Exhibit B to the Surface Water Coalition is and IGWA's Stipulated Mitigation Plan and Request for Order. Idaho Department of Water Resources Docket No. CM-MP-2016-001. Ten Tribes Partnership. Proposed Option: Voluntary Tribal Water Transfers, Submitted as part of the Reclamation Colorado River Basin Water Supply and Demand Study. Torrey, R.S. et al. Tribal Water Marketing, Report prepared in conjunction with the 1995 Symposium on the Settlement of Indian Water Rights Claims. May 1996. Vonde, A.Y. et al. Understanding the Snake River Basin Adjudication, 52 Idaho Law Review. 2016. Wolfley, J. A Tribal Perspective on Water and Water Rights, Prepared for Idaho Water Users Association, 29th Annual Water Law and Resource Issues Seminar. November 2012. Wolfley, J. Biagaweit, Securing Water From the Mighty Snake River in the Snake River Basin Adjudic
	 Brett Bovee is a Regional Director for WestWater Research LLC, a company focused on understanding water markets and the value of water in the Western US. Mr. Bovee has been working on the engineering and technical aspects of Tribal water rights issues for over 12 years, working on Tribal water projects in nearly every Western state. He is a registered civil engineer and a recognized hydrologist. Gail Martin is a Legal Assistant with the Tribal Water Resources Department. Ms. Martin joined the Department in 2000 and assists with a wide array of activities, including legal research, public hearings and education, and administrative functions. Prior to joining the Department, Ms. Martin was a paralegal for the Tribes' legal department and a cultural resources survey manager. She is an enrolled member of the Shoshone-Bannock Tribes. Elese Teton is the Director of the Tribal Water Resources Department, joining the Department in 1998 as the first permanent Tribal Water Engineer. Ms. Teton has overseen much of the growth and development of the Department, and supervises all aspects of the Department. She is a registered environmental engineer and an enrolled member of the Shoshone-Bannock Tribes. Jeanette Wolfley is an Assistant Professor at the University of New Mexico Law School. Ms. Wolfley teaches federal Indian law, Indian water rights, federal jurisdiction, and Tribal and cultural resources courses. Prior to this, Ms. Wolfley practiced law for over 30 years representing exclusively Tribal clients' interests in a wide variety of matters, both in private practice and as an attorney for the Native American Rights Fund. She is an enrolled member of the Shoshone-Bannock Tribes.

	"WATERS OF THE UNITED STATES"
WOTUS	NOT QUITE CLEAR YET
	by Richard M. Glick and Diego Atencio (Davis Wright Tremaine: Portland, Oregon)
	INTRODUCTION
Definition	The Clean Water Act (CWA or "the Act") grants the federal government authority to regulate discharges of pollutants into "navigable waters," which the Act helpfully defines as "waters of the United States, including the territorial seas" (WOTUS). 33 U.S.C. § 1362(7). What could be clearer than that? Alas, decades of litigation and administrative attempts at delineating the limits of government jurisdiction have failed. The resulting uncertainty is of course vexing to landowners, the government, and
	courts alike.
New Rule	In the latest attempt at clarity, the US Environmental Protection Agency (EPA) and the US Army Corps of Engineers (Corps) — the two agencies tasked with enforcing the CWA — published a new rule ("the new rule") in June 2015 in an attempt to resolve the issue. Clean Water Rule: Definition of "Waters of the United States," 80 Fed. Reg. 124 (Jun. 29, 2015) (to be codified at 33 CFR Pt. 328; 40 CFR Pts.110, 112,
	116, et al.). Opponents of the rule were quick to assail it in court in challenges filed in federal district and appellate courts across the country. These cases attack the new rule, but raise questions as to subject matter jurisdiction. Specifically, they argue that CWA language granting original jurisdiction to the circuit courts — authorizing review of approvals and promulgation of "any effluent limitation or other limitation," as
	well as issuances or denials of "any permit" — does not apply to the new rule because the rule is simply definitional. <i>Id.</i> At present, the US Circuit Court of Appeals for the Sixth Circuit has asserted jurisdiction and issued a nationwide stay of the new rule pending the court's decision. <i>See id; In re E.P.A.</i> , 803 F.3d 804 (2015). However, given its significance and the US Supreme Court's express desire to revisit the issue, the
	rule will certainly find its way back to the nation's highest court. Without clear guidelines, EPA and the Corps face tough questions in determining whether they may
Early Judicial Review	exercise jurisdiction over a particular piece of property. In two recent decisions, <i>Sackett v. E.P.A.</i> , 132 S.Ct. 1367 (2012) and <i>U.S. Army Corps of Engineers v. Hawkes Co., Inc.</i> , 136 S.Ct. 1807 (2016), the Supreme Court upped the ante by allowing early judicial review of asserted government jurisdiction (discussed below). As a result, the agencies must choose between a lax enforcement policy and the use of considerable resources in arriving at legally defensible jurisdictional determinations. Landowners, meanwhile, find it difficult to understand the scope of activities that they may legally carry out on their
Enforcement Uncertainty	property. <i>Id.</i> at 1816. The risk to landowners of filling jurisdictional wetlands is of great concern to the Supreme Court, which has noted that without access to the courts, landowners are left with the untenable choice of either complying with EPA restoration plans or facing potentially catastrophic financial penalties and criminal sanctions. Haphazard enforcement of the CWA also adds risk to critically important water resources. Nobody wins.
	Headwaters and irregularly flowing creeks constitute over half of the river miles in the continental United States, while wetlands serve important ecological functions like pollution filtration and flood control. According to EPA data, roughly 117 million people in the continental United States use public drinking water systems that rely on intermittent, ephemeral, or headwater streams. David Pettit, <i>The New Federal Clean Water Rule</i> , 25 Envtl. L. News 34 (2016).
	WOTUS IN THE SUPREME COURT
Scope of Jurisdiction	The Supreme Court has considered the scope of WOTUS jurisdiction three times, yet ambiguity remains. In <i>United States v. Riverside Bayview Homes I</i> , 474 U.S. 121 (1985) — the first Supreme Court case to address the WOTUS issue — the Court heard a challenge to the Corps' assertion of jurisdiction over wetlands adjacent to other "waters of the United States," where the wetlands did not visibly connect to the adjacent jurisdictional water. The Court held that the Corps' claim of jurisdiction was reasonable, persuaded by the Corps' judgment that adjacent wetlands "may function as integral parts of the aquatic environment even when the moisture creating the wetlands does not find its source in the adjacent bodies of water." <i>Id.</i> at 134-135.
Migratory Bird Rule	Shortly after the <i>Riverside Bayview</i> decision, the Corps claimed jurisdiction over intrastate waters that provided habitat for migratory birds, using the birds' significance to interstate commerce as its justification (this became known as the "Migratory Bird Rule"). <i>See</i> Karen Crawford et al., Memorandum for Ecos Concerning Waters of the United States Issues 3 (2014).

WOTUS	The Migratory Bird Rule was challenged in <i>Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers</i> , 531 U.S. 159 (2001) (<i>SWANCC</i>). In that case, a consortium of suburban Chicago municipalities seeking to dispose of non-hazardous waste challenged the Corps' assertion of jurisdiction over the consortium's chosen site: an isolated sand and gravel pit that hosted several permanent and seasonal ponds, as well as 121 species of birds. <i>Id.</i> at 162-164. The Court held that the CWA does not
"Navigable"	support the Corps' jurisdiction under the Migratory Bird Rule. To hold otherwise, the Court noted, would read the significance of the word "navigable" out of the statute altogether, since it would allow the Corps' to assert jurisdiction over waters wholly distant from a navigable waterway. <i>Id.</i> at 172. Importantly, the decision did not disturb the Court's prior holding in <i>Riverside Bayview</i> ; to the contrary, the Court reaffirmed the idea that the term "navigable" does not limit the CWA's applicability only to waters that are
<i>Rapanos</i> Split	 navigable in fact. Crawford et al., <i>supra</i> note 12, at 4. <i>Rapanos v. United States</i>, 547 U.S. 715 (2006) is the most recent Supreme Court case to address the WOTUS rule directly. In it, a fractured Court decided 5-4 that the government had overreached, but could not agree on the correct test. Writing for the plurality, Justice Scalia held that "waters of the United States" means "relatively permanent, standing or flowing bodies of water," and excludes "ordinarily dry channels through which water occasionally or intermittently flows." <i>Id.</i> at 732-33. He rejected the notion that a "Land is Waters" approach — where hydrographic features and the continuous presence of water are absent — could confer federal jurisdiction to an agency. <i>Id.</i> at 734. Justice Kennedy's concurring opinion endorsed a very different approach, relying on ecological
"Significant Nexus"	principles and the precedent set in <i>Riverside Bayview</i> . He held that CWA jurisdiction exists over waters sharing a "significant nexus" with navigable waters. <i>Id.</i> at 779. For there to be such a nexus, he wrote, the water in question must "significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable." <i>Id.</i> at 780. Meanwhile, in his concurring opinion, Justice Roberts chided the Corps for its overreach, stating that "[r]ather than refining its view of its authority in
Corps Overreach	light of our decision in <i>SWANCC</i> , and providing guidance meriting deference under our generous standards, the Corps chose to adhere to its essentially boundless view of the scope of its power. The upshot today is another defeat for the agency." <i>Id.</i> at 758. In the post- <i>Rapanos</i> landscape, courts have struggled to determine which test to apply in CWA jurisdictional cases. Federal agencies were reluctant to exercise jurisdiction over isolated or distant
Practical Difficulty	waterways. "According to the <i>New York Times</i> , in the four-year period between 2006 and 2010, more than 1,500 major pollution investigations of '[c]ompanies that have spilled oil, carcinogens, and dangerous bacteria into lakes, river and other waters [were] not being prosecuted, according to Environmental Protection Agency regulators working on those cases" Pettit, <i>supra</i> note 8, at 36. Further, Justice Kennedy's "significant nexus" test was difficult to apply in practice. Several legislative and administrative efforts to add clarity followed, but each effort was discontinued before it could supplement or replace existing law. <i>Id.</i> at 35-36.
Administrative Procedure	JUDICIAL REVIEW OF JURISDICTIONAL DETERMINATIONS Since deciding <i>Rapanos</i> , the Supreme Court has twice touched on WOTUS through the lens of administrative procedure issues. Plaintiffs in both cases were advocating for the reviewability of either EPA or Corps action. In both instances, a favorable judicial outcome would have allowed the plaintiffs to challenge the jurisdictional foundation of the agency action. The first case concerned an Idaho family — the Sacketts — that filled part of their residential lot with dirt and rock in anticipation of building a home. <i>Sackett v. E.P.A.</i> , 132 S.Ct. 1367, 1370 (2012) (<i>Sackett</i>). Several months after doing so, EPA sent the Sacketts an enforcement order declaring that they had
Compliance Order	discharged pollutants into wetlands that were jurisdictional by virtue of their proximity to a nearby lake, which was itself a water of the United States. <i>Id.</i> at 1370-71. The Sacketts requested a hearing regarding EPA's jurisdiction to no avail. They then challenged the compliance order in federal district court, which dismissed the claims for lack of subject matter jurisdiction, and the Ninth Circuit affirmed the decision on appeal. <i>Id.</i> at 1371. At the Supreme Court, the Sacketts argued that the issuance of a compliance order is a final agency action that is subject to judicial review. The Court agreed unanimously, holding that: compliance orders mark the consummation of the EPA decision-making process; that they determine rights and obligations from which legal consequences flow; and that the Sacketts did not have any other adequate remedy in a court. <i>Id.</i> at 1371-1373.
"Final Agency Action"	The second case, <i>United States Army Corps of Engineers v. Hawkes Co., Inc.</i> , 136 S.Ct. 1807 (2016) (<i>Hawkes</i>), is Sackett's twin. The case arose after a peat mining company, Hawkes Co., sought review of a Jurisdictional Determination (JD) issued by the Corps. <i>Id.</i> at 1809-10. JDs are formal opinions that reflect the Corps' definitive view on whether a particular piece of property contains waters of the United States. <i>Id.</i> at 1811. In this case, the Corps' JD responded in the affirmative, finding that the property was subject to the Corps' jurisdiction under the Clean Water Act. <i>Id.</i> at 1813. Hawkes Co. sought review in federal district court, but the district court dismissed the case for want of subject matter jurisdiction. <i>Id.</i> On appeal to the Supreme Court, Hawkes Co. argued that JDs are a "final agency action," and, as in <i>Sackett</i> , the Court unanimously agreed for largely the same reasons. <i>Id.</i>

WOTUS	At face value, <i>Sackett</i> and <i>Hawkes</i> appear insignificant to the WOTUS issue. Both cases turn on a mechanical application of the same well-known principles of administrative law. The outcomes would have likely been identical even in a world where WOTUS issues did not exist. In context, however, the cases may have greater meaning. They may even motivate the Supreme Court to greenlight EPA's new rule.
Immediate Review	Without the new rule, <i>Sackett</i> and <i>Hawkes</i> may have been two steps in the wrong direction. Knowing that compliance orders and jurisdictional determinations are immediately reviewable, EPA and the Corps' will be less willing to assert their authority in instances where their jurisdiction is not abundantly clear. This will make CWA enforcement even less effective than it was previously. If, instead, EPA and the Corps continue with business as usual, the judicial review provided for in <i>Sackett</i> and <i>Hawkes</i> will lead to increased litigation over jurisdictional issues. This will slow down the regulatory process and deprive
Continued Chaos	landowners of the beneficial use of their land pending resolution of the litigation. The Supreme Court seems to recognize that more is needed to avoid continued chaos. As Justice Alito notes in his <i>Sackett</i> concurrence: "Allowing aggrieved property owners to sue (in opposition to a compliance order) under the Administrative Procedure Act is better than nothing, but only clarification of the reach of the Clean Water Act can rectify the underlying problem." <i>Sackett</i> at 1375-76 (2012).
	THE NEW RULE
	On June 29, 2015, EPA and the Corps published a new rule defining the waters of the United States (cited above). The rule was developed in response to the "urgent need to improve and simplify the process for identifying waters that are and are not protected under the Clean Water Act." EPA, Clean Water Rule Litigation Statement, www.epa.gov/cleanwaterrule/clean-water-rule-litigation-statement.
Intent of	The new rule increases categorical jurisdictional determinations, and is intended to minimize the
New Rule	need for case-specific analyses. EPA Website: "What the Clean Water Rule Does" at www.epa.gov/ cleanwaterrule/what-clean-water-rule-does (last visited on June 28, 2016); and Claudia Copeland, <i>EPA and</i> <i>the Army Corps' Rule to Define "Waters of the United States,"</i> Congressional Research Service, January 4,
Jurisdiction	2016, p.11 (https://fas.org/sgp/crs/misc/R43455.pdf). In the aggregate, the agencies estimate that positive jurisdictional determinations will increase
Increase?	by roughly 3 to 5 percent relative to previous practices. Copeland, <i>supra</i> at 11. This estimate is
	controversial, as many of the opponents filing challenges assert that the rule vastly extends government
	jurisdiction. See, In re E.P.A., 803 F.3d 804, 806 (2015); see also Jeff Kray, Clean Water Act: Waters of the United States Rule Faces Political, Legislative, and Legal Challenges, Marten Law, www.martenlaw.
	com/newsletter/20150603-water-united-states-rule-faces-challenges.
Categorical	Among the new rule's categorically jurisdictional waters — i.e., those that are per se jurisdictional — are: traditionally navigable waters, all interstate waters and wetlands, the territorial seas, tributaries,
Jurisdiction	impoundments, and all waters that are adjacent to the previously listed waters. Copeland, <i>supra</i> at 5. The new rule adds the requirement that tributaries "show physical features of flowing water — a bed, bank,
"Adjacent" Boundaries	and ordinary high water mark — to warrant protection." EPA Website: www.epa.gov/cleanwaterrule/what- clean-water-rule-does (last visited Jun. 23, 2016). A water is now "adjacent" if it meets the rule's definition of "neighboring," which itself is explained using several defined boundaries (or "distance limitations"). The first boundary ropes in "all waters located in whole or in part within 100 feet of the ordinary high
	water mark (OHWM) of a jurisdictional water." The second includes "all waters located in whole or in part within the 100-year floodplain that are not more than 1,500 feet from the OHWM of a jurisdictional water." Copeland, <i>supra</i> at 6.
Case-Specific	The new rule lays out two other defined sets of waters that may be deemed jurisdictional if they are
Analysis	determined to have a significant nexus to a jurisdictional water. The first set includes "prairie potholes,
	Carolina bays and Delmarva bays, pocosins, western vernal pools, and Texas coastal prairie wetlands." The second set includes "waters located in whole or in part within the 100-year floodplain of a traditional
	navigable water, interstate water, or the territorial seas and within 4,000 feet of the high tide line or OHWM
	of a jurisdictional water." These are the only waters that would require a case-specific analysis; any water not falling into one of the two defined sets would be deemed categorically jurisdictional or categorically
	excluded. <i>Id.</i> at 7-8.
	CHALLENGES TO THE RULE
	While the new rule does meet its objective — i.e., adding clarity to the interpretation of WOTUS — its
Procedural	opponents argue that it possesses fatal flaws. Indeed, they claim that the rule is not consistent with the significant nexus test as defined by Justice Kennedy in <i>Rapanos. In re E.P.A.</i> , 803 F.3d 804, 806 (6 th Cir.
Defects	2015). The opponents also contend that the rule suffers from two serious procedural defects. First, they
	argue, the final rule is not a logical outgrowth of the proposed rule, as the latter "did not include any distance limitations in its use of terms like 'adjacent waters' and 'significant nexus.'" <i>Id</i> . At 808. Second,
	the opponents claim that the rule's distance limitations are not supported by science, making the agencies'
	decision-making arbitrary and capricious. EPA did not help itself in this regard by releasing a draft of the rule before receiving comments from its own Science Advisory Board ("SAB"), thus giving the impression

	The Water Report
WOTUS Procedure v. Resolution	that SAB review is mere window dressing. If the procedural allegations are true, both would constitute fatal violations of the Administrative Procedure Act. <i>In re E.P.A., supra</i> at 808. These arguments were persuasive enough to convince the US Court of Appeals for the Sixth Circuit to stay the implementation of the new rule — which, among other things, requires a showing of a substantial possibility of success on the merits of a claim. <i>Id.</i> at 807. The opponents' satisfaction of that threshold, combined with language by the court that should not inspire the agencies' confidence, suggests that the new rule sits atop a shaky foundation. Consequently, if the rule is to arrive at the Supreme Court, its justices might face the prospect of invalidating the rule on procedural grounds and not the merits, despite the Court's long held desire to resolve the WOTUS issue. That possibility, however, remains in the distant future. In February, a fractured 1-1-1 ruling by a three-judge panel of the Sixth Circuit resolved the question of whether the Supreme Court had original jurisdiction to consider the rule's challenge (as opposed to the federal district courts). Amena H. Saiyid, <i>Full Sixth Circuit Won't Review Water Rule Venue Question</i> , Bloomberg BNA, www.bna.com/full-sixth- circuit-n57982070204/. The weak nature of the ruling may invite an early appeal to the Supreme Court regarding the jurisdictional issue. <i>Id.</i> If not, a Sixth Circuit decision is expected before the end of the year. <i>See</i> Patrick A. Parenteau, <i>Sending a Message on WOTUS</i> ?, American College of Environmental Lawyers, http://acoel.org/post/2016/06/02/Sending-a-Message-on-WOTUS.aspx.
Intent Wetlands Distinction	CONCLUSION CONCLUSION Regardless of the outcome of challenges to the new rule, it is clear that there is nothing approaching consensus on the meaning of WOTUS. But consensus in this area is not at all a realistic goal, and whateve the agencies promulgated would have been found to be gross government overreach by some and not protective enough by others. The real problem is the Clean Water Act itself. The focus of the Act was to stop the discharge of toxic pollutants into waterways — recall images of the Cuyahoga River burning as the impetus leading to broad, bipartisan support for stepped up environmental protection. In that context, a more nuanced definition of WOTUS perhaps seemed unnecessary. Filling of wetlands is a different concern creating different imperatives. There is no particular reason to think that Congress will be any better at forging consensus than EPA and the Corps, and we know from observation over the past decade that Congress no longer is a consensus driven body. Could a clear congressional articulation of the bounds of federal jurisdiction clear the water? Probably not, but good legislative drafting could better frame the issues for the inevitable court challenge. For Additional INFORMATION:
Wate	RICK GLICK, Davis Wright Tremaine LLP, 503/778-5210 or rickglick@dwt.com FROUP Regon er Law hovember 16 & 17, 2016 Rick GLick Will Be Co-Chairing The 25th Annual Oregon Water Law Conference and Proconting On

president of the American College of Environmental Lawyers, served as chair of the Oregon State Bar Section on Environmental and Natural Resources Law, and is currently a participant in the National Water Resources Law Forum and a member of the Water Resources Committee of the ABA Section on Environment, Energy, and Resources. He has written and presented on numerous occasions on water rights, environmental and natural resources law issues.

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MANAGING WATER IN ARIZONA

AN INTERVIEW WITH TOM BUSCHATZKE DIRECTOR OF THE ARIZONA DEPARTMENT OF WATER RESOURCES

Interviewed by Doug Dunham, Arizona Department of Water Resources

Arizona Water



Tom Buschatzke Director of the Arizona Department of Water Resources Question: When people talk about managing water in Arizona, what comes up? What are the primary elements of water management?

Answer: Well, the main motivating factor in water-management and water planning in Arizona is scarcity. In the desert regions of the state we get less than 10 inches of rainfall a year — and often less than that during the lengthy drought that has been impacting the entire Southwest. Scarcity creates a very strong impetus to conserve what you have. In Arizona that means conserving water, something we have gotten very good at.

The main tool in the toolbox, of course, is the Groundwater Management Act of 1980. When people speak of water planning and management in Arizona, the 1980 Act is always at the top of the list. It is far from the only important feature of Arizona's water-planning scheme, though.

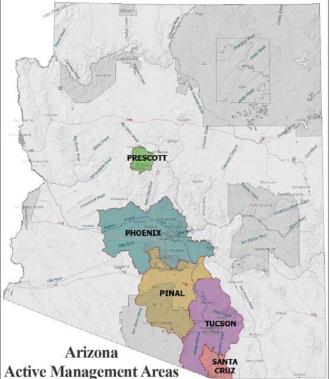
The state struggled for decades to create water-management law that would satisfy all the competing interests around the state. People outside Arizona find this hard to believe, but the sparsely populated Arizona of the 1950s actually consumed more water than we do today. Water conservation was not an issue then.

By 1980, population and economic growth had begun forcing the issue of protecting the state's groundwater supplies. Governor Bruce Babbitt and legislative leaders struggled with the language of the law for months, and eventually concluded that an effective law that restricted access to groundwater pumping would have to address three main issues:

• It would have to identify who would have a right to pump groundwater, and how much those people Groundwater should be permitted to take out of the ground; Issues • It would need to find effective methods of reducing groundwater overdraft; • It would have to answer whether groundwater management would occur at the state level or local level. Eventually, lawmakers settled on the law that would establish "active management" areas in certain regions of the state, including its most urban areas of Phoenix and Tucson. Within those "AMAs" (Active Management Areas), the Arizona Department of Water Resources "Active (ADWR), an agency created by the passage of the Groundwater Management Act, would apply the new Management" law's most stringent water-usage regulations. [AMA information available at: www.azwater.gov/AzDWR/ WaterManagement/AMAs/default.htm.] Development At the heart of those regulations was the firm requirement that developers would have to prove that their new-home buyers could rest assured that their taps would never run dry for at least 100 years. The Water developer would have to secure physical, legal and continuous access to water supplies. [See Assured and **Requirements** Adequate Water Supply Program at: www.azwater.gov/AzDWR/WaterManagement/AAWS/default.htm.] Arizona Water Use, Population, and Economic Growth (1957-2013) 10.5 260 240 9.5 220 8.5 200 180 7.5 160 Million (acre-feet or 6.5 140 5.5 120 4.5 3.5 2.5 1.5 0.5 1957 1973 1980 1990 2000 2013 2010 Adjusted Gross Domestic Income ---- Population -* Water Use (Acre-Feet)

Source: ADWR (2013)

	Q. The name of the Act, though, is the "Arizona Groundwater Management Act." What was the new law's
Arizona	<i>Q. The name of the Act, though, is the Arizona Groundwater Management Act. what was the new taws impact on groundwater pumping?</i>
	A. Basically, the law created management goals for each of the active management areas and enshrined
Water	the concept of "safe yield" in the Phoenix, Prescott, and Tucson active-management areas. That means at
"Safe Yield"	least as much water gets replenished underground, usually through one of a variety of methods generally described as "recharge," than what is mined from the ground.
Sale Held	Of the four original active-management areas (there now are five of them), three AMAs operate with
	the objective of achieving safe yield by the year 2025. The Tucson AMA, in fact, has been at or close to
	safe yield consistently for the last several years.
Agriculture	Just one AMA — Pinal — has a different goal in mind. Long a center of agriculture in central Arizona, the mission of the Pinal AMA is to retain its rural, agriculture-centric character for as long as possible while
Goal	still moving toward balance.
Irrigation	Q. So AMAs are a principle feature of the Groundwater Management Act. But what is an "Irrigation Non- Expansion Area?"
Limit	A. There are three existing INAs — the Joseph City INA, the Harquahala INA and the Douglas INA. In
	each of those areas, existing agriculture can continue to pump groundwater, but the amount of irrigated land
	cannot expand. [See INA information at: www.azwater.gov/AzDWR/WaterManagement/AMAs/.]
	Q. Not all of Arizona has been designated either an AMA or an INA. Why is that?
	A. Many regions of the state even now are contemplating how to best deal with their water concerns under
Local	the umbrella of the Groundwater Management Act.
Situations	As part of the Governor's Water Initiative, created by Governor Doug Ducey, Water Resource planners have been helping local residents fashion their own responses to their water-related issues.
	The idea is not to try re-creating a water-management plan that may have worked well in Tucson in,
	say, Willcox. They are two different places and have access to differing water supplies. The department
	works with local residents — the people who know and understand their water supplies best — to try to
	fashion a locally effective solution that may (or may not) include elements of both (or either) AMAs or INAs.
Water Bank	Q. What other "tools" are in the Arizona toolbox?
System	A. Remember, scarcity is the mother of innovation. One of the most innovative developments in water management in the last 20 years has been the creation of a "water bank" system.
	management in the fast 20 years has been the creation of a water bank system.
der and a second se	Ω How are water banks used in Arizona?



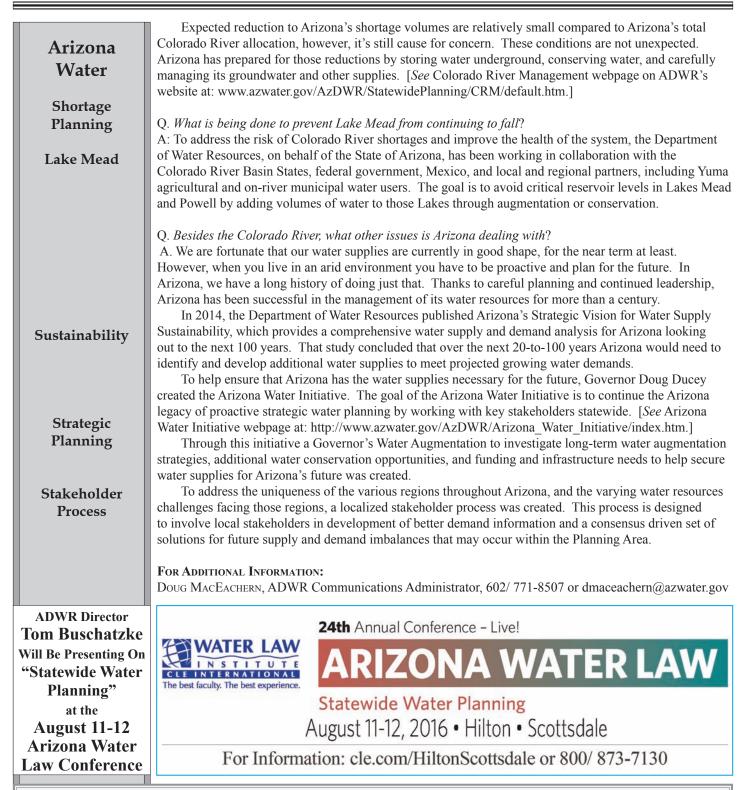
A. We see Arizona's water bank as a hedge against the possibility of future Colorado River delivery shortages.

The Arizona Water Banking Authority effectively has created an underground savings account of water. Since it began in 1996, the Water Bank has recharged in various underground aquifers over 4 million acre-feet of water, including 600,000 acre-feet that the Water Bank has stored on behalf of Nevada. [See Arizona Water Bank Authority website at: http://www.azwaterbank.gov/default.htm.]

As a thought experiment, try likening Arizona's annual 2.8 million acre-foot allotment of Colorado River water to a person's annual income. A wise wage-earner finds a way to squirrel away a portion of that pay for safekeeping. That is what the water bank does. It saves for a rainless day.

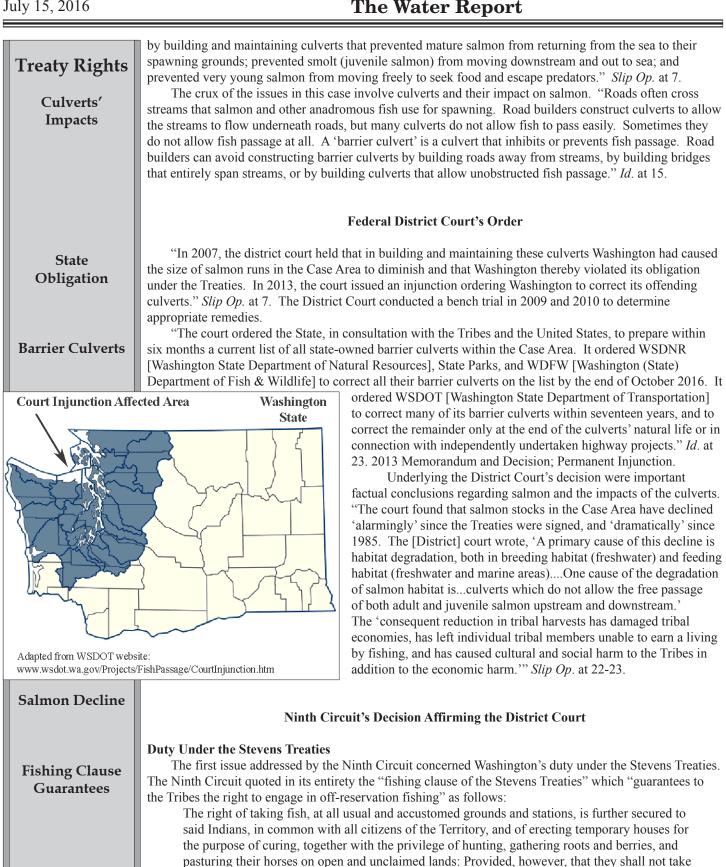
Q. Drought on the Colorado River is the focus of may news stories lately, how do these conditions impact Arizona?

A. The Colorado River supplies forty percent of Arizona's total water use. This major system, which provides water to some 40 million people and spans across seven states, has experienced extensive drought conditions for the past 16 years. This has resulted in Lake Mead dropping to historically low reservoir levels. Most recent projections show a probability of shortage is increasingly likely over the next 5 years.



Tom Buschatzke is the Director of the Arizona Department of Water Resources (ADWR). Prior to becoming the Director, Tom was the City of Phoenix's Water Resources Management Advisor, where he was responsible for policy development for management of the City's water resources and working with City executive staff, the City Manager, the Mayor, and members of City Council on a variety of water issues. Mr. Buschatzke also served as the City's liaison with the Salt River Project, the Central Arizona Project and the Arizona Department of Water Resources. Mr. Buschatzke has also served on the Board of Director's of the Western Urban Water Coalition and as Chair of their Endangered Species Act Committee. He is a member of the Colorado River Water User's Association; American Water Resources Association; and was on the Governor's Colorado River Advisory Council. Mr. Bushatzke also was appointed by then Governor Napolitano to sit on the Arizona Water Banking Authority. Mr. Buschatzke's career in Arizona water resources began in 1982 with the ADWR, and he became a Program Manager in the Adjudications Division. He began working for the City of Phoenix in 1988 as a Hydrologist in the Law Department where he provided assistance to City management and attorneys on issues relating to the City's water rights, water use, and water supply. Tom holds a Bachelor of Science Degree in Geology from the State University of New York and has taken Master Degree level courses in Geology at Arizona State University.

Treaty Rights	CULVERT CASE: NINTH CIRCUIT DECISION TRIBAL TREATY FISHING RIGHTS UPHELD STATE DUTY TO PROTECT SALMON FISHERY
	by David Moon, Editor
	Introduction
Habitat Protection	In a landmark decision, a three judge panel of the Ninth Circuit Court of Appeals (Ninth Circuit or Court) unanimously ruled on June 27th that Native American Tribes not only have a treaty right to fish for salmon, but also that the State of Washington must restore habitat by replacing hundreds of culverts that block salmons' access to spawning streams. <i>United States v. Washington</i> , Case No. 13-35474 (June 27, 2016). The precedents set by the decision could have significant ramifications for the state and federal governments due to its recognition that treaty rights for fishing necessarily include a right to a healthy fishery.
District Court Upheld	The Ninth Circuit, with Judge William Fletcher authoring the opinion, affirmed the federal district court's order and upheld a permanent injunction imposed by that court, which established a schedule and priority for repairing and replacing State culverts on streams in the State of Washington (<i>see</i> Love & Zentz, <i>TWR</i> #81; and Moon, <i>TWRs</i> #110 & #120). The Ninth Circuit decision resoundingly rejected the arguments asserted by the State of Washington on both factual issues and legal positions and found that the State's culverts violated — and continue to violate — the Tribes' treaty rights under the "Steven Treaties."
	Background
Stevens Treaties	The Ninth Circuit noted the historical underpinnings of this case: "In 1854 and 1855, Indian tribes in the Pacific Northwest entered into a series of treaties, now known as the 'Stevens Treaties,' negotiated by Isaac I. Stevens, Superintendent of Indian Affairs and Governor of Washington Territory. Under the Stevens Treaties ('Treaties') at issue in this case, the tribes relinquished large swaths of land west of the Cascade Mountains and north of the Columbia River drainage area, including the Puget Sound watershed,
Fishing Clause	the watersheds of the Olympic Peninsula north of the Grays Harbor watershed, and the offshore waters adjacent to those areas (collectively, the 'Case Area'), in what is now the State of Washington. In exchange for their land, the tribes were guaranteed a right to off-reservation fishing, in a clause that used essentially identical language in each treaty. The 'fishing clause' guaranteed 'the right of taking fish, at all usual and accustomed grounds and stationsin common with all citizens of the Territory.''' <i>Slip Op.</i> at 6. Also noted by the Ninth Circuit, "[f]or over a hundred years, there has been conflict between Washington and the Tribes over fishing rights under the Treaties.'' <i>Slip Op.</i> at 7. In 1970, "in an effort to resolve the persistent conflict between the State and the Indians, the United States brought suit against
Continuing Jurisdiction	the State on behalf of the Tribes." <i>Id.</i> at 14. That case, which involves determining the scope of the Tribes' treaty fishing rights, has been active off and on since 1970. It has come to be known as the "Boldt decision" after the original Judge in the case (District Judge George H. Boldt). In Phase I of the case, Judge Boldt held that the Stevens Treaties gave the Tribes the right to take up to 50% of the "harvestable" fish, based on the phrase "the right of taking fishin common with all citizens" <i>United States v. Washington</i> , 384 F. Supp. 312, 343 (W.D. Wash. 1974). The district court also authorized the parties to invoke the court's continuing jurisdiction to resolve continuing disputes.
Protection for Fish Supply	The US Supreme Court affirmed that treaty fishing right, stating that fifty percent was a ceiling rather than a floor and that the fishing clause guaranteed "so much as, but no more than, is necessary to provide the Indians with a livelihood — that is to say, a moderate living." <i>Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n</i> , 443 U.S. 658, 686 (1979) (<i>Fishing Vessel</i>). The Ninth Circuit cited this language, before further clarifying the reach of the decision: "In accordance with its standard practice of interpreting Indian treaties in favor of the tribes, the Court [Supreme Court] interpreted the clause as promising protection for the tribes' supply of fish, not merely their share of the fish." <i>Slip Op.</i> at 16. The <i>Slip Opinion</i> sets out additional details concerning the history of the Boldt decision. In 2001, the Treaty Tribes of western Washington initiated the current case as a subproceeding of the longstanding <i>United States v. Washington</i> litigation. The United States joined in the Tribes' Request. The Tribes contended that "Washington State…had violated, and was continuing to violate, the Treaties



Washington's Position

Id. at 24.

The Ninth Circuit then noted Washington's position on this issue: "Washington concedes that the clause guarantees to the Tribes the right to take up to fifty percent of the fish available for harvest, but it contends that the clause imposes no obligation on the State to ensure that any fish will, in fact, be available."

shell fish from any beds staked or cultivated by citizens.

	Washington took a hard line approach on this pivotal issue — as prominently noted by the Ninth
Tuester Dista	Circuit — maintaining that there was "no basis in the plain language or historical interpretation of the
Treaty Rights	Treaties" for the treaty right the Tribes were asserting. Washington also maintained in its briefing that
T (* /	"the right of taking fish in common with all citizens does not include a right to prevent the State from
Treaties'	making land use decisions that could incidentally impact fish. Rather, such an interpretation is contrary
Purpose?	to the treaties' principal purpose of opening up the region to settlement." Brief at 27-28. Slip Op. at 24-25
	(emphasis added).
	The Ninth Circuit opinion went on the highlight what it clearly viewed as an extreme position:
	"Washington contended that it has the right, consistent with the Treaties, to block every salmon-bearing stream feeding into Puget Sound" The Ninth Circuit cited an exchange during oral argument between
State	the Court and Washington's coursel to illustrate the point.
Contentions	The Court: Would the State have the right, consistent with the treaty, to dam every salmon
Contentions	stream into Puget Sound?
	Answer: Your honor, we would never and could never do that
	The Court: I'm asking a different question. Would you have the right to do that under the
	treaty? Answer: Your honor, the treaty would not prohibit that[.]
	The Court: So, let me make sure I understand your answer. You're saying, consistent with
	the treaties that Governor Stevens entered into with the Tribes, you could block every salmon
	stream in the Sound?
	Answer: Your honor, the treaties would not prohibit that[.]
	Id. at 25-26.
	The Ninth Circuit discussed how treaties between the United States and Indian tribes should be construed in favor of the Indians, beginning at page 26 of the <i>Slip Opinion</i> . The Ninth Circuit then quoted
	the US Supreme Court from its 1979 decision that previously affirmed the "Boldt decision:"
	[I]t is the intention of the parties, and not solely that of the superior side, that must control
Treaty Parties' Intentions	any attempt to interpret the treaties. When Indians are involved, this Court has long
Intentions	given special meaning to this rule. It has held that the United States, as the party with the
	presumptively superior negotiating skills and superior knowledge of the language in which
	the treaty is recorded, has a responsibility to avoid taking advantage of the other side. "[T]he treaty must therefore be construed, not according to the technical meaning of its
	words to learned lawyers, but in the sense in which they would naturally be understood by
	the Indians." Jones v. Meehan, 175 U.S. 1, 11. This rule, in fact, has thrice been explicitly
	relied on by the Court in broadly interpreting these very treaties in the Indians' favor.
	<i>Fishing Vessel</i> , 443 U.S. at 675–76. Citations omitted.
Treaties'	The complete rejection of Washington's interpretation of the Treaties was evident from the Ninth Circuit's finding on this issue. "Washington has a remarkably one-sided view of the Treaties. In its brief,
Principal	Washington characterizes the 'treaties' principal purpose' as 'opening up the region to settlement.' Brief at
Purpose	29. Opening up the Northwest for white settlement was indeed the principal purpose of the United States.
	But it was most certainly not the principal purpose of the Indians. Their principal purpose was to secure a
	means of supporting themselves once the Treaties took effect." <i>Slip Op.</i> at 28.
	The Ninth Circuit laid out some of the history surrounding the Stevens Treaties and the intention of the
	parties to those Treaties, before arriving at its conclusion. "The Indians did not understand the Treaties to promise that they would have access to their usual and accustomed fishing places, but with a qualification
Tribes'	that would allow the government to diminish or destroy the fish runs. Governor Stevens did not make,
Understanding	and the Indians did not understand him to make, such a cynical and disingenuous promise. The Indians
Chacistanang	reasonably understood Governor Stevens to promise not only that they would have access to their usual and
	accustomed fishing places, but also that there would be fish sufficient to sustain them. They reasonably
	understood that they would have, in Stevens' words, 'food and drink forever.''' <i>Id.</i> at 29. This interpretation of the Stevens Treaties by the Ninth Circuit is important, but the Court also went on
Treaty Promises	This interpretation of the Stevens Treaties by the Ninth Circuit is important, but the Court also went on to essentially expand on its ruling by stating that crucial inferences flow from treaty promises. "Thus, even
&	if Governor Stevens had made no explicit promise, we would infer, as in <i>Winters</i> and <i>Adair</i> , a promise to
Inferences	'support the purpose' of the Treaties. That is, even in the absence of an explicit promise, we would infer
	a promise that the number of fish would always be sufficient to provide a 'moderate living' to the Tribes.
	<i>Fishing Vessel</i> , 443 U.S. at 686. Just as the land on the Belknap Reservation would have been worthless
	without water to irrigate the arid land, and just as the right to hunt and fish on the Klamath Marsh would have been worthless without water to provide habitat for game and fish, the Tribes' right of access to their
	usual and accustomed fishing places would be worthless without harvestable fish." <i>Id.</i> at 31.

Treaty Rights Factual Basis	The Ninth Circuit found that Washington "acted affirmatively to build and maintain…barrier culverts within the Case Area [that] block approximately 1,000 linear miles of streams suitable for salmon habitat, comprising almost 5 million square meters." <i>Id.</i> at 31. The Court also found that, "Salmon now available for harvest are not sufficient to provide a 'moderate living' to the Tribes. <i>Fishing Vessel</i> , 443 U.S. at 686." This formed the basis of the Ninth Circuit's conclusion "that in building and maintaining barrier culverts within the Case Area, Washington has violated, and is continuing to violate, its obligation to the Tribes under the Treaties." <i>Id.</i> at 33.
Treaty Abrogation Requirement	 Waiver by the United States Asserted Washington asserted a defense of "waiver" based on actions and inactions by various agencies of the United States, which according to Washington led the State to believe that its barrier culverts did not violate the Stevens Treaties and that its other actions were sufficient for Washington "to conclude that it had satisfied any treaty obligations." <i>Id.</i> at 34. <i>See</i> discussion of details and law, <i>Id.</i> at 33-36. The Ninth Circuit, however, rejected this defense due to the strength of the Tribes' treaty rights. "The United States may abrogate treaties with Indian tribes, just as it may abrogate treaties with fully sovereign nations. However, it may abrogate a treaty with an Indian tribe only by an Act of Congress that 'clearly express[es an] intent to do so.' <i>Minnesota v. Mille Lacs Band of Chippewa Indians</i>, 526 U.S. 172, 202 (1999). Congress has not abrogated the Stevens Treaties. So long as this is so, the Tribes' rights under the fishing clause remain valid and enforceable. The United States, as trustee for the Tribes, may bring suit on their behalf to enforce the Tribes' rights, but the rights belong to the Tribes." <i>Slip Op.</i> at 34.
United States' Violations	Counterclaim Against the United States for Violations of the Treaties Washington filed a "cross-request" — essentially a counterclaim — against the United States. They asserted that the US' construction and maintenance of culverts on its own land would also be a violation of the Stevens Treaties. "Washington contended that an injunction requiring it to correct its barrier culverts, while leaving undisturbed those of the United States, imposed a disproportionate and therefore unfair burden on the State." <i>Id.</i> at 37. Washington then pushed further by requesting an injunction that would require the US to fix all its barrier culverts <i>before</i> Washington would be required to repair or remove any of its culverts.
Sovereign Immunity	The Ninth Circuit affirmed the District Court's rulings that the cross-request was barred by sovereign immunity and secondly, that Washington did not have standing to assert treaty rights belonging to the Tribes. "The United States enjoys sovereign immunity from unconsented suits." <i>Id.</i> at 37.
"Recoupment"	Washington attempted to get around sovereign immunity by claiming that the relief it sought is "recoupment." Eventually, the Ninth Circuit ruled that the request did "not qualify as a claim for recoupment and is barred by sovereign immunity." This was based on its finding that one of the criteria for recoupment is that it be a monetary claim and that no cases could be found where "the term recoupment has been applied to non-monetary relief such as an injunction." <i>Id.</i> at 39. The Ninth Circuit's findings in regard to the legal issue of "standing" provide interesting implications for the future. The standing issue involved whether or not Washington had any legal rights that it could assert against the US. "Washington seeks an injunction requiring the United States to correct its barrier culverts on the ground that the United States is bound by the Treaties in the same manner and to the same degree as the State. Washington is, of course, correct that the United States is bound by the Treaties." <i>Id.</i> Following that finding regarding the US' duty based on the Treaties, the Ninth Circuit made a finding
US Violations Tribes' Rights	regarding US violations before ultimately concluding that the State of Washington cannot assert Tribal rights. "Our holding that Washington has violated the Treaties in building and maintaining its barrier culverts necessarily means that the United States has also violated the Treaties in building and maintaining its own barrier culverts. However, any violation of the Treaties by the United States violates rights held by the Tribes rather than the State. The Tribes have not sought redress against the United States in the
Specific Remedies	 proceeding now before us." <i>Id.</i> at 39. Appropriate Remedies Ordered by the Injunction Beginning at page 40 of the Slip Opinion the Ninth Circuit discusses in detail the facts of the case regarding the "barrier culverts" and the specific requirements that the District Court ordered in its injunction for an appropriate remedy. "Washington declined to participate in the formulation of the injunction on the ground that it had not violated the Treaties and that, therefore, no remedy was appropriate. Washington now objects on several grounds to the injunction that was formulated without its participation." <i>Id.</i> at 42-43.

Treaty Rights objections. However, it is safe to say that the Ninh Circuit du not find Washington's various as to be persuasive. First, addressing the issue of the breadth of the Injunction, the Ninh Circuit qu contentions from Washington's Brief. "Ithe Tribes presented no evidence that state-owned culverts are a significant cause of the decline [in salmon] Despite that complete failure of proof, the district court 'ordered replacement of nearly every state-owned barrier culvert within the case area without any specific showing those culverts have a significant total impact on salmon production" Brief at 50 (emph in original). Washington contends, further, that the district court 'ordered replacement of nearly every state-owned barrier culverts with the case area without any specific showing those culverts have significantly diminished fish runs or tribal fisheries, or that replacing to will meeningfully improve runs." Id. Immediately following this quote, the Ninh Circuit curty stated, 'Washington misrepresents the amischaracterizes the district court's other. In the next paragraph, the Court continued. 'Court be state's contention, the Tribes presented extensive evidence in support its view of the culverts' imp Op. at 43. 'Witnesses at trial repeated/y described benefits to salmon resulting from correction curvers'. ''. Id: 44: S. Additional levidence from the District Court's bench trial was a subst adverse effect on salmon. The record courts bare evidence, much of if from the Sti is 60 (our 's bench trial washington 's contention that the Tribes 'presented no evidence, that there was a 'sompted failure of proof,'' that state-owned barrier culvert's have a subst adverse effect on salmon. The record courts state 's active of a further district ourt's bench trial curver divery every state-owned barrier culvert's with at a state the state the state to evidence, what has bar that the state 's o	ton's assertions
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Equity Favors TribesUltimately, the Court turned back to Judge Martinez' District Court ruling regarding "equity" in the The balance of hardships tips steeply toward the Tribes in this matter. The promise made the Tribes that the Stevens Treaties would protect their source of food and commerce was 	le to as State of

Treaty Rights Impacts on State?	Washington also raised an objection about the intrusion into state government operations the District Court's requirement would compel. Again, the Court quoted from Washington's Brief for its assertion that "there was no need for the court to issue a detailed and expensive injunction that sets an inflexible and tight schedule for culvert repair." Brief at 63–64. Washington also implied that "the cost of complying with the court's order will oblige the State to cut other important state programs" specifically mentioning "health insurance for low income workers, K-12 schools, higher education, and basic aid for persons unable to work." Brief at 58.
Cost Estimates Overstated	The Court pointed to the District Court's conclusion that due to the "State's slow rate of barrier correction, the court concluded that 'under the current State approach, the problem of WSDOT barrier culverts in the Case Area will never be solved." <i>Slip Op.</i> at 56. The Ninth Circuit again found fault with Washington's cost estimates. "The district court also disagreed with the [sic] Washington's cost estimates. As seen above, Washington's estimate of its cost to comply with the court's order ('roughly \$100 million per year' more than it would otherwise spend) is dramatically overstated." Washington also asserted that "Federalism Principles" are violated by the injunction. The Court concluded that the District Court's injunction did not violate the broad principles asserted by Washington and specifically relied on the US Supreme Court's rejection of "federalism-based objectives to the injunctions enforcing the Treaties" in the <i>Fishing Vessel</i> case, citing 443 U.S. at 695 (1979).
	Conclusion
Expansion of Fishing Rights	"In sum, we conclude that in building and maintaining barrier culverts Washington has violated, and continues to violate, its obligation to the Tribes under the fishing clause of the Treaties. The United States has not waived the rights of the Tribes under the Treaties, and has not waived its own sovereign immunity by bringing suit on behalf of the Tribes. The district court did not abuse its discretion in enjoining Washington to correct most of its high-priority barrier culverts within seventeen years, and to correct the remainder at the end of their natural life or in the course of a road construction project undertaken for independent reasons." <i>Slip Op.</i> at 59. The Ninth Circuit's decision is clearly a resounding victory for the Tribes, with its recognition that a right to fish at the usual and accustomed places is of no value unless there are fish there to catch. Finding that a duty exists for the State to restore habitat by replacing and maintaining the culverts — and that the US also has violated the Stevens Treaties with its culverts as well — has resulted in a significant expansion of the interpretation of the Tribes' treaty fishing rights. With the decision in hand, it will be interesting to see how the Tribes will question other activities that significantly impact salmon and their habitat. The ramifications of the Court's statement that the US has violated the Stevens Treaties also remain to be seen. FOR ADDITIONAL INFORMATION: DAVID MOON, The Water Report, 541/ 485-5350 or thewaterreport@yahoo.com DECISION AVAILABLE AT: https://cdn.ca9.uscourts.gov/datastore/opinions/2016/06/27/13-35474.pdf
	David Moon, Co-Editor of The Water Report, is an attorney who has specialized in water law for over 30 years, practicing in Montana and Oregon. Mr. Moon is also a seasoned journalist, who for over 20 years has reported regularly on evolving water law issues. Moon graduated from Colorado College in 1975 and received his J.D. from the University of Idaho in 1979. He is a member of the Montana and Oregon BARs and was formerly a member of the Idaho BAR. While in college, David spent four summers on the maintenance crew for the National Park Service at Old Faithful.

WATER BRIEFS

"ACCOMMODATION" GROUNDWATER RULING

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On May 27, the Texas Supreme Court (Court) held that the accommodation doctrine applies as between a landowner and the owner of an interest in the groundwater. Coyote Lake Ranch, LLC v. City of Lubbock, Case No. 14-0572 (May 27, 2016). The accommodation doctrine previously only applied in oil and gas severance in Texas. The accommodation doctrine was defined by the Court: "Absent an agreement to the contrary, an oil-andgas lessee has an implied right to use the land as reasonably necessary to produce and remove the minerals but must exercise that right with due regard for the landowner's rights." Slip Op. at 1.

Plaintiff Coyote Lake Ranch (Ranch), a 26,600-acre ranch in Bailey County, Texas, is used primarily for agriculture, raising cattle and recreational hunting, with some irrigated cropland. The ranch's water comes from the Ogallala Aquifer. In 1953, the City of Lubbock (City) purchased the Ranch's groundwater for its own and other towns' water supply. "The Ranch deeded its groundwater to the City, reserving water for domestic use, ranching operations, oil and gas production, and agricultural irrigation. For irrigation, the deed allows the Ranch to drill only one or two wells in each of 16 specified areas. The deed contains lengthy, detailed provisions regarding the City's right to use the land...." Id. at 2-3.

In 2012, the City announced plans to dramatically increase water-extraction efforts and the Ranch "objected that the proposed drilling program would increase erosion and injure the surface unnecessarily." The City, however, claimed that it was acting within its broad rights as laid out in the deed. The City began mowing extensive paths for its drilling activities and the Ranch sued to stop the City's actions. *Id.* at 4.

The parties' positions were succinctly set out by the Court. "The Ranch pleaded in part that the City 'has a contractual and common law responsibility to use only that amount of surface that is reasonably necessary to its operations' and 'a duty to conduct its operations with due regard for the rights of the surface owner.' The City contended that it has full rights under its deed to pursue its plans and that the law imposes no duty on groundwater owners, as it does on mineral owners, to accommodate the surface owner." *Id.* at 5.

The Court did find that "[t]he City's deed governs its use of the Ranch's land to access and remove groundwater." *Id.* at 7. However, the Court also found that the deed did not resolve the underlying dispute because it was silent on the subject. "But the deed leaves unclear whether the City can do everything necessary or incidental to drilling anywhere, as it claims, or only what is necessary or incidental to fully access the groundwater, as the Ranch argues." *Id.* at 8.

The Court highlighted the parameters of the accommodation doctrine. "Texas law has always recognized that a landowner may sever the mineral and surface estates and convey them separately. The severed mineral estate has the implied right to use as much of the surface estate as reasonably necessary to produce and remove minerals." Id. at. 9. The Court also pointed out that a key principle underlying the accommodation doctrine is that the (severed) mineral and surface estates "must exercise their respective rights with due regard for the other's." Id. at 10. "The burden is on the surface owner to prove that the mineral estate's use is not reasonably necessary." Id. at 11.

Eventually, the Court turned its attention to the groundwater aspect. "We have applied the doctrine only when mineral interests are involved. But similarities between mineral and groundwater estates, as well as in their conflicts with surface estates, persuade us to extend the accommodation doctrine to groundwater interests." Id. at 14. The Court noted those similarities: "Groundwater and minerals both exist in subterranean reservoirs in which they are fugacious. An interest in groundwater can be severed from the land as a separate estate, just as an interest in minerals can be. A severed groundwater estate has the same right to use the surface that a severed mineral estate does. Both groundwater and mineral estates are subject to the rule of capture. And both are protected from waste." (citations omitted). Id. at 14-15.

The Court weighed other considerations, which included discussing the differences between

dominant and servient estates. Finally, the Court held "that the accommodation doctrine applies to resolve conflicts between a severed groundwater estate and the surface estate that are not governed by the express terms of the parties' agreement. As stated in Merriman, the surface owner must prove that (1) the groundwater owner's use of the surface completely precludes or substantially impairs the existing use, (2) the surface owner has no available, reasonable alternative to continue the existing use, and (3) given the particular circumstances, the groundwater owner has available reasonable, customary, and industry-accepted methods to access and produce the water and allow continuation of the surface owner's existing use." Id. at 17. For info: Decision at: www.txcourts. gov/media/1378439/140572.pdf

NEW MEX V. COLO CO/NM MINE WASTE SPILL SUIT

On June 23, New Mexico Attorney General Hector Balderas and Governor Susana Martinez announced New Mexico filed a lawsuit in the US Supreme Court with the New Mexico Environment Department to hold Colorado responsible for the downstream contamination of the Animas and San Juan watersheds in New Mexico that was allegedly caused by continuing acid mine drainage and the 2015 Gold King Mine waste spill. In addition to Colorado's role in the Gold King Mine release, New Mexico is asserting that Colorado is directly responsible for the hazardous conditions that preceded the catastrophe. New Mexico filed the lawsuit after discussions and negotiations with Colorado failed. "The Gold King Mine release is the result of two decades of disastrous environmental decisionmaking by Colorado, for which New Mexico and its citizens are now paying the price," said Attorney General Hector Balderas. "New Mexicans rely on the Animas and San Juan Rivers for drinking water, ranching, farming, tourism and much more, so our communities must be compensated and protected from future health and safety risks."

Colorado authorized the risky strategy of plugging mining tunnels with bulkheads to attempt to control acid mine wastewater drainage, according to New Mexico. Following the August 5, 2015 Gold King Mine blowout, Colorado downplayed the effects of the three million gallon toxic spill into the Animas and San Juan rivers flowing southwest through New Mexico and Utah. New Mexico Environment Department Secretary Ryan Flynn said, "Colorado was fully aware of the enormous risks to downstream communities associated with their failed strategy of plugging drainage tunnels. They, essentially, authorized the transformation of Colorado mines into an enormous wastewater storage facility, ready to burst. We're fighting for New Mexicans to hold Colorado accountable for their short-sighted and reckless actions."

In a June 23 press release, New Mexico officials noted that federal government agencies pointed toward Colorado when examining the causes of the Gold King Mine Spill. Although EPA officials initially claimed responsibility for the Gold King Mine blowout, they zero in on Colorado's Division of Reclamation and Mine Safety (DRMS) at critical decision points in their Addendum to EPA's Internal Review of the Gold King Mine Incident. Describing the excavation that caused the blowout, EPA states, "Excavation was...a decision to be made by the EPA OSC with advice from qualified and experienced personnel including DRMS staff" and "...with consultation from DRMS as well as contractor support, the team began additional excavation" Similarly, the Department of the Interior's Technical Evaluation of the Gold King Mine Incident describes the error that led to the Gold King Mine failure: "... EPA, in consultation with the Colorado Division of Reclamation, Mining and Safety (DRMS), concluded the adit was partially full of water....It was incorrectly concluded that the water level inside the mine was...a few feet below the top of the adit roof. This error...led directly to the failure." For info: James Hallinan, NMAG's Office, 505/660-2216 or Allison Scott Majure, NM Environment Depart., 505/231-8800; Bill of Complaint at: www.nmag.gov/uploads/FileLinks/ 7f3e6bf7210a4855947655e6a117c918/ New Mexico Bill of Complaint.pdf

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DROUGHT ENFORCEMENT CA STATE ACTIONS DISMISSED

In the last issue of *The Water Report* (#148), a Water Brief reported on the proposed dismissal of administrative drought enforcement actions by the California State Water Resources Board (SWRCB) against Byron-Bethany (BBID) and The West Side Irrigation Districts (WSID). As noted, the dismissals needed to be approved by the full SWRCB at its June 7 meeting.

On June 7, SWRCB adopted an order dismissing the pair of enforcement actions brought against the two water districts alleged to have taken water that was not available due to drought conditions. The Order follows an impartial administrative hearing where two State Water Board members concluded there was not enough evidence to support the allegations.

Responding to the drought, the Division prepared an analysis of the naturally flowing water available in the Sacramento and San Joaquin river watersheds. The analysis included an assessment of the demands being made by water users. In the two enforcement actions, Division staff alleged that the water districts were taking water after Division staff determined water was not available for the districts' senior water rights. After the water districts contested the allegations, SWRCB commenced a public hearing in March in which the Division presented its case against the districts, and two Board members, serving as impartial hearing officers, considered the evidence and arguments. SWRCB issued a draft order on May 26, which was affirmed by the full Board June 7.

"The Board determined that it has the authority to enforce against senior water right holders who take water if there is not an adequate supply for them under the priority system. The Board also concluded, however, that there was not sufficient data presented in this case to show that these particular water districts violated the water rights priority system," said SWRCB Chair Felicia Marcus. SWRCB did not find that there was in fact water available for diversion by the water districts. Rather, because these were enforcement actions, the Division had the burden of proof. SWRCB concluded that the evidence presented by the Division was not adequately explained and supported to

carry its burden to show that there was insufficient water available.

The adopted order clarifies that SWRCB has the authority to impose penalties for diversion or use of water by claimants of senior rights when water is unavailable under the priority of their rights. This authority allows SWRCB to curtail water use and enforce the water rights priority system during drought, or in other circumstances when the water supply is insufficient to satisfy all claimants. In the order, SWRCB found that the forecasting tool the Division used to issue curtailment notices was accurate for that purpose, and "an indispensable planning tool to forecast water availability for categories of rights when shortages are anticipated."

In an effort to improve enforcement protocols related to water use or diversions, SWRCB will be evaluating and refining its water availability methodologies and practices based on lessons learned. Later this year, SWRCB will hold a workshop on best practices for water availability analyses and other regulatory approaches related to administering water rights during shortages.

For info: SWRCB website: www. waterboards.ca.gov/waterrights/board_ info/faqs.shtml

TRIBAL WATER QUALITY AZ MONITORING FUNDING

EPA announced on June 9th that it has awarded the Navajo Nation Environmental Protection Agency \$465,000 for water quality monitoring in the San Juan River. This funding is in addition to \$1 million awarded in October for water quality monitoring and ecological restoration activities throughout the Reservation.

Navajo Nation will use the funds to do additional monitoring in the San Juan River, including sediment sampling and a fish tissue contaminant study. The study will monitor current contaminant levels in fish and focus on potential human health risks associated with fish consumption subsequent to the Gold King Mine release. EPA has allotted \$2 million in grants to states and tribes to develop a better understanding of overall water quality conditions in the Animas-San Juan Basin following the Gold King Mine release.

This funding supports Navajo's monitoring efforts to meet their data

needs and to gather a robust set of data that can be compared to longer-term monitoring results of EPA and other tribes and states in the San Juan River basin. EPA's long-term monitoring plan is available at the website noted below. **For info:** Margot Perez-Sullivan, EPA, 415/ 947-4149, perezsullivan.margot@ epa.gov or www.epa.gov/goldkingmine

GROUNDWATER QUALITY US USGS STUDY & MAPPING TOOL

USGS has released a groundwater quality study and mapper that provides a first of its kind, national assessment of this unseen, valuable resource. About 140 million people — almost one-half of the Nation's population — rely on groundwater for drinking water, and the demand for groundwater for irrigation and agriculture continues to increase. This mapper shows how concentrations of pesticides, nutrients, metals, and organic contaminants in groundwater are changing during decadal periods across the US.

As USGS notes on its website for the "Decadal Change in Groundwater Quality: Comparing 1988-2001 to 2002-2012," tracking changes in groundwater quality and investigating the reasons for these changes is crucial for informing management decisions to protect and sustain valuable groundwater resources.

Groundwater quality data were collected in 5,000 wells between 1988 and 2001 by the National Water-Quality Assessment Project. About 1,500 of these wells were sampled again between 2002 and 2012 to evaluate decadal changes in groundwater quality. Monitoring wells, domestic-supply wells, and some public-supply wells were included in this study. All water was collected before treatment. **For info:** USGS study at: http:// nawqatrends.wim.usgs.gov/Decadal/

OIL & GAS EFFLUENT

PRETREATMENT STANDARDS

In June, EPA established pretreatment standards for the Oil and Gas Extraction Category (40 CFR Part 435). The standards prohibit discharges of wastewater pollutants from onshore unconventional oil and gas (UOG) extraction facilities to publicly owned treatment works (POTWs). The Oil and Gas regulations apply to conventional and unconventional oil and gas extraction with the exception of coalbed

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methane. The regulatory requirements are incorporated into NPDES permits.

UOG extraction wastewater can be generated in large quantities and contain constituents that are potentially harmful to human health and the environment. Wastewater from UOG wells often contains high concentrations of salt content, also called total dissolved solids (TDS). The wastewater can also contain various organic chemicals, inorganic chemicals, metals, and naturallyoccurring radioactive materials. This potentially harmful wastewater creates a need for appropriate wastewater management infrastructure and practices.

Direct discharges of oil and gas extraction wastewater pollutants from onshore oil and gas resources to waters of the US have been regulated since 1979 under Part 435, the majority of which fall under Subpart C, the Onshore Subcategory. The limitations require zero discharge of pollutants. Historically, operators of oil and gas extraction facilities primarily managed their wastewater via underground injection in disposal wells (where available). Where UOG wells were drilled in areas with limited underground injection wells, and/or there was a lack of wastewater management alternatives, it became more common for operators to look to public and private wastewater treatment facilities to manage their wastewater.

Because they are not typical of POTW influent wastewater, some UOG extraction wastewater constituents:

- can be discharged, untreated, from the POTW to the receiving stream
- can disrupt the operation of the POTW (for example, by inhibiting biological treatment)
- can accumulate in biosolids (also called sewage sludge), limiting their use
- can facilitate the formation of harmful disinfection by-products

Based on the information reviewed as part of this rulemaking, UOG operators currently do not send wastewater to POTWs. Given this, and other factors, EPA has established a prohibition on discharges of UOG extraction wastewater pollutants to POTWs. EPA promulgated this regulation because onshore unconventional oil and gas extraction facilities have discharged to POTWs in the past, and because the potential remains that some facilities could discharge to POTWs in the future. **For info:** www.epa.gov/eg/ unconventional-oil-and-gas-extractioneffluent-guidelines

OR

OIL TRAIN BAN?

MORATORIUM REQUESTED

In the wake of an oil train derailment in Oregon on June 3, Oregon's Department of Transportation (ODOT) has requested a moratorium within Oregon on running unit oil trains over sections of track that contain a specific type of track fastener that is believed to be the cause of the accident. On June 8. ODOT's Rail and Public Transit Division sent the letter to the Federal Rail Administrator for Region 8. A 94-tank car Union Pacific train carrying crude oil from the Bakken oil fields in North Dakota derailed in Mosier, Oregon in the Columbia River gorge, engulfing four of the tanker cars in flames.

ODOT noted in the letter that "preliminary indications point to broken Rectangular Head Timber Coach Screws" as the cause of the derailment. "There were a number of broken Rectangular Head Timber Coach Screws found at the accident site, many of which exhibited evidence of having been broken for a significant amount of time prior to the derailment." ODOT also pointed out that "[g]iven the nature of this defect, it was not detectable by normal inspection methods, either physical...or by recent GRMS (Gauge Restraint Measurement System) tests conducted by the Union Pacific Railroad by hyrail." ODOT also pointed out that it is unclear if the broken screws are the result of defects in the metal or manufacturing, "or if the fastening system is insufficient for these types of loads in this vicinity." ODOT was apparently referring to the weight of unit oil trains, which consist entirely of tanker cars carrying oil.

ODOT is requesting the moratorium until the "underlying cause of the bolt failures is understood and, a means of detecting this defect is developed." ODOT, June 8, 2016).

The US Department of Transportation, Federal Railroad Administration, released its "Preliminary Findings Report: Mosier, Oregon; Union Pacific Derailment" (Report) on June 23 blaming Union Pacific for the accident (see weblink below). The Report concluded: "FRA's preliminary investigation determined the Union Pacific derailment was caused by broken lag bolts leading to wide track gauge. FRA's investigation found that multiple lag bolts in this section of Union Pacific track were broken and sheared, leading to tie plates loosening from ties. The loosened tie plates allowed for the rails to be pushed outwards as trains moved across them, eventually resulting in an area of wide gauge, leading to the derailment."

The Report's "Conclusion" went on to note the following: "Unless or until additional details come to light, FRA has made the preliminary determination that Union Pacific's failure to maintain its track and track equipment resulted in the derailment. Broken and sheared lag bolts, while difficult to detect by highrail, are more detectable by walking inspection combined with indications of movement in the rail or track structure and/or uneven rail wear, and are critically important to resolve quickly."

The Report goes on to lay out the actions FRA has undertaken to inspect and ensure safety along the route involved. Finally, the Report stated that "FRA is evaluating potential enforcement actions, including violations, and other actions to ensure Union Pacific's compliance with applicable safety regulations." **For info:** Preliminary Findings Report available at: http://www.fra.dot.gov/ eLib/details/L17964; Melissa Navas, Governor's Office, 503/ 378-6496

BLM FRACKING RULE HELD ILLEGAL BY FED JUDGE

On June 21, US District Court Judge Scott Skavdahl in Wyoming set aside BLM's final rule related to hydraulic fracturing on federal and Indian lands. "Congress has not delegated to the Department of Interior the authority to regulate hydraulic fracturing. The BLM's effort to do so through the Fracking Rule is in excess of its statutory authority and contrary to law." *State of Wyoming and Colorado, et al. v. U.S. Dept. of Interior, et al.,* Case No. 2:I5-CV-043-SWS, page 26 (June 21, 2016).

BLM issued the final version of its regulations on March 26, 2015 and the rule was scheduled to take

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effect on June 24, 2015 before being postponed by the District Court. The rules addressed three aspects of oil and gas development: well-bore integrity, water "produced" during oil and gas operations, and public disclosure of fracking chemicals. As noted in the opinion, each of those three aspects is "subject to comprehensive regulations under existing federal and/or state law." *Slip Op.* at 3.

Judge Skavdahl set forth the determining issue as well as noting what was not involved in his decision. "In this case, the threshold issue before this Court is a Constitutional one — has Congress (the legislative branch) delegated its legal authority to the Department of Interior to regulate hydraulic fracturing. [citation omitted] The issue before this Court is not whether hydraulic fracturing is good or bad for the environment or the citizens of the United States." *Id.* at 2.

The decision relies on examination of the principles concerning delegation of administrative authority and guidance for determining if Congress has directly addressed the question at issue. "Guided by the foregoing principles, the Court finds that Congress has directly spoken to the issue and precluded federal agency authority to regulate hydraulic fracturing not involving the use of diesel fuels." Id. at 9. At that point, the opinion goes into a lengthy discussion of the various statues that the Court felt did directly address the question at issue — BLM's authority to regulate hydraulic fracturing. For info: Decision available at: www. wyd.uscourts.gov/pdfforms/orders/15cv-043-S%20Order.pdf

SALMON-SAFE

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SEA-TAC FIRST "SALMON-SAFE" US AIRPORT

WA

The Seattle-Tacoma International Airport (Sea-Tac) has become the first US airport to achieve Salmon-Safe certification, earned for its environmental practices that protect Puget Sound water quality and salmon habitat.

The designation means that Sea-Tac passed Salmon-Safe's comprehensive third-party evaluation of the airport's land and water management practices, is adopting practices that go above and beyond regulatory requirements, and is committing to further reducing its environmental impact over time. Sea-Tac joins Vancouver International Airport, British Columbia, in receiving this award.

The airport certifications mark Salmon-Safe's growth into industrial properties and large infrastructure projects, expanding from its 15 years of work with farm and urban landowners. Salmon-Safe currently certifies more than 800 urban and rural sites in Oregon Washington and British Columbia, representing 80,000 acres. That includes many Northwest vineyards as well as Nike World Headquarters, the University of Washington Seattle and Bothell campuses, Washington State Department of Ecology's headquarters campus, Vulcan development projects in Seattle, and other institutional and corporate sites.

Actions Sea-Tac took to earn designation:

- Enhancing more than 160 acres of land on and off airport site
- Improving water quality in local streams by treating all airport runoff including the use of filtration strips between runways
- Treating runoff from ramp operations, including aircraft deicing, through onsite wastewater treatment plant
- Reducing stream erosion through controlled release from detention ponds to improve spawning habitat for salmon
- · Eliminating high-hazard pesticide use
- Reducing water consumption throughout the terminal
- Minimizing sediment runoff during construction projects
- Committing to low impact development for the future

The airport occupies approximately 2,500 acres of land within the City of SeaTac, Washington, approximately halfway between Seattle and Tacoma.

Founded in Oregon by river and native fish conservation organization Pacific Rivers, Salmon-Safe is an independent environmental certification nonprofit focused on protection of water quality and wildlife habitat. Salmon-Safe works at urban and agricultural sites across the West Coast through a network of place-based partners, including Stewardship Partners in Washington. Salmon-Safe is based in Portland *(see: salmonsafe.org)*. **For info:** News Release at: www.portseattle. org/Newsroom/News-Releases

WATER BRIEFS

SELENIUM WQ CRITERIA

US

FIRST FISH-TISSUE BASED CRITERION Selenium is a naturally occurring element present in sedimentary rocks, shales, coal, and phosphate deposits and soils. Selenium can be released into water resources by natural sources via weathering and by anthropogenic sources, such as surface mining, coal-fired power plants, and irrigated agriculture. Selenium is a nutritionally essential element for animals in small amounts, but toxic at higher concentrations. Selenium bioaccumulates in the aquatic food chain and chronic exposure in fish and aquatic invertebrates can cause reproductive impairments (e.g., larval deformity or mortality). Selenium can also adversely affect juvenile growth and mortality. Selenium is also toxic to water fowl and other birds that consume aquatic organisms containing excessive levels of selenium.

EPA has published the final updated national chronic aquatic life criterion for the pollutant selenium in freshwater, developed per Clean Water Act section 304(a). The 2016 criterion reflects the latest scientific information, which indicates that selenium toxicity to aquatic life is primarily driven by organisms consuming seleniumcontaminated food rather than by being exposed only to selenium dissolved in water.

This is EPA's first fish-tissue based aquatic life criterion. EPA is recommending a national selenium criterion expressed as four elements. Two elements are based on the concentration of selenium in fish tissue (eggs and ovaries, and whole-body or muscle) and two elements are based on the concentration of selenium in the water-column (two 30-day chronic values and an intermittent value). EPA recommends that when implementing the criterion, the fish tissue elements take precedence over the water column elements, except in certain circumstances.

EPA will release such technical support materials for public comment after the final selenium criterion is published. Materials will include fish tissue monitoring guidance as well as FAQs and fact sheets addressing the flexibility of states and authorized tribes in implementing the criteria, assessing and listing water body impairments, and wastewater permitting. **For info:** Joe Beaman, EPA, beaman. joe@epa.gov EPA website: www.epa. gov/wqc/aquatic-life-criterion-selenium

SELENIUM RULE CA EPA PROPOSAL FOR SAN FRANCISCO BAY ENDANGERED SPECIES AT RISK

On July 1st, EPA proposed a federal Clean Water Act rule to tighten the current selenium water quality criteria for the waters of San Francisco Bay and Delta. The proposed change would better protect aquatic species, including salmon, smelt, and diving ducks, that are dependent on the Bay and Delta ecosystem, from harmful exposure to elevated levels of selenium.

The Bay and Delta support a significant diversity of fish and wildlife species including federally listed threatened and endangered green sturgeon, Chinook salmon, steelhead trout, delta smelt and the California Ridgway's rail, as well as many migratory bird species that use the estuary as a wintering ground.

Selenium levels from agricultural runoff and oil refinery discharges have been reduced due to previous state and federal regulatory requirements. EPA set selenium limits for the Bay and Delta in 1992, yet the latest research on bioaccumulation of selenium indicates that the existing federal criteria of 5 parts per billion are insufficient to protect aquatic and aquatic dependent species in these water bodies. EPA's current proposal calls for more stringent selenium water quality criteria of 0.2 parts per billion, which would be the basis to limit selenium sources through the implementation of state regulations.

Ambient selenium conditions in the Bay and Delta must remain low to sustain healthy populations of fish and wildlife. The population explosion of an invasive clam species, commonly known as Corbula, has resulted in a rapid rate of acceleration of selenium accumulation in the food chain of fish and bird species in the Bay and Delta. EPA scientists considered this fact and the latest science on selenium toxicity and accumulation to determine the new and revised criteria for whole body and muscle fish tissue, clam tissue, and water column concentrations. The proposed rule will be available to the public for a 60-day comment period following publication in the Federal Register. EPA will also host a virtual public hearing on August 22, and in-person public hearings in its San Francisco office on August 23. **For info:** Michele Huitric, EPA, Huitric.Michele@epa.gov; website: www.epa.gov/wqs-tech (Announcments)

WATERSENSE ACHIEVEMENTS NOTED

US

Since EPA launched the WaterSense program 10 years ago, Americans have saved \$32.6 billion in water and energy bills and 1.5 trillion gallons of water, which is more than the amount of water needed to supply all of the homes in California for a year. More than 1,700 utilities, local governments, manufacturers, retailers, distributors, builders, and other organizations have partnered with EPA to produce and promote water-efficient products, programs, and homes.

WaterSense labeled products, which are independently certified to use at least 20 percent less water and perform as well or better than standard models, have been on the market since 2007 when toilets first earned the label. Since then, the number of labeled models has grown to more than 16,000, including products found in residential and commercial bathrooms, commercial kitchens, and for outdoor irrigation.

In addition to saving water, WaterSense labeled products save the energy associated with treating, pumping, and heating water. Since 2006 WaterSense labeled products saved the energy equal to the amount used to power 19.4 million homes for a year while preventing 78 million metric tons of associated greenhouse gas emissions.

EPA's WaterSense program also certifies homes with WaterSense labeled fixtures and features. Compared to a typical home, a WaterSense labeled home can save a family an estimated 50,000 gallons of water a year, which is enough water to wash 2,000 loads of laundry and could curb utility bills up to \$600. To date more than 700 homes have earned the WaterSense label. **For info:** Julia Valentine, EPA, valentine.julia@epa.gov WaterSense website: www.epa. gov/watersense

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CALENDAR

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July 13-15NDWestern States WaterCouncil Summer (181st)Council Meeting, Bismarck.Radisson Hotel. For info:http://www.westernstateswater.org/upcoming-meetings/

July 14-15 NM

Natural Resources Damages Seminar, Santa Fe. La Fonda Santa Fe Hotel. For info: Law Seminars Int'l, 800/ 854-8009, registrar@lawseminars.com or www.lawseminars.com

July 18-19 WA Washington Water Law Seminar, Seattle. WA State Convention Ctr. For info: Law Seminars Int'1, 800/ 854-8009, registrar@lawseminars.com or www.lawseminars.com

July 18-19 CO Endangered Species Act, Wetlands, Stormwater & Floodplain Regulatory Compliance for Utilities, Denver. Hyatt Regency Denver Tech Center. Presented by EUCI. For info: events@eucievents.com

July 21 DC
Hazardous Waste & Sites
Course, Washington.
Environmental Law Institute,
1730 M Street NW, Ste. 700. For
info: www.eli.org/events/

July 21 CA & WEB Improving California's Water Accounting - Event & Webcast, Sacramento. Capitol Event Center, 1020 11th Street, 2nd Floor, Noon-1:30pm. Presented by PPIC Water Policy Center; Register by 7/14. For info: www. ppic.org/main/event.asp?i=2077

July 21-23 CA Rocky Mt. Mineral Law Foundation 62nd Annual Institute, Squaw Valley. The Resort at Squaw Creek. For info: www.rmmlf.org

July 22 HI Hawaii Water Law, Honolulu. Hilton Waikiki Beach. For info: The Seminar Group, 800/ 574-4852, info@theseminargroup.net or www.theseminargroup.net <u>July 28</u>

Pacific Northwest Environmental Summit - 1st Annual, Seattle. Washington Athletic Club. Presented by Environmental Business Int'l, 2020 Environmental Group, in association with the Northwest Environmental Business Council. For info: http://www. environmentalbusiness.org/ #!pacific-northwest-summit/goucr

August 2-4MTInstitute for TribalEnvironmental Professionals(ITEP)Training: ClimateChange Adaptation Planning,Billings. For info: Sue Wotkyns,ITEP, 928/ 523-1488, Susan.Wotkyns@nau.edu or www7.nau.edu/itep/main/Training/training_cc

August 3TXDam Safety Workshop, Denton.University of North Texas inUniversity Union, 1155 UnionCircle, 8am-2pm. Presented byTCEQ. For info: Natalie Myhra,512/ 239-3143 or events@tceq.texas.gov

August 3-5IDWestern Water Seminar, SunValley. Sun Valley Resort.Presented by National WaterResources Ass'n. For info: www.nwra.org/upcoming-conferences-workshops.html

August 11ID2016 Tribal Water RightsWorkshop: Marketing ofWater Rights to Create TribalBenefits, Fort Hall. Sho BanHotel & Events Ctr. Hosted bythe Shoshone-Bannock TribalWater Resources Dept. Forinfo: Elese Teton, Tribal WaterResources Dept., 208/ 239-4580 or www.waterexchange.com/tribal-water-rights-workshop/

August 11-12AZArizona Water LawConference: "Statewide WaterPlanning", Scottsdale. HiltonScottsdale Resort & Villas. Forinfo: CLE Int'l, 800/ 873-7130 orwww.cle.com

 August 22-25
 IN

 Stormcon - 15th Annual Surface

 Water Quality Conference &

 Expo, Indianapolis. Indiana

 Convention Center. For info:

 www.stormcon.com/

August 23-25OH13th Annual U.S. DrinkingWater Workshop, Cincinnatti.Hyatt Regency. Presented by EPA& Ass'n of State Drinking WaterAdministrators; Must Register byAugust 12. For info: http://tiny.cc/EPADWW

August 24-26COColorado Water CongressSummer Conference, SteamboatSprings. Sheraton SteamboatResort. For info: http://www.cowatercongress.org/summer-conference0.html

August 29-31MNInternational Low ImpactDevelopment Conference,Portland. Holiday Inn PortlandBy the Bay. Organized byEnvironmental & WaterResources Institute of theAmerican Society of CivilEngineers - Urban WaterResources Research Council. Forinfo: http://www.lidconference.org/about/

September 7 TX Pollution Prevention Waste Management Workshop, Austin. J.J. Pickle Center, 10100 Burnet Road, Bldg. 137. Presented by TCEQ. For info: www.tceq. texas.gov/p2/events/pollutionprevention-waste-managementworkshop-2

September 8-9ORConnecting the Dots:Groundwater, Surface Water& Climate Connections- Conference, Portland. RedLion Hotel on the River - JantzenBeach. Presented by NationalGroundwater Association. Forinfo: http://www.ngwa.org/Events-Education/conferences/Pages/5029sep16.aspx

September 9NMWildlife & Endangered Specieson Public & Private Lands,Albuquerque. 5121 MastheadN.E.. Course Presented by theState Bar of New Mexico. Forinfo: www.nmbar.org/nmstatebar/CLE/Events/Event_Display.aspx?EventKey=AL16

September 11-14FL31st Annual WateReuseSymposium, Tampa.Tampa Marriot WatersideHotel & Marina. Forinfo: https://watereuse.org/news-events/conferences/

September 12-13IDWater Law in Idaho Seminar,Boise. The Owyhee. For info:Law Seminars Int'l, 800/ 854-8009, registrar@lawseminars.comor www.lawseminars.com

September 12-14CAStormwater Evolution: Sourceto Resource - 2016 CASCATwelfth Annual Conference,San Diego. Paradise Point.Presented by CaliforniaStormwater Quality Ass'n. Forinfo: www.CASQA.org

September 13OHOhio Surface WaterConference, Columbus.Renaissance Downtown. Forinfo: CLE Int'1, 800/ 873-7130 orwww.cle.com

September 13-15NEInstitute for TribalEnvironmental Professionals(ITEP)Training: ClimateChange Adaptation Planning,Nebraska City. For info:Sue Wotkyns, ITEP, 928/523-1488, Susan.Wotkyns@nau.edu or www7.nau.edu/itep/main/Training/training_cc

September 14WAEmerging Issues in WaterQuality Regulations, Seattle.Motif Seattle. For info: TheSeminar Group, 800/ 574-4852,info@theseminargroup.net orwww.theseminargroup.net



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CALENDAR -

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September 14-15COChallenging & DefendingFederal Natural ResourceAgency Decisions Institute,Westminster. WestinWestminster. Presented byRocky Mountain Mineral LawFoundation. For info: www.rmmlf.org

September 15CAHydrology & the Law Seminar,Santa Monica. DoubleTree GuestSuites. For info: Law SeminarsInt'1, 800/ 854-8009, registrar@lawseminars.com or www.lawseminars.com

September 15-16 CA ACWA's 2016 Continuing Legal Education for Water Professionals, San Diego. Bahia Resort Hotel. Ass'n of California Water Agencies CLE. For info: www.acwa.com/events/acwa-2016-continuing-legal-educationwater-professionals September 15-16NMNew Mexico Water LawConference, Santa Fe. EldoradoHotel & Spa. For info: CLE Int'l,800/ 873-7130 or www.cle.com

September 16CACalifornia EnvironmentalQuality Act: Critical Updateson Major Developments, SantaMonica. DoubleTree GuestSuites. For info: Law SeminarsInt'l, 800/ 854-8009, registrar@lawseminars.com or www.lawseminars.com

September 19WACERCLA & MTCA: AdvancedSediments Conference, Seattle.WA State Convention Ctr.For info: Environmental LawEducation Center, 503/ 282-5220or www.elecenter.com

September 19-22CAVERGE: Where TechnologyMeets Sustainability(Convention), Santa Clara.Santa Clara Convention Ctr.For info: www.greenbiz.com/events/verge/santa-clara/2016

September 22-23 CA California Coastal Law Conference, Los Angeles. Intercontinental Century City. For info: CLE Int'1, 800/ 873-7130 or www.cle.com

September 24-28LAWEFTEC 2016: The WaterQuality Event & Exhibition,New Orleans. MorialConvention Ctr. Presented byWater Education Foundation.For info: www.weftec.org/future-weftec-schedule/

September 28-30UTWestern States WaterCouncil Fall (182nd) CouncilMeeting, St. George. BestWestern Abbey Inn. For info:http://www.westernstateswater.org/upcoming-meetings/

September 29-30 NV Tribal Water Law Conference, Las Vegas. Caesars Palace. For info: CLE Int'l, 800/ 873-7130 or www.cle.com September 29-30TXTexas Water Law Conference,
San Antonio. La Cantera Hill
Country Resort. For info: CLE
Int'l, 800/ 873-7130 or www.cle.
com

October 2-6OK18th Annual EPA Region6 Stormwater Conference,Oklahoma City. SheratonDowntown Hotel. Hosted byEPA) Region 6, Texas A&MUniversity in Kingsville,Oklahoma City MS4s, and Statesin Region 6. For info: NellySmith, EPA, 214/ 665-7109,smith.nelly@epa.gov or www.epa.gov/ok/18th-annual-epa-region-6-stormwater-conference

October 5-6CAWater & Long-Term Value 2Conference, San Francisco.Levi Strauss & Co., 1155Battery Street. Hosted bySkytop Strategies. For info:http://skytopstrategies.com/water-long-term-value-2/