The Water Report

Water Rights, Water Quality & Water Solutions in the West

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JOHN ECHOHAWK INTERVIEW

JOHN ECHOHAWK, EXECUTIVE DIRECTOR, NATIVE AMERICAN RIGHTS FUND

Interview by Steve Moore and David Gover, Native American Rights Fund (Boulder, CO)

Introduction

Recently, two senior attorneys at the Native American Rights Fund (NARF), Steve Moore and David Gover, sat down with John Echohawk, for a casual discussion about NARF and its role in the development of Native American water rights in American law. They examined the development and evolution of water as a priority practice area at NARF. John has been at NARF since its inception, and he offers unique perspectives on these topics, as well as what the future might hold for this vital and ever-evolving area of natural resource law.

Interview

Steve: John, could you start us off by telling us a little bit about the founding of the Native American Rights Fund, and also what part you played in its creation.

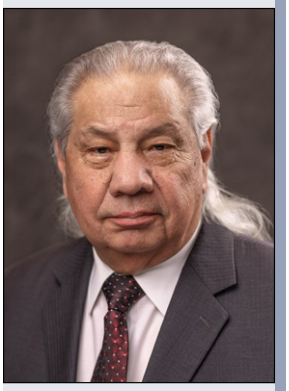
John: Well, the Native American Rights Fund was founded in 1970 when the Ford Foundation in New York City made a grant to California Indian Legal Services to start a national Indian legal defense fund. California Indian Legal Services had done a lot of great work as an Indian legal services program there in California.

The Ford Foundation thought that if they started doing that across the country as a special project, it could expand into the national legal defense fund for Indian tribes and peoples. The Ford Foundation at the same time was making seed grants to also start other legal defense funds such as the NAACP (National Association for the Advancement of Colored People) Legal Defense Fund and the Sierra Club Legal Defense Fund — which became Earthjustice. And indeed that's what NARF became. I was fortunate enough to get hired by California Indian Legal Services just about the time they got the grant from the Ford Foundation. So they asked me whether I wanted to work on this national project and, of course, I said I sure would. That's my dream come true! So away we went, and here we are 53 years later.

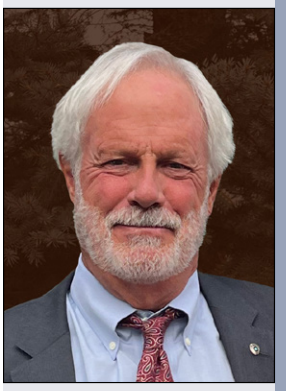
Steve: John, let's talk about the priority areas — the mission of NARF. What kinds of work does NARF involve itself in with Indian tribes and tribal rights?

John: Well, when we started the organization, we put together a board of directors composed of Native American leaders from across the country. And they helped us decide what the priorities of the organization should be. There's, of course, no way that we could represent all tribes, organizations, individuals, and all of these issues and cases and things. So we had to set some priorities and that's what this national Native board of directors did for us. They established as the top priority the protection of our tribal existence and that translates legally into protection of our tribal sovereignty. We have sovereign status under the treaties with this country. And that's the most important thing to us. That's what sustains independent tribal existence.

Echohawk



John Echohawk



Steve Moore

David Gover

Members of NARF's first Steering Committee (1972), from Left to Right alternating front to back row: David Risling (Hoopa), Dr. Alfonso Ortiz (Ohkay Owingeh), Dr. LaNada War Jack (Shoshone Bannock), John Stevens (Passamaquoddy), Thomas Banyacya (Hopi), Charles Lohah (Osage), Fred Gabourie (Seneca)

Second of all, they said we need to protect our tribal natural resources, our homelands, our lands, our water, and hunting and fishing rights. That's how we sustain ourselves as unique Native communities. That's what's defined us as peoples, what we've always been, and we need to maintain that and get back as much of that as we can, what's been lost. So those natural resource issues became our second priority.

Thirdly, they established protection of our human rights, you know, the rights that everybody else has but which have been denied to Native peoples historically. Our board said this is something we ought to protect as well. And in particular the unique situation we have in terms of protection of our religions and cultures. We've got unique Native American religions and Native American cultures that need to be protected and we needed to work on those issues as well.

Fourthly, they established as a priority the enforcement of the accountability of the federal government as trustee to Indian tribes, to protect and preserve our lands and natural resources. The government has a clearly established fiduciary obligation to help us protect our land and our resources.

And finally, priority number five, the development of Indian law and the education of the public about federal Indian law and policy. We knew that most people in the country don't know anything about tribes and tribal sovereignty, tribal history, or tribal policy. So we need to do everything we could to educate the public about this and develop Indian law in that way. Those were the five priorities that were set by our all-Native board of directors.

Steve: John, how would you describe the available legal resources for Indian tribes prior to the founding of NARF in 1970?

John: Well, there just wasn't much availability out there in terms of legal representation because of course, our Native American people were the poorest of the poor. Lawyers cost money. So we didn't really have very many tribes that had funding available to retain attorneys. About the only legal representation that was going on was coming from the programs funded under the Office of Economic Opportunity in Washington, DC, which had set up legal aid offices that were federally funded across the country, and seven of those programs were established in Indian Country. But of course, those seven programs did not have the means to cover all of Indian tribes and communities. So that's why everyone knew we really needed a national organization — to cover these other reservations that were without legal representation.

Steve: In its early days, NARF, I imagine, was overwhelmed with requests for representation from tribes throughout the United States. Maybe describe that a little bit and then also how the staff attorneys on your board would decide specifically what cases to take.

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San Luis Rey Case

Pyramid Lake Paiute

John: Well, of course you know, we were overwhelmed with all of these needs out there — legal needs in Indian country. We utilized the priority set by the board to figure out which one of those issue areas, those problem areas that we should address. And of course we had limited staff, with not a whole lot of legal resources. So we had to be very strategic in what we did and I thought that we did that well to start out with.

David: Can you speak to how NARF landed in Boulder, Colorado?

John: Well, as I said, we started out in California, but we realized that was not really a central location for our work throughout Indian Country. So we decided we should relocate. We chose to move to Colorado because that was really centrally located in the middle of Indian Country. Most of the tribes are located west of the Mississippi, and of course, Colorado's kind of right in the middle of that. And we knew we could fly out of Denver to go anywhere in the west pretty fast, because our clients were poor. They couldn't come see us, we had to go see them. And of course we had cases and, court appointments and meetings and everything all over the west. So we really needed to be here centrally located. So that's, that's why we're in Colorado.

Steve: And, and turning to water, what were some of the early cases that came to NARF, the early tribes that approached NARF and said, "Hey, we need your assistance on these complex water issues we're facing?"

John: Well the California Indian Legal Services had already been involved in one of these cases, and that was the San Luis Rey case involving five tribes in Southern California that are on the San Luis Rey River in their need for water that had been diverted and taken by their neighbors. That representation had been on-going when NARF was established, and NARF assumed a co-counsel role. [*See* Settlement at: https://digitalrepository.unm.edu/slrwrs/; San Luis Rey Indian Water Rights Settlement Act, Pub. L. No 100–675, §§ 101–111, 102 Stat. 4000 (1988), amended by Pub. L. No. 102–154, § 117, 105 Stat. 1012 (1991), amended by Pub. L. No. 106–377, App. B, § 211, 114 Stat. 1441A–70 (2000), amended by Pub. L. No. 114–322, § 3605, 130 Stat. 1793 (2016)].

The five tribes were asserting their rights under the *Winters* Doctrine, and that's based on a 1908 U.S. Supreme Court case, *Winters v. United States,* 207 U.S. 564 (1908), where the United States Supreme Court held that, though the treaties and executive orders setting aside land as Indian reservations did not expressly reference reserved water, there was by implication water rights reserved for those tribes to make their reservations livable. The Court held tribes would be entitled to whatever water they needed for their present and future uses with the priority date as early as the establishment of the reservation, which in most cases meant that they would have priority over non-Indian users that came along in times of shortage.

The *Winters* Doctrine: A Tribal Homeland Establishes Water Rights

The U.S. Supreme Court established the *Winters* water rights doctrine 115 years ago. In *Winters v. United States*, 207 U.S. 564 (1908), the Court recognized that when the United States creates an Indian reservation, it also reserves the water necessary to fulfill the purposes of the reservation. In negotiating land to reserve as a reservation, tribal and federal governments intended the reservation would serve as a permanent homeland, which can only happen if tribal citizens have access to adequate water resources.

Over the past century, the Court has repeatedly affirmed the *Winters* Doctrine. Lower federal and state courts consistently have relied on the *Winters* Doctrine to resolve water resource management issues across the arid American West. In dozens of negotiated water rights settlements, many of which were approved by Congress, the *Winters* Doctrine has provided certainty in confirming and allocating water rights for tribal and non-tribal water users.

In addition to that matter, there was another well-known crisis going on in the west at that time over in Nevada for the Pyramid Lake Paiute Tribe. The Tribe there is at the end of the waters of the Truckee River flowing out of the Sierras in California, eastward out into the Nevada desert where the Pyramid Lake Paiute Reservation was. And at the end of the river there is a huge lake, Pyramid Lake, and that's where the Paiute had always sustained themselves with the waters of the lake, the fishery and riparian resources. The upstream diversions by non-Indian farmers and ranchers were depleting the lake and,

Echohawk

Prior Appropriation Protection

thereby, the resources the Tribe had depended on for millenia. So NARF got involved in representing them against the water users who were taking water out of the Truckee River upstream, by establishing the Tribe's 1859 priority date was senior to upstream water users. The priority date meant that the Tribe's water demands were owed deference under the Prior Appropriation Doctrine and the *Winters* Doctrine.

Eventually, the seniority of the Tribe's federally reserved water rights led to a settlement that included protections for the Pyramid Lake fishery. The case went on for many years and ultimately the Tribe prevailed. And Pyramid Lake got preserved for the Paiute people. [*See* Truckee-Carson-Pyramid Lake Water Rights Act of 1990, Pub. L. No. 101–618, 104 Stat. 3289 (1990)].

Pyramid Lake, Nevada

David: On the heals of Pyramid Lake, can you also speak about *U.S. v. Washington* and what NARF's role was in that that matter as well? [*See Washington v. Washington State Commercial Passenger Fishing Vessel Association,* 443 U.S. 658 (1979)].

U.S. v. Washington

John: *U.S. v. Washington* was another early case that we got involved in, in the early 1970s. The case involved the treaty rights of the tribes in western Washington State to fish the way they always had fished. The substantial salmon fisheries up in that area have sustained tribes and their members since time immemorial. Their subsistence, their culture, religion — everything revolved around them fishing. The tribes thought that they had preserved that in the treaties they made with the United States government in 1855 when they preserved the right to fish in common with the citizens of the state at their usual and accustomed fishing places. [Editor's Note: What came to be known as the "Boldt Decision" involved the 1855 Stevens Treaties between the United States and several tribes in the Pacific Northwest].

Fishing Licenses

But over the years, the State of Washington was telling Indian fishermen that the language in their treaties meant only that you have to get a fishing license just like everybody else. The State had actively persecuted Indians for fishing without licenses and out of season. Of course that's not what the tribes understood that treaty provision to mean. So we, along with attorneys from Evergreen Legal Services, took the dispute to court, together with the United States government as our trustee.

Tribal Co-Managers

We had the federal court hear testimony from tribal leaders about the meaning of that language. And the court sided with the tribes, and held that the tribes were entitled to take 50% of the fish under tribal law. The tribes became very successful co-managers of that fishery with the State of Washington, and could fish off reservation at their usual and accustomed places if that's what they wanted to do. So everything changed, and again, based on the 1855 treaties people came to understand that treaties were not just ancient history, they are still the supreme law of the land. Other tribes took notice of that and other treaty cases proceeded across the country.

Fishing Rights

David: My understanding is those principles were then extrapolated to tribes in the Midwest in the *U.S. v. Michigan* litigation. [*See United States v. State of Michigan,* 653 F.2d 277, 278 (6th Cir. 1981), cert. denied]. I understand that NARF represented Bay Mills. Might you speak to that a bit?

John: Yes, that was that was the second case that we undertook in the fishing rights arena. The tribes there in the Michigan area took notice of what had happened up in Washington State. So they came to us and asked us if we would help them protect their treaty fishing rights in the Great Lakes. So we undertook the representation with legal aid attorneys in Michigan. And, of course, it was a big fight, just like it was in Washington State.

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But, ultimately, we prevailed because they have a treaty right to take fish out of the Great Lakes. And the courts upheld that. Again, another victory for tribal treaty rights.

Water to Sustain Fisheries

Steve: You're bringing up a fascinating subject, and that is the intersection of the right to fish reserved under treaties and the importance of reserved water to protect the habitat on which the fish and other riparian species depend. Can you talk about how water litigation in particular serves the interests of tribes in protecting their treaty reserved fishing rights?

John: Yes. Along with the fishing rights comes an implied right to maintain water rights sufficient to *sustain* that fishery. So that's a very important part of the fishing right, which is the water right to be able to sustain the fisheries that the tribes have under their treaty rights.

Instream Flows

Steve: Turning back to the Pacific Northwest, tell us about two of NARF's longtime clients, the Nez Perce Tribe of Idaho and the Klamath Tribes of Oregon, and their efforts to secure water for instream flows in rivers and streams in their aboriginal territory to protect fishery habitat.

John: Yes, these were two other treaty fishing rights cases that we took on. The Klamath Tribes in southern Oregon had been terminated, but their fishing rights had not been taken away by express Congressional language. [Editor's Note: Congress passed the Klamath Termination Act in 1954, a measure authorizing the sale of reservation lands and establishing procedures for terminating the federal government's relationship with Klamath Tribes]. So we litigated that issue for them, and prevailed. Their treaty fishing rights had survived the termination of their political relationship with the United States. So they still had their right to take fish and maintain a level of Klamath Lake to keep that fishery going. [*See United States v. Adair*, 723 F.2d 1394, 1408, 1414-1415 (9th Cir. 1984)].

Klamath Tribe

That also led to years of litigation to establish the Tribes' right to instream flows in the rivers and streams of their former reservation lands, which was also successful. [*See* Corrected Partial Order of Determination, Water Right Claim 622 (Upper Klamath Lake), Mr. Moon, Is *In re Waters of the Klamath River Basin* correct? *YES -- it is part of the adjudication* WA1300001 (Or. Klamath Cir. Ct. Feb. 28, 2014), KBA_ACFFOD_04947, 04960; available at: https://www.oregon.gov/owrd/programs/WaterRights/Adjudications/KlamathAdj/KBA_ACFFOD_04947.PDF].

Nez Perce Tribe

Up in Idaho for the Nez Perce Tribe, again, a tribe that has always depended on the salmon fisheries there. When the State of Idaho in the mid-1980s commenced an adjudication of all the water rights of the Snake River and all its tributaries — a huge undertaking that involved about 85% of the State — the United States and the tribes with asserted interests in those waters intervened and filed claims (*see* https://idwr.idaho.gov/water-rights/adjudication/srba/). The Nez Perce filed claims not only for on-reservation consumptive uses, but for instream flows with sufficient water to maintain their fishery under their treaties. After more than a decade of litigation the Tribe achieved a congressional settlement that included protecting instream flows in dozens of priority stream and river systems throughout the Tribe's aboriginal territory. [*See* https://idwr.idaho.gov/legal-actions/settlements/srba/].

The Snake River remains a vital lifeline as the watershed sustains Native religious practice, cultural continuity, subsistence fishing and gathering, and economic development along with sites of cultural, historical, archaeological, and geologic importance. Photo courtesy NARF Staff Attorney Brett Lee Shelton

Echohawk

Steve: You're raising an interesting topic, John, and that is court jurisdiction to adjudicate federal and tribal water rights. Can you speak briefly to federal court versus state court jurisdiction and, and how that was all addressed beginning in the 1970s? What courts have jurisdiction to adjudicate these tribal water rights?

State Adjudications

John: Well, when we first started in the 1970s, we of course were working with the United States government and we were taking these cases to the federal courts. But then the states got involved you know, opposing us and started asserting in these cases that there was state jurisdiction over the adjudications of tribal water rights. Ultimately the courts decided that there was state jurisdiction to adjudicate tribal water rights under the McCarran amendment that had been passed by Congress in the fifties. [*See* 43 U.S.C. § 666 (1952)]. So tribal water rights then could be adjudicated in these state water adjudications so long as those adjudications were comprehensive; referred to as "general stream adjudications." The courts acknowledged tribal water rights are federal in nature, but federal law would be interpreted by state court judges. Federal court jurisdiction was not completely divested, it is concurrent depending on the circumstances. The tribes have never been entirely pleased with that outcome, but it has been the legal framework tribes have had to work within for several decades, with mixed success.

Jurisdictional Challenges

Steve: John, you mentioned the United States and their involvement in the 1970s in sorting out these complex jurisdictional issues. When did the notion of a federal policy of settling Indian water rights begin to take shape? Which federal administration was involved? Tell us about the early days of the formation of that settlement policy.

Settlement Policy

John: Well, these tribal water rights adjudications became very controversial in the seventies as again, working with the United States government, tribes filed case after case. That got the notice of the states and private water interests since tribes and the US as trustee for the tribes were making superior claims — they would have priority dates better than most of the non-Indian users. And it just became very controversial. Those interests asserted that this was basically going to be tying up economic development in the West because these cases involving all of the water users in the West and these different basins would take a long, long time.

All parties with asserted rights and interests in water would be facing decades of uncertainty! And of course these complex federal and tribal claims don't have to be litigated to the bitter end. They can always be settled. Lawsuits get settled and the parties come together and figure out what ought to be done and they can reach a settlement. And that doesn't take forever. So the federal government started talking to the states about settlements, and proposed a settlement policy as something that they ought to get together and implement. That was under the Carter administration in the late 1970s.

Arizona Tribal Settlements

While there are distinct advantages to avoiding uncertainty over water by reaching settlements, these negotiations have always proved challenging. The earliest settlements involved tribes in Arizona, the very earliest being with the Ak-Chin Tribe and their neighbors. [*See* https://digitalrepository.unm.edu/acwrs/]. One of the tribes NARF represented down in Arizona, the Papago Tribe — now known as the Tohono O'odham Nation — was involved in litigation as well. And they ended up following the example of the Ak-Chin Tribe and entering into settlement negotiations. Their settlement was eventually approved by Congress there in the early 1980s. [*See* https://digitalrepository.unm.edu/towrs/].

David: Did that also include Fort McDowell? Were they in there at the same time?

John: That was our second Arizona case. We started representing the Yavapai Apache at the Fort McDowell reservation there in Arizona. That case ended up being settled in the 1980s as well. [*See* https://digitalrepository.unm.edu/fmwrs/].

Time & Uncertainty

Steve: John, describe for us how NARF began reaching out to state partners, the Western Attorneys General and the Western States Water Council. Tell us about how you in particular were involved in helping to create the relationship between these Western legal and political entities.

John: Well, of course we were seeing them in court as we moved forward with these Indian water rights cases. That's the way we got to know them and they got to know us. They, again, saw that this issue of uncertainty was caused by the magnitude of these cases, huge cases that would take forever to litigate. And that uncertainty was of great concern to them, and their friends and neighbors. In particular, one of their allies was something called the Western Regional Council, which consisted of all these big businesses in the West. Of course, they kind of all depended on water, and they did not like this uncertainty created by these huge water rights cases. They started complaining about that to

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the governors and their state attorneys general. So they reached out to the tribes to see what they could do about this. And the tribes brought NARF into the discussion.

That discussion happened in a big meeting there in Denver in the early 1980s. The tribes asked NARF to attend and participate in this meeting with the Western Governor's Association Conference of Western Attorney Generals and this Western Regional Council. We talked about the *Winters* Doctrine and what that meant for tribes, and why we had to go to court to do what we needed to do because water was a very scarce and important resource for the tribes. Plus we had senior rights and we needed to establish those. The states and private interests talked about their concern over the length of the cases and the uncertainty it created and everything.

Settlement Mechanism

They asked what we could do about that. And I said, well, again, the federal government has already started talking about this settlement policy and why don't you all get on board on that settlement policy? And they said, oh, okay. That means we could resolve these things faster. Yeah, if we can reach settlements, then, you know, we get treated fairly. And they said, okay let's do that. So we decided there to go into Washington DC and talk to the administration about setting up a big tribal water rights settlement policy mechanism that could resolve a lot of these issues quicker than the big, long litigation process.

They had a chance right off to help with that because of this Papago settlement that I mentioned earlier that had been negotiated and approved by Congress. When it went through President Reagan, he vetoed it, cause it was something to help tribes and he wasn't a big fan of tribes. So we asked the Western governors if they would contact their friend, President Reagan, and explain all this to him, and that he needed to approve that settlement. And they did. So when Congress passed the settlement again and sent it to his desk — this time he signed it. [Papago Tribe, now known as the Tohono O'odham Nation: Settlement available at: https://digitalrepository.unm.edu/towrs/].

Collaboration

Reagan also helped set up a meeting at the Interior Department with Secretary of Interior James Watt. So we all went in to see Secretary Watt: the Western Regional Council, the Western Governors, the Western Attorney Generals, and the tribes. Watt frankly couldn't believe that we were all in the same room at the same time, on the same side on this huge issue. Watt was not a big supporter of tribal rights either. But for him to see the states and the businesses supporting this effort by tribes to settle the water rights was something that caught him by surprise. But eventually he got on board and realized that this is something that he had to do. So he helped to set up the Secretary of the Interior's Indian Water Rights Office to start really focusing on these settlements and getting this settlement policy implemented, and a way we went. That's what we've been doing now, what, for 40 years. And it's paid off.

Steve: John, you point out the strategic power of having everybody in the room, and pulling in the same direction, telling the administration, and telling Congress, that a settlement is a good thing. "We all want this." When you're all pulling in the same direction, members of Congress actually sit up and take notice.

John: Yeah. It wasn't easy. It was particularly upsetting to the people at the Bureau of Reclamation, of course, which had long catered to non-Indian water interests. All of a sudden, here's this seemingly strange alignment of water interests, surfacing at Interior, and it caused them all kinds of heartburn, and they fought and delayed the creation of the settlement office for a while. It was a struggle, but we finally got it done.

Biannual Conference

David: John, can you speak to how this collaboration with state and private water interests turned into NARF's biannual conference on the settlement of Indian water rights?

John: Yes, the Western Governor's Association brought in an organization of all of the state water directors, called the Western States Water Council to start working on these issues. One of the things representatives of the Western Governors Association and the Western States Water Council realized was that so many of the non-Indian water interests caught up in these huge water fights didn't know much about federal Indian law, Indian treaties, the *Winters* Doctrine, and Indian reserved water rights. So they thought we really needed to do whatever we could to educate people about Indian water rights and Indian water rights settlements.

Education

One of the things we started doing with the Western States Water Council toward the end of the 1980s was having biannual symposiums on Indian Water Rights settlements. We would bring together all of the tribal parties, state parties, private interests, the federal government, and all the people involved in all of this. We would all sit down and talk about this and you know, understand what was happening with the settlement negotiations going on, and what was needed to make those settlement negotiations successful. We focused on learning from the ones that had been already passed by the Congress, and trying to figure out how to do more of that.

Echohawk

Successful Settlements

Participants at 2017 Water Rights Symposium (includes John Echohawk)

Reservation Experience

So, we've been having those symposiums that usually go about two days ever since the 1980s. A key feature of those symposiums has always been, they've always been held near an Indian reservation, Indian Country, usually near one of these tribes that had recently gone through a tribal water rights settlement. And we would spend a good part of the meeting out on the reservation looking at all of the tribal water rights settlement features. This gave the state people and the private parties and a lot of the federal people, many of them, their first chance ever to go on a reservation, first time ever to meet Indians, first time to come to understand them. They just again, didn't know much about us. Once we got these symposiums' evaluations the participants always rated that reservation experience as the most important thing that happened during those two-day symposiums. They got to spend some time with some Indians and get to know Indians and Wow! Nice people!

Steve: And they cook great food and, and put out a great spread!
John: Yeah. We always fed 'em too. They like that part too! That's important. Yeah.

Involving Congress

Steve: So, next tell us about the Ad Hoc Working Group on Indian Water Settlements, John, that you were involved in forming with the Western States Water Council. Tell us about the focus of the Working Group in influencing key entities in Washington DC.

John: It has always been important to get the current Administration on board, as well as the Secretary's Indian Water Rights Office. But we've had to educate the state people and private water interests about tribal water rights settlements. We had people on Capitol Hill too, who also needed to be educated about this.

Appropriating Funding

These settlements get negotiated, you know, by the settling parties, but then they have to be approved by Congress because this deals with a federal property right: the water rights of the tribes. Congress has to be involved in validating those rights and in appropriating funding to effectuate the terms of the settlement. So part of what we realized we had to do was also educate Congress about these tribal water rights and the need for settlements. Most members of Congress and their staff didn't really know much about it. So we started having regular meetings with the relevant committees on the Senate and the House side, us and the Western States Water Council on a regular basis. We became the Ad Hoc Working Group.

Talking to them about these settlements that were coming up, the ones that were pending, and trying to get them educated and ready to pass these settlements when they came up. So we eventually became successful at that and we had more and more people educated about that. We had to go back year after year, Congress after Congress, because of course, the staff's changed, the Representatives change, the Senators changed. So it's just a continual process of educating people on the Hill about these things. But we've kept it up all these years and again, I think it's paid off.

David: How many settlements have been entered into and how many have NARF been involved in? Do you have the numbers off the top of your head?

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John: I think the latest number is there've been 38 congressionally approved Indian water rights settlements and the Native American Rights Fund has been involved in nine of those settlements. Of course, we're hoping to get more done. We're currently representing six tribes in their water rights issues. [RE: Tribal Water Settlements as of 2019, *see* Congressional Reseach Service, *TWR* #185.]

38 Indian Settlements

Steve: Each Indian water settlement is unique and they're all exceedingly complex. One common challenge is the funding of Indian water settlements, especially the ones that involve the construction of new or rehabilitated water infrastructure. Construction of infrastructure is very expensive these days, and the costs continue to increase. How has the Ad Hoc Working Group and NARF played a role in the funding side, the appropriation side of Indian water settlements, both with Congress, the Administration, and the Office of Management and Budget?

Infrastructure Funding

John: Well, the budget issues in Congress are always very contentious. Everybody fights over the budget. How much is Congress going to spend and what are they going to spend it on? And it becomes very political, year after year. It has grown particularly divisive in recent years, as we all know. Indian water rights settlements get caught in the cross-hairs of these larger battles, because there is always funding involved in implementing the settlement. The tribes want funding to build the infrastructure where they are able to use the water that they get in the settlement. Oftentimes they have to forego some of their water rights to help the non-Indians keep using the water they're [currently] using. And the tribes are entitled to be paid for that water that they're giving up. So, again, more and more appropriations.

Over the years we've always seen that the most difficult part of a tribal water rights settlement is the funding part. Over the years, different Congresses, different administrations have had different policies relating to the budget and appropriations and all that. Recently Congress, in the Inflation Reduction Act, appropriated huge sums of money for natural resources issues out West, including $2.5 billion to fund several tribal water rights settlements that they had approved, but not fully funded. So that was a tremendous step forward. But again, it just kind of shows how difficult this funding issue is, which again is the most difficult issue that we face in terms of trying to negotiate these settlements.

Authorization V. Appropriation

David: John, that highlights a distinct point that you learn when you're in the mix here, the difference between authorization and appropriation.

John: Yes, yes. Congress authorizes money for settlements, but when they appropriate it, that's a whole other thing. So there are two fights.

David: With the recent funding amounts authorized it seems to have cleared the deck — at least for existing settlements by fully funding those settlements that had not yet been fully funded by Congress — but then going forward, of course, that fight continues to obtain the actual appropriation of funds from Congress.

John: Yes, it does.

Reclamation Fund

Steve: John, Congress established decades ago the Reclamation Fund. More recently, an Indian Settlement Fund component to the Reclamation Fund was established. Can you describe that briefly? Does it still have continuing relevance?

John: Yes, it does. The Bureau of Reclamation was set up in the early 1900s to help the west with their need for water and water projects. The way they were funded was through the revenues generated by federal dams that were set up on different rivers that generated power revenues. These power revenues would go to the federal government and into this Reclamation Fund. Then the Reclamation Fund would of course fund these Western water projects and needs of Western water users and everything. And that went on and on. But of course that Fund never really helped the tribes. Eventually, the Fund carried an enormous balance, as more revenues were going in than Reclamation was spending on western water development. In fact, Congress could divert the Fund for other purposes if it wanted.

So this is one of the things the Ad Hoc Working Group focused on. Well, we told Congress, if you're having trouble finding money to fund Indian water rights settlements, how about this Reclamation Fund? Look at all this money that's come out of you know, the Western power revenue generation. And it's not being used. Through our efforts and with the wonderful assistance of key members of Congress, an Indian Water Settlement component to the Reclamation Fund was created and an allocation of funds was deposited every year — going out to be available to fund tribal water rights settlements.

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Fund-Based Settlements

Steve: Oftentimes over the years through an Indian water settlement, Congress has authorized the construction of infrastructure for a tribe, such as a dam, canals, pipelines, etc. That has been known as project-based authorization, and then appropriations. In recent years, we've seen a new concept in Indian water settlements, a fund-based settlement approach. Can you briefly describe the difference and, and maybe the advantages and disadvantages of each.

John: Yes. Over the years in these tribal water rights settlements when infrastructure needed to be built, the actual construction was undertaken by the federal government, through for example the Bureau of Reclamation. But over the years as tribes and tribal governments evolved and you know, became more able to manage their own affairs, the tribes started thinking, well, the federal government doesn't always have to build the projects we get in these settlements. We could build these projects ourselves. We know how to do business.

So in recent years some of the tribes have advocated for that in their settlements. Congress and the Interior Department have come to recognize the ability of tribes to build their own projects and that they wouldn't necessarily always have to be built by the federal government. So they started approaching this as an option that the tribes could go for in their settlements. They could opt for a fund-based settlement where Congress appropriates the funding and turns it over to the tribe.

I think this has been a great development. I think many of the tribes have liked that. Some of them aren't ready for that just yet, and they'd rather have the federal government do it. But these are choices that tribes in the modern era are well equipped to make.

David: One of the commonalities, I guess, when you're looking at those fund-based or project-based, of course, United States tied it to their waivers and relinquishment in the settlement, right? So it's something that each tribe needs to understand and do what's best for them. Is that a fair statement?

John: Yes, it is. These basically are our final settlements and the tribes get what they get, either, whether it's fund based or project based, that's what they get in the settlement and it has to get done. And, you know, that'll be the end of it. There's no more — they can't come back again after the settlement. Or if they do, it's a very, very difficult process. So yeah, it's something that the tribes pay very close attention to these days.

Negotiations for Funding

Steve: The negotiations over the agreed amount that Congress will appropriate then become so important, because tribes knowing that this is their one shot to get funding from Congress have to be very careful in determining what dollar amount they will agree to.

John: Yes. From time to time those agreements don't exactly come out to be what they thought they were going to be and to be able to build a project they thought they were going to be able to build. And they have to think about going back and getting an amendment to their settlement to address that kind of issue. Other times there are other issues that come up that they didn't really resolve adequately in their settlement negotiation. So they have to go back to Congress over those issues and again, try to get their settlement amended. That's happened with several of the settlements over the years.

Implementation Issues

Steve: Settlement negotiations are very long and complex processes. When you're dealing with such a dynamic natural resource as water, and the changing and evolving conditions around water availability and use, it's difficult to imagine what the future is going to be like in 50 years or 100 years. Invariably, as you suggest, things come up or circumstances change and the parties need to go back and take a look at what they've done and they need to make corrective changes.

John: Yes, those are the implementation issues that oftentimes require another trip to Washington.

Navajo Nation Case

Steve: In the remaining time we have today, John, let's turn to a very important case in the [United States] Supreme Court that will be argued before the court on the 20th of March. The lawsuit, 20 years in the making, brought by the Navajo Nation against the Interior Department pertaining to the asserted failure by the United States to protect the water rights and interests of the Navajo Nation out of the mainstem of the Colorado River. Specifically, the Nation has alleged breach of trust for failure to take account of its needs from the river and to develop a management plan for that water. What are your perspectives and impressions about the case, especially considering the fact that now the *Winters* Doctrine is before the Supreme Court? [*See Navajo Nation v. U.S. Dep't of the Interior*, 26 F.4th 794, 800 (9th Cir. 2022), cert. granted sub nom. *Arizona v. Navajo Nation,* 143 S. Ct. 398 (2022)].

Arizona v. Navajo Nation

John: Well, the Navajo Nation (Nation) has the largest reservation in the United States. Its reservation is in parts of three states. It's also an exceptionally dry part of the country, so water literally is the lifeblood of the reservation and the many Navajo people who depend on it. The water rights claims of the Navajo Nation in the State of New Mexico have been resolved through a Congressionally approved

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The Tule River Tribe and NARF Deputy Director Matthew L. Campbell preparing to testify before the Senate Select Committee on Indian Affairs about Tule River Tribe Reserved Water Rights Settlement Act of 2022. In recent years, the Tribe's reservation has gone dry for several months each year, forcing members to shower from trucks and obtain bottled water at great expense. (November 16, 2022; details: https://narf.org/tule-river-water-rights/)

Colorado River Water

settlement. Just last year after years of negotiations they got a settlement for the portion of the Navajo reservation in Utah. So there is just one part of the Navajo Nation where its water rights have not been litigated or settled. That's the Arizona portion. It happens to be the largest portion of the reservation with the largest water needs — and that's the one on the Colorado River.

The tribe, of course, over the years has tried to get the federal government to take affirmative steps to protect the Nation's *Winters* Doctrine rights on the Arizona portion of the Navajo reservation. But the federal government, for various reasons, has never really ever done that. Out of frustration, the Nation sued the Interior Department seeking enforcement of the government's trust responsibility to do an assessment and a plan for addressing its water needs on the Arizona portion of the Navajo Nation.

The Nation prevailed in the Ninth Circuit. But the states and the federal government appealed to the Supreme Court, and the Court has taken on the case. So we will see whether there is a trust responsibility on the part of the federal government to perform an assessment and devise a management plan to address the water needs of the Navajo Nation there in Arizona.

Supreme Court

So we shall see what happens. The federal government is basically saying, well, we don't have to do anything unless Congress says we have to do it. That's their argument. Congress has to order us to do this assessment and plan. But the Navajo Nation says no — we're entitled under the *Winters* Doctrine to at least this much, right? The trust obligation of the United States imposes at the very least this modest step. So that's the issue before the court. And we will see how it comes out. It's going to be very important not only to the Navajo Nation, but to other tribes as well, who still don't have their water rights determined under the *Winters* Doctrine yet, either.

Implications

Steve: You mentioned the possible national implications. You've talked about the 37 settlements enacted by Congress to date, and the total of 575 federally recognized tribes around the country. There is still a tremendous amount of work to do for the federal government, and for tribes, to assert and protect their water rights and resources throughout the country, not only in the western United States. From that standpoint, it would be a cruel result for the Supreme Court to hold that the Executive Branch has no minimal, modest obligation to the remaining tribes — over 500 of them — with unquantified and unprotected water rights. Or to rule that the body of federal treaty and executive orders establishing hundreds of Indian reservations, together with the *Winters* Doctrine, imposes no obligation on the Interior Department.

Increasing Challenges

John: I think you're exactly right, Steve. It raises a huge, huge issue involving a lot of tribes out there. And it would just be unbelievable to me that the Supreme Court would let that go and just let the federal government do whatever it wanted to do and leave so many tribes high and dry. And it's going

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to be particularly difficult in coming years since most of these tribes are in the West and we've got these projections for climate change, making things even drier in the West. Of course, we're already starting to see that now with the Colorado River Basin and shortages looming. It's just something that's not very pleasing to think about. Just a very scary situation for tribes.

Steve: I could understand John, the Executive Branch arguing that it needs to protect and preserve some discretionary authority. But what I find particularly troubling in the context of the Navajo case is that the Interior Department takes the position that it has the right to do nothing if it choose to do nothing. I don't think the Executive Branch having discretionary authority gives it the right to do nothing, to sit idly by for decades and watch all the water be given away to other entities.

John: Yes, absolutely.

David: Especially when Interior's the one managing it and allocating it elsewhere, right? They're the ones that are controlling the spigot.

Unresolved Issues

Steve: In closing, John, there are enormous unresolved water issues for tribes throughout the United States. When you look around the watersheds in the West, I see many coastal river systems in California, Oregon, and Washington, and moving east there are the Missouri River tribes, the Great Lakes tribes, and the two river systems in Oklahoma with 39 tribes in residence. John, what do you envision in the future will be the most effective way for the United States government to begin to address this enormous unmet need amongst all the tribes around the country?

John: Well, that's going to depend initially on what the Supreme Court says this year in the Navajo Nation case. The Executive Branch can either do nothing, or they're going to be required to do something. It's just a huge issue, a very, very important case. And it's made all the more important by climate change that's coming on. We're soon going to see some more of that play out in what happens this year in the Colorado River Basin. Are Reclamation, the states, and tribes going to be able to reach agreement on how to administer the shortages, or are they going to end up suing each other?

Involving Congress

Steve: Being an optimist, John, I'd like to believe that this might present another opportunity for the tribes, for NARF, for the Western States Water Council, for the Western Governors and Western states to go to Congress and say, we need what the National Water Commission said we need in 1973. We're 50 years hence from the release of the report from the National Water Commission. The Commission recommended these complex issues be handled systematically by the Congress. That never happened. Perhaps an opportunity may arise for it to happen at long last.

John: It's an enormous problem and it's only going to get worse. Yes, that would be great if that could happen. Yes.

NARF Impacts

David: So, John, final question for me on this. You know, we — NARF's — been in the water rights world work since its inception, right? Since 1970, and we recently celebrated our 50 years of service. As we move into our 53rd and 54th year how do you see NARF's continuing role in the water rights business?

John: Well, we've been in it as you said, for a long, long time. And as we just talked about, there's many, many more important issues out there. And so I think we're just going to continue to work in this area. It's just really kind of a never-ending process. There are so many tribes, so many water needs out there, and we've always been there. They always need us out there, so we want to continue to be there for Indian Country on these issues.

For Additional Information:

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John E. Echohawk (Pawnee) is the Executive Director of the Native American Rights Fund. Echohawk was the first graduate of the University of New Mexico's special program to train Indian lawyers, and was a founding member of the American Indian Law Students Association while in law school. He has been with NARF since its inception in 1970, having served continuously as Executive Director since 1977.

Steven C. Moore helped establish the Idaho Legal Services Indian Law Unit before joining the Native American Rights Fund in 1983 as a staff attorney. Moore has advocated for federal Indian reserved water rights for the Nez Perce Tribe, the Agua Caliente Band of Cahuilla Indians, the Tule River Tribe, and the Kickapoo Tribe. He has defended Native rights regarding sacred places, the religious use of peyote, the rights of Native prisoners, and in repatriation, among other matters. Moore is a 1979 graduate of the University of Colorado Law School.

David L. Gover joined the Native American Rights Fund as a staff attorney in May of 2005. Gover has worked in the areas of water rights, natural resource, and treaty protection matters. He currently serves as NARF's Colorado Managing Attorney and a member of the Case Selection Committee. Prior to joining NARF, Gover served as an Assistant Attorney General for the Muscogee Nation and as Legislative Counsel for the Navajo Nation. He received his J.D. and B.A. degrees from the University of Oklahoma. Gover is a citizen of the Choctaw Nation of Oklahoma and descendant of the Pawnee Nation.

NM Task Force

NEW MEXICO WATER POLICY AND INFRASTRUCTURE TASK FORCE: A ROADMAP TO RESILIENCE

John Fleck, Utton Transboundary Resources Center,
University of New Mexico School of Law;
Patrick McCarthy, Thornburg Foundation; and Mike Hamman, New Mexico State Engineer

Introduction

Challenges & Opportunities

In 2022, New Mexico faced what state leaders viewed as a water crisis. Reservoirs were near empty, with declining snowpacks and river flows leaving little hope that they would refill. Irrigation ditches often ran dry when crops needed water the most. Rural communities faced growing water infrastructure challenges, made worse by wildfires ravaging many headwaters communities.

But there was a convergence of opportunity as well, with renewed attention from a state political leadership that knew something needed to be done, combined with a massive infusion of federal infrastructure spending, as well as booming oil and gas revenue pumped into state government coffers.

Task Force

Amid that storm, state officials in the summer of 2022 created the New Mexico Water Policy and Infrastructure Task Force. Over the following six months, the Task Force's members — a range of state agency officials and stakeholders across the breadth of New Mexico's water-using communities — tackled the tasks of first defining the problems, and then presenting a far-reaching list of legislative and executive policy recommendations to address them.

At the heart of their work was a bold premise, which emerged from the group's efforts to define its charge, and was formalized in this language from the group's charter: "Driven by drought and climate change, New Mexico's water crisis has laid bare water policies and processes that users, practitioners, and lawmakers agree *are not meeting the 21st century needs of New Mexicans* under the stress of drought, aging infrastructure, and climate change." (Emphasis added)

Modernizing Water Governance

The Water Policy and Infrastructure Task Force offers a case study in modernizing water governance in a state facing multiple complex challenges — a classic "wicked problem," in which there are many differing ways to define a problem, each drawn from a different community's perspective, each suggesting a different path toward action. Importantly, "wicked problems" are never solved, but rather subject to never-ending adjustments to changed circumstances and societal values and a steady stream of surprises.

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Given that framework, the Task Force developed 17 specific recommendations for the legislative and executive branch of government. But perhaps equally important, the Task Force assembled and built upon a community of people with an increased understanding of one another's values and issues, an accumulation of social capital that, if it endures, could contribute in the long run to the adaptive governance of New Mexico's water.

Wicked Problems

Multifaceted Definitions

Developing effective water policies requires balancing competing interests of various stakeholders — a classic "wicked problem," or "set of wicked problems," in which complex, multifaceted problems lack a clear solution in large part because there is no one agreed-upon definition of what the problem — or problems — actually are. Wicked problems are difficult to solve because the causes and effects are often unclear, and there is no agreement on the appropriate problem definition, which inevitably leads to differences over what approaches might count as "solutions."

Coping and Taming

In fact, as the University of California Berkeley theorists Horst Rittel and Melvin Webber argued in the seminal 1973 paper that first defined "wicked problems," they "are never solved." (Rittel, Horst WJ, and Melvin M. Webber. "Dilemmas in a general theory of planning." Policy sciences 4.2 (1973): 155-169. https://doi.org/10.1007/BF01405730). Coping and taming, rather than solving problems, has been suggested as an alternative framework for problems like New Mexico's complex water management future, and broad multi-stakeholder processes have been suggested as one approach that can be fruitful. Emery Roe, also from Berkeley, called the challenge "making the most of mess." Problems are never, in Roe's view, cleaned up. Instead, we manage the mess in a way that ensures that the underlying service society needs can be reliably provided in spite of the messiness of the process. (Roe, Emery. *Making the most of mess: reliability and policy in today's management challenges*. Duke University Press, 2013.)

Challenges

New Mexico's water challenges match up nicely with the "wicked problems" framework:

- A significant time deadline for finding a solution;
- Those seeking to solve a problem are also causing it;
- There is no central authority dedicated to finding solutions, and with the political or legal power to implement them; and
- Certain policies irrationally impede progress.

With this challenge in mind, under the direction of the state's governor, the leadership of New Mexico state agencies with responsibility for pieces of the water management puzzle convened a task force in the summer of 2022 to identify problems and develop policy options for the state's legislature and executive branch of government.

The range of state agencies involved is a testament to the "wickedness" of the water policy agenda: the Office of State Engineer, the Interstate Stream Commission, the New Mexico Finance Authority, the Department of Finance and Administration, the Environment Department, the Bureau of Geology and Mineral Resources, the Game and Fish Department, the Indian Affairs Department, and the Department of Agriculture.

This list includes agencies with regulatory authority, agencies with responsibility for management of on-the-ground projects, and agencies with oversight over financing. The non-state-government members of the task force drew on similar diversity, with representatives of municipal and agricultural water agencies, sovereign Tribal governments, non-governmental organizations devoted to environmental issues, and New Mexico's traditional rural acequia irrigation communities.

The purpose was to bring together a diverse set of perspectives and expertise to develop a suite of water policy proposals that reflected the needs and interests of all stakeholders.

Developing Policy

Advantages of Stakeholder-Driven Task Forces:

Stakeholder-driven task forces offer several advantages for developing water policy proposals. First, they promote collaboration and cooperation among stakeholders, which is essential for developing effective policies. By bringing together diverse perspectives, the task force can identify common ground and develop proposals that reflect the needs and interests of all stakeholders.

Diverse Perspectives

Second, stakeholder-driven task forces can lead to more innovative and effective policy proposals. The diverse set of perspectives and expertise that the task force brings together can lead to creative solutions that would not have been possible with a narrow group of experts.

Third, stakeholder-driven task forces help to build trust among stakeholders. Trust is essential for developing effective policies because stakeholders are more likely to support policies that they believe are fair and equitable. The task force provides a forum for stakeholders to express their concerns and work together to find solutions that are acceptable to all.

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Fourth, building on the trust built among stakeholders, the New Mexico process created a network of social capital that has endured after the completion of the task force work, helping shepherd its recommendations through state legislative and executive branch governance processes.

New Mexico's Water Challenges

Water Setting

Located in the arid southwestern United States, New Mexico is a relatively poor state, ranking 45th of the 50 US states in per capita income. Its four most populous cities are concentrated in the state's central Rio Grande corridor, along a river that stretches from its headwaters in Colorado to the borderlands of Texas and Mexico. The river is governed by an interstate compact among Colorado, New Mexico, and Texas, and a treaty between the United States and Mexico — two external legal structures that impose significant constraints on each state's water management.

Native American communities have practiced agriculture since long before colonization, many of them enduring on the same lands on which they lived when the Spanish first arrived from the south in the 1500s. In water law terms, their rights are cited as dating to "time immemorial," a notion rooted in English common law: a "time where of the memory of man runneth not to the contrary."

New Mexico water law is based on the doctrine of prior appropriation, but the state's ability to manage water is constrained by the reality that many of the state's most important watersheds — including the state's populous Middle Rio Grande Valley — are not adjudicated: the date, purpose, and place of use of thousands of water rights have not been formally determined or recorded. New Mexico was one of the earliest US states to explicitly statutorily recognize the connection between surface water and groundwater.

Water Use

New Mexico styles itself the "Chile Capital of the World" because of the famous hot peppers grown in the Rio Grande Valley, and irrigated agriculture dominates the state's human use of water, according to the New Mexico Office of State Engineer:

- Irrigated agriculture: 76.3 percent
- Municipal water supplies: 9.1 percent
- Other (mining, commercial, livestock, etc.): 14.6 percent

But while it dominates the use of water, has significant cultural importance, and is economically important in the rural areas where it is practiced, agriculture makes up less than two percent of the state's Gross Domestic Product, according to the US Department of Commerce.

Climate Change

Climate Setting

New Mexico is a dry state, and the struggle to build lives in the arid landscape has shaped the state's culture and communities since time immemorial. But the Task Force's work was motivated by a recognition that climate change is pushing the state toward a breaking point.

A series of immediate challenges provided the impetus and context for the Task Force:

- The state endured an unprecedented wildfire season, including the two largest wildfires in the state's recorded history, which devastated watersheds and communities across New Mexico.
- Flows in the Rio Grande, the state's most important source of surface water supply, have been below average for all but four years in the 21st century, with the river through central New Mexico at its lowest flows in recorded history. To put an exclamation point on the crisis, the river briefly dried up in the summer of 2022 through Albuquerque, the state's largest city, for the first time in four decades.
- Total water storage in the Rio Grande's major reservoirs entered the third decade of the 21st century at their lowest levels since the drought of the 1950s.

Groundwater Decline

Accelerated decline of many of the state's major aquifers is the result of pumping water to make up for chronic shortages of rain and snow, while adding additional demands as the state's population increases. Gaps in New Mexico's groundwater monitoring network leave communities with no clear picture of the status of the state's aquifers in many parts of the state. Several communities have seen their wells go dry, forcing them to take emergency measures such as trucking in water.

Aging Infrastructure

Aging water infrastructure, especially in New Mexico's smaller communities, is under increasing pressure to meet the challenges posed by the climate crisis. Decaying infrastructure and lack of community capacity to repair, replace, and manage water and wastewater systems threaten equitable access to the basic necessity of clean, safe drinking water.

Climate change is making things worse, as noted in *Climate Change in New Mexico Over the Next 50 Years: Impacts on Water Resources*, a comprehensive report prepared for the state by a team of New Mexico researchers led by the New Mexico Bureau of Geology and Mineral Resources. Dunbar, N.W., Gutzler, D.S., Pearthree, K.S., Phillips, F.M., Bauer, P.W., Allen, C.D., DuBois, D., Harvey, M.D., King, J.P., McFadden, L.D., Thomson, B.M., and Tillery, A.C., 2022, *Climate Change in New Mexico Over the Next*

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50 Years: Impacts on Water Resources: New Mexico Bureau of Geology and Mineral Resources, Bulletin 164, 218 p. (Available at: https://geoinfo.nmt.edu/publications/monographs/bulletins/164/). Requested by Gov. Michelle Lujan Grisham, this review of the latest science literature presents a sobering picture of the probable impacts of climate change to New Mexico's water resources (page vii):

> [T]he climate will continue to warm over the next 50 years, likely without an increase in precipitation, leading to greater statewide aridity. Hydrological modeling indicates declines in both runoff and recharge going forward, amounting to 3% to 5% per decade for both quantities. Historical trends in runoff indicate significant year-to-year variability, as do trends in soil moisture and recharge. But all are generally decreasing, consistent with the results of climate models that project a drying climate. Combining the historical trends with modeling of future changes, significant decreases in runoff and recharge seem very likely.

New Normal

While there will be regional variability, the report suggested, all water users in the state should expect decreased water availability as a warming climate turns what were once droughts — due to end with the next wet years — into something more permanent, which scientists have begun calling "aridification." This reflects not merely the need to adjust to a "new normal," but rather a need to adapt to an inexorable downward trend in New Mexico's water supplies.

The analysis nicknamed the "Leap Ahead Report" provided a critical ingredient for policymaking in complex settings — a foundation of shared understanding of the resources under discussion.

Government Agency Setting

The Task Force quickly converged on a core issue: the state agencies responsible for working on the problems the group hoped to address have long been starved for resources. There are too many ongoing projects to effectively oversee, too many water users to effectively monitor, and too many potential sources of contamination to effectively police.

Resources Needed

Local agencies, especially among small communities, face similar struggles: too many small water systems dependent on volunteers; too few technical experts to provide the help to design and manage the construction of new projects; and too few resources to maintain existing infrastructure.

Many water users themselves have delayed adapting to changing circumstances, the Task Force concluded, as they recall the bounty of supplies during the "fat and happy" period of 1979-2000 and being bailed out year upon year by proactive water management of meager winter snowpacks and sporadic monsoons. But awareness is growing that these creative workarounds — which worked in the past to get the state through multi-year droughts — may be overwhelmed by climate change-driven aridification and inexorably declining water supplies. This realization is setting in and worried mindsets can lead to conflict unless trust and compromise are pursued.

The Task Force's charge was based on the belief by the state's water leaders that New Mexico has a once-in-a-generation chance to make transformational change in the policies and processes inherited from the 20th century — policies and processes that need serious review and reform to provide the tools necessary to rise to the task of addressing persistent drought overlain with climate change.

Task Force Process

Transformation Change

In its charter, the Task Force outlined the circumstances driving its work: "a generational opportunity to make major inroads toward transformational change on established water policies and processes that users, practitioners, and lawmakers all agree are not currently meeting the 21st century needs of New Mexicans under stress resulting from persistent drought, aging infrastructure, and other pressures."

The urgent need combined with growing political attention and an influx of both federal funding and state revenue from New Mexico's oil and gas boom combined to open a window of opportunity the Task Force sought to exploit.

Task Force Charter

The Task Force's charge, via a self-developed charter, was to:

- Use existing scientific and policy analyses of New Mexico's climate, hydrology, water law, and policy
- Develop consensus-based, actionable recommendations to be delivered in time to be taken up in the New Mexico legislature's 2023 session
- Identify common barriers and root causes associated with financing infrastructure projects
- Investigate means and propose recommendations to efficiently and deliberately manage State and federal funding to prioritize, optimize, and target programs to equitably fund improvements to

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irrigation delivery, drinking water, stormwater, wastewater, and natural infrastructure systems, including watershed health initiatives, across the State — with an emphasis on assiting under-resourced communities
- Serve as ambassadors and subject matter experts for each region by conveying to the Water Task Force information from constituents and the public regarding priorities of interest on water and infrastructure funding concerns, and by carrying information from the Water Task Force back to members' communities to support transformational change

Membership

The Task Force was chaired by Mike Hamman, who as State Engineer, runs the state's primary water agency. Membership included representatives of key state natural resources, finance, and agricultural agencies' staff including:
- Environment Department
- Energy, Minerals and Natural Resources Department
- Interstate Stream Commission
- Department of Agriculture
- Department of Game and Fish
- Indian Affairs Department
- Finance Authority
- Department of Finance and Administration

In addition, membership included appointed volunteers from across the state with knowledge and experience in all aspects of water and related infrastructure management. Member representation included: the agriculture sector; municipal and domestic water users; Tribes, Pueblos, and Nations; New Mexico's acequia communities; environmental advocates; oil and gas interests; philanthropy; and academic and research institutions.

Legislative Involvement

As a creation of the executive branch of state government, the Task Force by design included no formal representation by members of the New Mexico state legislature. But, recognizing legislators' keen interest, and crucial role, the Water Task Force Executive Committee invited eight legislative advisors, and one alternate, to engage in the Water Task Force process. These legislative advisors were encouraged to join in discussion at meetings, provide comment on draft recommendations and coordinate on next steps. Legislative advisors brought valuable expertise related to their communities and constituents, as well as the policy-making process.

To manage and moderate the consensus-driven stakeholder work, the state contracted with New Mexico First, a non-profit organization with a long history of town halls, forums, and other non-partisan work on a range of public issues ranging from the economy to education, natural resources, and public health.

Thornburg Foundation

With financial help from the Thornburg Foundation, a New Mexico-based philanthropy, the Task Force also drew on the expertise of the Utton Transboundary Resources Center, a public interest research and service group based at the University of New Mexico School of Law with a long history of natural resources policy work.

Meetings

After a series of in-person and remotely held meetings over the summer of 2022 to define the Task Force's mission, the group broke down into three subgroups to analyze and formulate recommendations in three areas:

Recommendations

- Community Drinking Water, Wastewater and Stormwater Capacity, Infrastructure and Finance
- Water Resources Management and Planning
- River, Aquifer, and Watershed Health

The full Task Force then reconvened in a series of late fall meetings to review the sub-groups' recommendations and finalize the details of their recommendations to Governor Michelle Lujan Grisham and the state legislature.

Equity

Access to Water

Equity in water resources management refers to the fair and just distribution of water resources among all users, without discrimination or favoritism. It involves ensuring that all individuals, communities, and stakeholders have access to sufficient and safe water for their basic needs and livelihoods, regardless of their social, economic, or cultural status.

Equity requires considering the needs and rights of different users, such as households, farmers, industries, and ecosystems, and allocating water resources in a manner that reflects their relative importance and value. It also involves recognizing and addressing historical inequalities and power imbalances that may have resulted in some groups being marginalized or excluded from decision-making processes relat-

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Defining "Water Equity"

ed to water resources management. Equity also requires transparency and accountability in the management of water resources, to ensure that decisions are made in a fair and just manner, and that the benefits of water resources are distributed equitably among all users.

Having recognized that New Mexico's water problems have affected some groups more than others — for example, the inequities in access to clean water that became starkly apparent during the COVID-19 pandemic — the Task Force intentionally grounded its analysis and findings in the principle of "equity." This included working as a group to clarify precisely what that term meant in the context of its charge.

The group settled on a definition developed by the US Water Alliance, in which "water equity" occurs when all communities:

- Have access to safe, clean, affordable drinking water and wastewater services;
- Share in the economic, social, and environmental benefits of water systems; and
- Are resilient in the face of floods, drought, and other climate risk.

Core Problems

Identified Problems

The Task Force identified core problems in four areas:

Water Supply: coping with the reality of climate change impacts on the state's already overallocated rivers and aquifers

Community Capacity: massive wildfires, deep and lasting drought, and warming hammering communities — especially small, rural, and Tribal communities — that lack the resources to adapt

State Government Capacity: state water agencies lack of programs, technology, and resources — including the resources to take advantage of underused policies — to protect public welfare and help communities improve their resilience and equitably adapt to substantially less water

Watersheds and Aquifers at Risk: jeopardy for the health of New Mexico's forests, rivers, and aquifers; jeopardy for those who depend on them and the services they provide

Core Solutions

Identified Solutions

The proposed solutions are clustered in five key areas:

Capacity: Building the ability of existing state and local entities to cope with the growing scale and complexity of our water problems

Funding: Increasing the amount of money available to fix the problems we know we have, including the resources needed to effectively spend the bounty of federal and state grants and loans now available

Science, Data, and Planning: Filling major gaps in the scientific understanding of New Mexico's water writ large by investing in hydrogeologic investigations and aquifer monitoring wells, providing the basis for the regional water planning needed to adapt to a difficult future

Community Engagement: Drawing on the knowledge and values of those closest to the problems and potential solutions. Solutions cannot be imposed from above

Water Conservation: Finding and promoting ways for New Mexicans to use less water

Findings: Problems and Solutions

Identification of problems, and proposed legislative and executive actions to address them, emerged from three subgroups formed by Task Force members. Each group identified a motivating problem or problems and recommendations for actions in response.

NM Task Force

Community Drinking Water, Wastewater and Stormwater Capacity, Infrastructure and Finance

The Problem

The challenges of providing safe and reliable drinking water, managing wastewater, and managing stormwater, drove much of the Task Force's work. It was a problem that many of the group's leadership have long wrestled, and the availability of unprecedented levels of federal and state funding offered a unique opportunity, but also exposed the challenges. Money is necessary, but not sufficient, to overcome the problems facing communities lacking capacity.

Challenges

The challenges these communities face, as identified by the Task Force, are manifold:

- Aging and frequently inadequate infrastructure
- A lack of local and Tribal government capacity — technical, managerial, and financial — to operate and maintain current systems, let alone plan for their upgrade or replacement
- Needed infrastructure investments for reuse, aquifer storage and recovery, water conservation (e.g., leak reduction) and energy efficiency, which may be more acute needs for larger water systems
- A shortage of needed private sector capacity among engineering firms and others

Addressing Capacity

The problem is growing, the Task Force found, even as New Mexico provides more non-federal dollars for water infrastructure problems in proportion to its population than any other state. Many critical projects go unfunded or underfunded due to factors beyond issues of local and Tribal government capacity, including:

- New Mexico's process for allocating capital dollars
- Unpredictability of funding levels in any given year
- Uncertainty of amount of funds available for various purposes across multiple agencies and funding sources
- Added stress on infrastructure and water supply associated with increased drought, flooding and severe weather conditions, which may exacerbate the scale and scope of needed infrastructure improvements
- A tangle of funding programs at the state and federal levels with differing requirements and selection criteria that leave small communities lost and unable to find a way through the morass to get the help they need
- A lack of prioritization of funding by policymakers
- The challenge of coordination across state agencies, Tribal governments, and with the federal government

Finding Solutions

Recommendations

- Create a Water Infrastructure Projects Authority to assist small communities
- Support regional water system collaboration
- Enhance technical assistance support to small communities
- Create an emergency relief fund to help communities like those hit by fires and post-fire flooding in 2022
- Grow the water workforce

Economies of Scale

Water Infrastructure Projects Authority

Driven by the views of Task Force members (both within and outside state government) who have struggled with the problem for decades, the Task Force identified a key factor in this core problem. Many communities lack resources and economies of scale and need a capital investment model that encompasses the planning, project management, and execution of water infrastructure projects, services not now provided by the state departments that oversee such spending. These agencies include: the Department of Finance (DFA) and Administration, Water Trust Board, Colonias Infrastructure Fund, New Mexico Finance Authority, Environment Department, and Indian Affairs Department.

WIPA's Goal

Creation of a new Water Infrastructure Projects Authority (WIPA), a state government entity, would help these communities by vetting, prioritizing, funding, planning, designing, and constructing drinking water, wastewater, stormwater, irrigation, and dam infrastructure projects using a dedicated stream of state funding from severance tax bond proceeds, the Task Force found.

A goal of the new WIPA would also be to provide navigation services to help communities navigate the range of other possible funding sources and support Technical Assistance Providers that currently assist communities with these challenges.

NM Task Force

Small Systems

Regional Collaboration

Collaboration among small drinking water and wastewater systems — ranging from informal to formal arrangements — can help them overcome the lack of economies of scale that larger systems take for granted, the Task Force found.

Steps to incentivize such collaboration include:

- Legislative direction that drinking water and wastewater finance programs prioritize and incentivize regional collaboration
- Creation, by NMED (New Mexico Environment Department), of a list of drinking water and wastewater systems that might benefit from some form of regionalization, to be provided to state infrastructure finance program managers

Regional Resources

Technical Assistance

New Mexico has a network of technical assistance providers — e.g., regional Councils of Government, Southwest Environmental Finance Center, Rural Water Association, Rural Community Assistance Corporation — which help address gaps in local and Tribal capacity, including governance, planning, and certified operator training. Recurring appropriations are needed to bolster this system to ensure small local communities have the help they need.

Financial Support

Emergency Fund

The wildfires of 2022 and the flooding that followed exposed New Mexico's need for a more robust way of helping communities respond to such emergencies. The Task Force concluded that establishment of an emergency fund with clear protocols and strategies to mobilize resources would help. Legislative establishment of such an emergency fund is needed, with a direction to DFA to administer the fund and coordinate with other state agencies for technical assistance in allocation of money and project oversight.

Education

Water Workforce

Legislation, with appropriations to support it, can help grow the water workforce to meet the demands of water and wastewater systems for certified operators, staff, and volunteers. Allowing state retirees to return to the workforce, creation of an apprenticeship program, and supporting educational programs to strengthen local water systems could all play critical roles.

Water Resources Planning and Management

Scientific Analysis

The Problem

Drawing on research compiled in the New Mexico Bureau of Geology's "Leap Ahead" report, the Task Force emphasized the impact of New Mexico's changing climate as a key motivation for the group's work. With higher temperatures resulting in greater aridity and less available water, the group found, New Mexico lacks institutional tools suited to the scale of the response needed.

Like much of the Task Force's work, the group's analysis of the state's water resources and planning problems was built on the foundation laid by the state's scientists. Key findings from the scientific analysis included reservoirs, aquifers, and rivers at or near record lows, with an expectation of a further 25 percent decrease in streamflow and aquifer recharge over the next half century. The Task Force believed New Mexico must nevertheless prepare for a growing population and changing economy.

Challenges

Resulting challenges, the Water Resources Planning and Management subgroup found, include:

- Risk to New Mexico's ability to comply with interstate compacts given increasing scarcity and competing demands between New Mexico and neighboring states as well as the subsequent need for significant funding for legal defense and/or settlement negotiations
- The lack of clarity of Tribal and non-Tribal water rights due to many unadjudicated stream systems and unresolved Tribal and Pueblo water right settlements
- Threats to all forms of agriculture — commercial and cultural, large and small, rural and urban, irrigated and dryland
- Threats to the water supplies that sustain municipalities and industry
- The disproportionate impact to communities both in the amount of water available during drought and times of shortage, and the socioeconomic impact of water right transfers from agriculture to other uses, particularly in rural and acequia communities. In consideration of equity and private property rights, this must be balanced with the need to move water around via water banking, transfers, and markets to adapt
- The need to augment supply regionally, through such tools as brackish groundwater desalination, wastewater reuse, and treated or recycled produced water
- The need to conserve water across sectors with investment in innovative conservation technology

NM Task Force

Existing Capabilities

Data Platform

Funding, Research, Support

Stressors

The group focused extensively on existing state government capabilities that are not currently being utilized, attempting to avoid the policy trap of creating new programs and authorities rather than providing the needed resources to carry out the programs and authorities already present in state law. For example, in 2019 the state legislature authorized creation of an integrated scientific platform, the New Mexico Water Data Initiative, to improve and integrate the availability of the state's water data, making it more accessible and usable for decision makers.

Water data was one of several "underused and under-resources institutional tools" that required funding and institutional support to provide the benefits for which they were developed, including:

- An alternative to priority administration found in New Mexico's statutorily authorized Active Water Resources Management (AWRM); voluntarily negotiated shortage sharing agreements; and other mechanisms for water management during drought
- Aquifer recharge (AR) and aquifer storage and recovery (ASR), which are commonly used throughout the western United States, but which are underutilized in New Mexico in part because of bureaucratic roadblocks
- Wastewater reuse
- The state's Strategic Water Reserve, which allows the state to buy and hold water rights for environmental and interstate compact compliance purposes, but which is underutilized because of a lack of funding and inadequate staffing
- Equitably structured, regulated, and managed water banks and water markets

Key Recommendations

- Equip state agencies — especially the Office of the State Engineer (OSE), the Interstate Stream Commission (ISC), and the Environment Department (NMED) — to effectively address New Mexico's 21st Century emerging water security challenges and help New Mexicans across the state improve their water resilience and adaption to reduced water supplies. Set targets and ensure accountability through regular reporting by agencies
- Elevate water planning, through statutory clarification of its purpose and proper funding. Empower regional and local water agencies, to set clearly identified goals for permanent and escalating reductions in water use over the coming decades
- Capitalize a new state fund needed to capture and leverage the bounty of federal funding currently available for needed state and local water infrastructure
- Support the resilience of the state's diverse agricultural communities with effective water rights administration by the Office of the State Engineer (OSE), inclusion of agricultural stakeholders in water management, and consideration of equity, conservation, and sustainability
- Advance our scientific understanding of groundwater through measuring, monitoring, and models to protect the quantity and quality of groundwater resources

River, Aquifer, and Watershed Health

The Problem

New Mexico's rivers, aquifers, and watersheds face unprecedented stress from a warming and drying climate, over-allocation of water rights, and human impacts on surface and groundwater quality.

The work group noted that over-allocation of surface water rights, depletion of groundwater reserves, impaired surface and groundwater quality, fire suppression, and manipulation of the land magnify New Mexico's water issues. The current conditions and anticipated stressors in coming decades imperil New Mexico's communities — including, but not limited to our agricultural communities — threaten many species and associated ecosystems, impact traditional cultural users of the river by residents, indigenous, and acequia communities, and may contribute to public health hazards.

In crafting proposed solutions, the work group focused on the state's long history of resilient community adaptation dating to the state's many Native American communities and early Spanish settlers. That history of "practicing equitable water management," the work group argued, "serves as a model for all levels of governance." The group highlighted an important commitment that provided one of the key foundations for the Task Force's application of the principle of equity — the government-to-government relationships with indigenous Tribes, Pueblos, and Nations must continue to guide and influence how we are evolving New Mexico's water policy.

Key Recommendations

- Fully fund and staff the Strategic Water Reserve and River Stewardship Program, two underutilized existing programs

NM Task Force

- Fund New Mexico Environment Department to take over surface water quality regulation from the federal government
- Review modifications to New Mexico groundwater law to enable New Mexico to increase the resilience of the state's groundwater supplies and groundwater-dependent users
- Modernize forest management programs, both preventative and post-fire response
- Fund programs that help educate decision-makers and the public on water issues

Many of these recommendations focus on strategies that involve working with natural systems (such as natural and green infrastructure) to build New Mexico's water resilience and provide communities with equitable and sustainable access to water resources. Strategies that use natural and green infrastructure are well positioned to access federal funding.

Green infrastructure is an approach to water management that protects, restores, or mimics the natural water cycle. Green infrastructure incorporates both the natural environment and engineered systems to provide clean water, conserve ecosystem values and functions, and provide a wide variety of benefits to people and wildlife.

Conclusion

Taking Action

In the early months of 2023, positive results from the Task Force's work had already begun to emerge. Seventeen legislative bills and memorials were introduced that were either inspired by, or directly adapted from, the Task Force's recommendations, with another four bills indirectly related to the recommendations.

Action on the issues raised by the Task Force will be necessary to build the resilience of New Mexico's water system in the face of climate change. But while necessary, it may not be sufficient, for two reasons.

First, the major river basins and aquifers that provide water to New Mexicans' span state, tribal, and national boundaries. Accordingly, interstate and international negotiations and collaboration are required to ensure shared goals — including water security, food security, economic development, nature conservation, and environmental justice — are met. One of the critical pieces of successful water management is ensuring structures are in place to deal with these cross-scale linkages.

Second, the scale, scope, and speed of climate change may overwhelm government's efforts to keep pace. More radical or fundamental changes may ultimately be needed to sustain the communities and ecosystems of the southwestern US. This is at the heart of the notion of "wicked problems." To again cite Rittel and Webber, they "are never solved." To that end, however, the social capital built during the Task Force process shows promise of enduring in a way that might help to provide adaptive capacity to pursue the ongoing necessary changes.

For Additional Information:

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Patrick McCarthy is Water Policy Officer for the Thornburg Foundation, where he oversees the organization's efforts to build the health and resilience of New Mexico's watersheds, rivers, aquifers, and communities. Before joining the Foundation, he worked with water managers and community leaders across the US Southwest and in southern Africa on science-based water conservation solutions.

Mike Hamman is New Mexico's Senior Water Advisor and State Engineer and is at the forefront of the State's collaborative efforts to adapt to climate change and aridification. Trained as a civil engineer at the University of New Mexico, Mike has taken on a broad and diverse array of assignments in water policy and management, including Director of the City of Santa Fe's Water Utilities Division, Water Administrator for the Jicarilla Apache Nation, Executive Director of the Trinity River Restoration Program in California, Albuquerque Area Manager for the US Bureau of Reclamation, and CEO of the Middle Rio Grande Conservancy District.

WATER BRIEFS

PFAS US

NEW LIMITS

The Environmental Protection Agency (EPA) unveiled unprecedented new limits on the toxic "forever chemicals" — known as PFAS — as a way to tackle drinking water contamination. The proposal targets six notorious PFAS — PFOA, PFOS, GenX, PFBS, PFNA and PFHxS.

The limits, known as maximum contaminant levels, or MCLs, are the highest level of a contaminant allowed in drinking water. In addition to weighing health, these limits take water treatment costs and feasibility into consideration. The MCLs announced are 4 parts per trillion, or ppt, for PFOA and 4 ppt for PFOS, currently the limit of detection for both chemicals. For the other four PFAS chemicals, the EPA is proposing a "hazard index," which is a tool the agency uses to address cumulative risks from mixtures of chemicals.

While these are the first federal proposed drinking water limits for PFAS, ten states already have final or interim enforceable drinking water limits for PFAS.

The EPA also set a Maximum Contaminant Level Goal, or MCLG, for PFOA and PFOS of zero, based on identified cancer risks. An MCLG is the maximum level of a contaminant in drinking water at which the EPA determines that no adverse health effects would occur. Whenever there is an identified cancer risk, the MCLG is set at zero.

"Today we can celebrate a huge victory for public health in this country — EPA is finally moving forward to protect drinking water across the United States by proposing federally enforceable limits on some of the most toxic, persistent, and bioaccumulative chemicals ever found in our nation's drinking water supply," said Rob Bilott, the attorney who uncovered the widespread presence of PFAS chemicals and whose story is told in his book "Exposure" and portrayed in the movie "Dark Waters."

PFAS have been linked to cancer, reproductive harm, immune system damage and other serious health problems, even at low levels. The EPA has known about the risks from PFAS since at least the 1990s.

In June, the EPA proposed updated lifetime health advisories, or LHAs, for PFOA and PFOS and published new LHAs for PFBS and GenX. LHAs provide information on contaminants in drinking water that can harm people exposed to them throughout their lives.

The new EPA health risk assessment for the LHAs for the first time included studies on people, including children, and showed that PFAS exposure can cause health harms at levels much lower than the EPA's previous health guideline of 70 ppt for PFOA and PFOS in water.

PFAS have been found in the drinking water and groundwater of more than 2,800 communities. But the true scale of contamination is likely much greater.

Restricting industrial discharges will reduce the amount of PFAS that drinking water utilities must treat. In January, the EPA delayed proposed rules limiting discharges of PFAS from certain industries.

Under the Safe Drinking Water Act, the EPA has until September 3, 2024, to finalize the new drinking water standards. Drinking water utilities will then likely have three to five years to comply. Congress provided funding in the 2021 bipartisan infrastructure law to address PFAS in drinking water.

Because of current EPA guidelines, between 2023 and 2025, most water utilities will be required to test drinking water for 29 PFAS. That effort will provide more insight into the extent of contamination from those chemicals, which may prompt regulation of other compounds.

The proposed MCL is limited to six notorious PFAS. Treatment technologies installed to comply with the MCL mean other PFAS will effectively be treated too, which will reduce total PFAS levels in drinking water.

FOR INFO https://www.whitehouse.gov/wp-content/uploads/2023/03/CEQ-PFAS-Report-March-2023.pdf

NAVAJO NATION CASE US

WINTERS DOCTRINE

On March 20th, the US Supreme Court (Supreme Court) heard oral argument in *Arizona v. Navajo Nation*, Case No. 21-1484. This case has enormous consequences for tribal water law depending on the decision from the Supreme Court. *See* Echohawk Interview in this issue of *The Water Report* #230 for more about this lawsuit.

Brought by the Navajo Nation against the US Department of the Interior, the lawsuit pertains to the asserted failure by the United States to protect the water rights and interests of the Navajo Nation out of the mainstem of the Colorado River. Specifically, the Nation has alleged breach of trust for failure to take account of its needs from the river and to develop a management plan for that water.

On Feb. 8, 2023, 37 tribal governments, the National Congress of American Indians (NCAI), the Affiliated Tribes of Northwest Indians, and the San Luis Rey Indian Water Authority filed an amicus brief in support of the Navajo Nation in *Arizona v. Navajo Nation.* The brief urges the Supreme Court to respect the *Winters* water rights doctrine — which the Court established 115 years ago — and enforce the Tribe's trust relationship with the US with respect to water for the Navajo Reservation. In the *Winters* decision, 207 U.S. 564 (1908), the Court recognized that when the United States creates an Indian reservation, it also reserves the water necessary to fulfill the purposes of the reservation. "In creating a reservation, the federal and tribal governments understood that adequate water is essential to the purpose of a homeland. This has been settled law for over a century and it is absolutely the case for the Navajo Nation," explained University of Arizona Rogers College of Law Tribal Justice Clinic Director Heather D. Whiteman Runs Him.

The Supreme Court has repeatedly affirmed the *Winters* doctrine. Lower federal and state courts consistently have relied on the *Winters* doctrine to resolve water resource management issues across the arid American West. And, in dozens of negotiated water rights settlements, many of which were approved by Congress, the *Winters* doctrine has provided certainty in confirming and allocating water rights for tribal and non-tribal water users.

"We urge the Court to respect the well-established right of tribal nations who ceded millions of acres of land to the United States to have the United States protect the water needed for the remaining land that was reserved for tribal homelands. The federal government long has recognized its legal and moral obligations to fulfill its trust relationship with tribes, including the Navajo Nation," said Native American Rights Fund Staff Attorney Morgan E. Saunders.

The amicus brief was filed by Professor Whiteman Runs Him; Professor Monte Mills, Native American Law Center at the University of Washington School of Law; Professor Dylan R. Hedden-Nicely, University of Idaho College of Law; and John Echohawk, Steven C. Moore, David L. Gover, Ada Montague Stepleton, Joe Tenorio, Morgan E. Saunders, Wesley James Furlong, and Sydney Tarzwell at the Native American Rights Fund.

FOR INFO Argument Audio of the oral argument is available at: https://www.supremecourt.gov/oral_arguments/audio/2022/21-1484. Argument Transcript is available at: https://www.supremecourt.gov/oral_arguments/argument_transcript/2022; Case Documents available at: https://sct.narf.org/caseindexes/arizona_v_navajo.html

MANAGEMENT PLANS CA

BASINS IN OVERDRAFT

The California Department of Water Resources (DWR) announced March 2 decisions for **g**roundwater sustainability **p**lans (GSPs) for 12 critically overdrafted groundwater basins in Central California. These plans provide a roadmap for how groundwater basins will reach long-term sustainability, while implementing near-term actions such as expanding monitoring programs, reporting annually on groundwater conditions, implementing groundwater recharge projects and designing allocation programs.

Of the 12, plans for six basins are recommended for approval with corrective actions for the basins to remain in an approved status. The remaining six basins are deemed inadequate and are transitioning from DWR's oversight to the State Water Board for State intervention under the Sustainable Groundwater Management Act (SGMA). Adopted in 2014, SGMA requires local groundwater

sustainability agencies (GSAs) in medium and high-priority groundwater basins, which includes 21 critically overdrafted basins, to develop and implement GSPs.

DWR recommends approval of plans for the following basins:

- Cuyama Basin in Santa Barbara, San Luis Obispo, Ventura, and Kern counties
- Paso Robles Subbasin in San Luis Obispo County
- Eastern San Joaquin Subbasin in San Joaquin County
- Merced Subbasin in Merced County
- Westside Subbasin in Fresno and Kings counties
- Kings Subbasin in Fresno County

DWR deemed the following basin plans Inadequate:

- Chowchilla Subbasin in Madera and Merced counties
- Delta-Mendota Subbasin in San Joaquin, Stanislaus, Merced, Fresno, Madera, and San Benito counties
- Kaweah Subbasin in Tulare and Kings counties
- Tule Subbasin in Tulare County
- Tulare Lake Subbasin in Kings County
- Kern Subbasin in Kern County

GSAs are required to begin implementing their plans as soon as they are adopted locally, and these activities will continue even if basins are under State intervention. These plans will help local agencies address conditions that negatively impact groundwater within 20 years such as groundwater overdraft, degraded groundwater quality, land subsidence, and impacts to drinking water well users.

The GSAs whose plans are recommended for *approval* conducted critical analysis of groundwater levels, water quality, and inter-connected surface waters to develop and refine sustainable groundwater management criteria. While additional analytical work is needed during implementation, DWR deemed the framework for management sufficient under the law.

The basins deemed *inadequate* by DWR did not appropriately address deficiencies in how the GSAs structured their sustainable management criteria. The management criteria provide an operating range for how groundwater levels prevent undesirable effects such as overdraft, land subsidence, and groundwater levels that may impact drinking water wells, within 20 years. These GSAs did not analyze and justify continued groundwater level declines and land subsidence. Further, the GSPs lacked a clear understanding of how the management criteria may cause undesired effects on groundwater users in the basins or critical infrastructure.

In January 2022, after technical evaluation, DWR found the plans in these 12 critically overdrafted basins to be incomplete, identifying significant deficiencies that precluded approval. The GSAs had 180 days to correct the deficiencies and revise and resubmit their plans to DWR for re-evaluation, consistent with the regulations.

The basins with plans recommended for approval will continue to work with DWR and report on their progress in implementing their plans and completing corrective actions. DWR will transmit each basin deemed inadequate to the State Water Board, which may designate the basin probationary after providing public notice and then holding a public hearing. Any probationary designation will identify the deficiencies that led to intervention and potential actions to remedy the deficiencies. At the hearing, interested parties will have the opportunity to provide comments and technical information to the State Water Board regarding the deficiencies that were identified in the plans. Each basin is unique and will be evaluated individually by the State Water Board. State intervention and oversight is a critical step in making sure these basins succeed in achieving sustainable groundwater conditions. The ultimate goal is to have all basins return to local management with a clear path on how to achieve sustainability within 20 years of their original plan submittal.

DWR supports local agencies by providing planning, technical, and financial assistance to help GSAs and local communities in this long-term effort to sustainably manage their groundwater basins. The critically overdrafted basins each received $7.6 million in Sustainable Groundwater Management grant funding to help them implement their plans. Complementary funding programs like DWR's LandFlex program, state drought assistance programs, and the California Department of Conservation's Multibenefit Land Repurposing program are helping the most critically overdrafted areas of the state reduce their dependence on groundwater and fast-track progress in reaching local sustainability goals.

Out of a total of 94 groundwater basins required to submit plans under SGMA, DWR has provided determinations for 24 basins and is currently reviewing an additional 61 plans from 59 of the state's high- and medium- priority basins that were submitted to DWR in January 2022. DWR anticipates issuing determinations for the remaining basins throughout 2023.

FOR INFO Mary Fahey, 916/ 820-8083, media@water.ca.gov

AQUIFER RECHARGE CA

PILOT PROGRAM

Water agencies in California's Central Valley and East Bay took a major step forward in February on a joint pilot project to diversify water supplies, enhance drought resilience and restore a depleted aquifer through groundwater recharge.

For the first time, the East Bay Municipal Utility District (EBMUD) extracted groundwater banked deep below farmland in San Joaquin County into the utility's Mokelumne aqueducts, which convey surface water from Pardee Reservoir in the Sierra Nevada foothills to customers in the East Bay.

This extraction was a key step for DREAM — short for Demonstration Recharge, Extraction and Aquifer Management — a pilot project involving EBMUD, North San Joaquin Water Conservation District, San Joaquin County, and Eastern Water Alliance. The unique urban-agricultural partnership is designed to improve water supply reliability for both San Joaquin County farmers and EBMUD customers in Alameda and Contra Costa counties while recharging the critically over-drafted Eastern San Joaquin County Groundwater Basin.

DREAM is the result of years of negotiations and trust-building between water agencies to find mutually beneficial solutions to emerging water challenges.

Under the pilot project, EBMUD is providing up to 1,000 acre-feet of surface water diverted from the Mokelumne in wet years to avoid the need for farmers to pump groundwater from the area's depleted aquifer. In exchange, EBMUD receives a credit to withdraw up to half as much water as it previously delivered to farmers. The result will be a net gain in groundwater to replenish the aquifer, growers receiving the water they need to irrigate crops, and greater diversification of EBMUD's water supplies.

EBMUD first delivered surface water to growers in 2018 and 2019. This February, North San Joaquin Water Conservation District provided EBMUD with nearly 40 acre-feet of groundwater over 13 days, or about 1 million gallons a day. That is a small percentage of the roughly 160 million gallons of water EBMUD delivers daily to customers, but it represents a significant milestone as EBMUD works to expand its water supply portfolio and increase resilience against drought and other challenges exacerbated by climate change.

This is the first time EBMUD has incorporated groundwater into its Mokelumne water supply. EBMUD treated the blended water at its water treatment plants, and extensive water quality testing throughout the process ensured the water blend met or surpassed all state and federal drinking water safety standards. In addition, San Joaquin County monitored groundwater levels near the DREAM extraction well to verify the aquifer was not negatively impacted by the pumping.

The DREAM project partners expect to complete this pilot in March 2026 and are discussing concepts for a larger-scale groundwater banking program.

"To solve our local water supply challenges, we have to think regionally about how to make the system work better for all involved by utilizing the unique assets of each project partner," said North San Joaquin Board President Joe Valente. "As a district, we have learned so much with the DREAM project and are excited to take the concept to the next level."

FOR INFO https://www.ebmud.com/water/about-your-water/water-supply/demonstration-recharge-extraction-and-aquifer-management-dream-project

ASSURED WATER AZ

GROUNDWATER SUPPLIES

The Town of Queen Creek continues to have a 100-year water supply through groundwater. The Town is primarily using treated effluent to recharge the aquifer — it is working with developers to expand its treated effluent program and is in the process of expanding its recharge facilities. In addition, by 2026, the Town will have an additional 15,000-acre feet of water supplies to offset

groundwater pumping. Queen Creek's allocation of Colorado River (established in the 1980s) is a very small portion of what the Town is using to recharge the aquifer.
FOR INFO Constance Halonen-Wilson, Constance.Wilson@QueenCreekAZ.gov

LAND CONSERVATION WA

OKANOGAN RIVER

During the first week of March 2023, Western Rivers Conservancy (WRC), the Confederated Tribes of the Colville Reservation (Colville Tribes) and the Washington Department of Fish and Wildlife (WDFW) permanently protected two miles of the Okanogan River and a key piece of one of the state's most important wildlife corridors by conserving McLoughlin Falls Ranch.

The 727-acre ranch lies within one of the most scenic and historic reaches of the Okanogan River, located roughly 30 miles south of the Canada-US border. The property is defined by towering stands of ponderosa pine, grassy benches above the river and dramatic, glacier carved cliffs that rise like sagebrush-covered stairsteps along the meandering Okanogan.

WRC purchased McLoughlin Falls Ranch in 2022 and held the property while pulling together the funding and partnerships needed to permanently protect it. On March 3, WRC conveyed the southern portion of the property to WDFW and the northern portion to the Colville Tribes. This unique outcome delivers a three-way win, conserving critical habitat for fish and wildlife, returning ancestral lands to the Colville Tribes, and providing new recreational access to a popular reach of the Okanogan River.

McLoughlin Falls Ranch forms a critical part of a larger wildlife movement corridor that reaches from the Cascade Mountains to the Kettle River Range. Mule deer migrate between the valley and higher elevations, and the area is home to mountain lion, elk, bighorn sheep, state endangered Columbian sharp-tailed grouse, and the country's healthiest population of Canada lynx.

"What makes McLoughlin Falls Ranch so special, beyond its breathtaking scenery, is how integral it is, and always has been, to communities of fish, wildlife and people," said Nelson Mathews, WRC's vice president. "Conserving McLoughlin Falls Ranch in partnership with the Colville Tribes and WDFW means this area will remain a haven for imperiled animals and that ancestral lands will be returned to their original stewards."

McLoughlin Falls Ranch possesses key stands of riverside forests that benefit river habitat by keeping water temperatures low. Despite intense pressure, the Okanogan River supports federally threatened Upper Columbia River Steelhead as well as one of only two self-sustaining runs of sockeye salmon left in the Columbia Basin. On a river that has experienced significant development, conserving intact habitat like that found at McLoughlin Falls Ranch is crucial to the survival of these fish.

In addition to its robust fish and wildlife habitat, McLoughlin Falls Ranch is important for its historic and cultural values. The area has been inhabited by members of the Colville Tribes for millennia, and the property is an important ancestral hunting and fishing site.

"We appreciate the partnership with WRC, WDFW, and Conservation Northwest in making this acquisition possible by working together in the name of conservation," said Jarred Erickson, Confederated Tribes of the Colville Reservation chairman. "McLoughlin Falls was a very important fishery to our people and the cultural ties to these places are at the core of who we are as people. This collaborative work will ensure our people will have future access to a historic fishing site while also ensuring these areas stay wild and allow the movement of many keystone species from the Cascades to the Kettle River Range."

Now that a portion of the ranch is under the stewardship of WDFW and will soon be open to the public, boaters are permitted to stop and rest or picnic near the property's namesake falls (a large Class II rapid called McLoughlin Falls). On land, visitors will have non-motorized access.

"Opening this land to public use is a huge win for the people of the area to be able to hike, bike, boat, hunt, and wildlife watch," said Brock Hoenes, WDFW Region 2 director. "Public lands benefit all of us but also the many species of wildlife that call this land home. Preserving it for the future means preserving much needed habitat, as one of the biggest challenges our wildlife faces is loss of habitat."

This project was made possible by funding and support from Conservation Northwest, an organization that works to protect, connect and restore wildlands and wildlife across Washington state and into British Columbia. Support from The David and Lucile Packard Foundation, the Giles W. and Elise G. Mead Foundation, and the James M. Lea Foundation was also pivotal to this project.
FOR INFO Danny Palmerlee, WRC, 503/ 241-0151

SNOWPACK AZ

SALT RIVER PROJECT

Even before the parade of February snowstorms began marching through Arizona's high country, meteorologists and hydrologists were beginning to see the handwriting on the canyon walls. The Southwest's moisture-laden winter was going to force the Salt River Project to begin "spilling" water from its reservoir system in order to create storage space for the Spring runoff season.

SRP recently began a low-level release of water from its Verde River system. Initial releases began flowing over Granite Reef Dam — located about four miles below the confluence of the Salt and Verde rivers — at a rate of approximately 500 cubic feet per second (CFS), which increased to 1,000 CFS last weekend. The releases, which originate out of Bartlett Dam, are expected to continue through March.

"SRP monitors the watershed and reservoir system year-round to ensure a reliable supply for the Valley," said Charlie Ester, Manager of SRP Water Management. "This winter has proven to be a productive year for the watershed, which is good news as SRP is able to store the water for future years." Because of the productive storms experienced this winter and the subsequent runoff, the SRP reservoirs on the Verde River are nearing full capacity.

SRP officials report that while the releases are expected to be maintained at a low level, the water will eventually be visible flowing through the normally dry Salt River. The flows are expected to close McKellips Road in the East Valley until later in the Spring.

This is the first water release since 2019. Water releases in winters with abundant precipitation and runoff are an essential tool to safely manage SRP's water supply to the Valley and to ensure dam and public safety. Strategically releasing water into the Valley of the Sun is a major part of SRP's mission.

Throughout the year, SRP releases water from the dams on the Salt and Verde rivers into a series of canals to meet the water needs of the Valley. In particularly wet winters when the reservoirs are nearing capacity, some releases outside of the canal system are required to make room for additional expected runoff.
FOR INFO Arizona Department of Water Resources, engage@azwater.gov, 602/ 771-8500

FUNDING US

FISH PARTNERSHIPS

Through the National Fish Habitat Partnership (NFHP) (www.fishhabitat.org), the US Fish and Wildlife Service (USFWS) and partners are providing more than $39.2 million to support 95 fish habitat conservation projects in 24 states. The USFWS is providing $5.8 million this year, with non-governmental organizations, state resource agencies, and other partners contributing an additional $33.3 million. This represents a 5.7:1 leveraged funding match for NFHP funding.

These projects empower and boost locally led conservation efforts that restore and reconnect habitats to create more robust fish populations, better fishing, and healthier waterways. Twenty individual Fish Habitat Partnerships across the nation make up the national efforts and work with a variety of partners, including private landowners, farmers and ranchers, Tribes, non-profit organizations, state, federal, and local government agencies, and many others to achieve fish habitat conservation goals that protect, restore, and enhance habitat conditions locally for fish.

In 2023, project types include removing barriers to fish passage, reducing erosion from farm and ranchlands, restoring stream banks, combatting the impacts of drought, and conducting monitoring and assessments to identify conservation needs for fish and their habitats. Anticipated benefits include more robust fish populations, better fishing, and healthier waterways. This year's projects meet local priorities that span from restoring urban streams to reconnecting tidal wetlands and are in areas ranging from Hawaii to Vermont. Projects target and address limiting factors to improve habitat, water quality, and benefit our nation's fisheries resources. This funding will also support the coordination of the individual Fish Habitat Partnerships and the

operations of the National Fish Habitat Board to help establish national priorities and under NFHP. A full list of funded projects can be found HERE.

NFHP uses a nationally focused aquatic conservation strategy to maximize the reach of limited fish habitat conservation dollars. Under NFHP, federal, state, tribal, and privately raised funds are leveraged through regional Fish Habitat Partnerships to address the nation's biggest fish habitat challenges. The USFWS is a key partner in implementing the partnership, providing leadership and technical expertise on the local, regional, and national levels, as well as financial assistance directly to partners for on-the-ground conservation projects. Since 2006, the USFWS has provided over $56.5 million to conservation projects which leveraged at a 4:1 ratio to provide over $292.7 million in funding support for fish habitat conservation projects that improve angling and recreational opportunities across the nation. NFHP assembles the collective expertise of federal, state, and non-governmental organizations to identify and prioritize conservation work to achieve significant benefits for fish and other aquatic resources for the American people.

Since 2006, NFHP has supported 1,378 projects benefiting fish habitat in all 50 states. This effort works to conserve fish habitat nationwide, leveraging federal, state, tribal, and private funding resources to achieve the greatest effect on fish populations through priority conservation projects of 20 regionally-based Fish Habitat Partnerships. In 2020, NFHP was recognized by Congress as part of the America's Conservation Enhancement (ACE) Act. NFHP guidance and policies are developed in conjunction with our partnerships and the National Fish Habitat Board.

For additional information regarding NFHP, see major articles in *TWR* #225 (Nov. 15, 2022) & *TWR* #227 (Jan. 15, 2023)

FOR INFO Ryan Roberts, NFHP, 202/ 838-3466

LAND USE OR

NATURAL PARKS

Metro (a planning organization for Portland, OR) has created a new natural area with the acquisition of 92.38 acres of largely undeveloped land in the Upper Holcomb Creek area of unincorporated Clackamas County. The purchase was made possible through funding from the voter-approved 2019 parks and nature bond measure.

In a memorandum sent to Metro Council, Metro conservation program director Dan Moeller wrote that this acquisition was significant not just for its size, but because of its diverse range of habitats and its location in an area that so far has seen little investment in conservation.

Metro officially took possession of the parcel on January 26. Now Parks and Nature staff can begin to plan for the site's restoration. This plan will include removing some existing structures, replacing invasive weeds with native plants, and improving habitat complexity.

The property allows Metro to take a large step forward in its goal of improving regional water quality, as it contains more than 3,000 feet of seasonal headwater streams that feed into Upper Holcomb Creek, which in turn feeds Newell and Abernethy creeks. Protecting these streams can also help mitigate flooding risks and enhance climate resilience in the watershed.

The property contains a wide variety of habitats: oak savanna, woodland, and prairie. As a result, it could serve as a habitat for many kinds of native plants and wildlife. It also is home to a significant amount of Oregon white oak, a native tree that can provide habitat for many regionally declining species as well as sustenance for mammals like deer and elk.

This is the 12th land acquisition purchased with funding from the 2019 parks and nature bond, creating a total of 478 acres acquired across nine target areas identified by the bond and its refinement plan.

FOR INFO Hannah Erickson, Metro, 503/ 797-1700

SALMON DECLINES CA

SPORT FISHING

On March 10, by recommendation from California and Oregon agency representatives and industry advisors, the National Marine Fisheries Service took in season action to cancel ocean salmon fishery openers that were scheduled between Cape Falcon, Oregon, and the US/Mexico border through May 15.

The sport fishery had been scheduled to open off California in most areas on April 1. The actions were taken to protect Sacramento River fall Chinook, which returned to the Central Valley in 2022 at near-record low numbers, and Klamath River fall Chinook, which had the second lowest abundance forecast since the current assessment method began in 1997.

The Pacific Fishery Management Council (PFMC) has produced three regulatory options for the May 16, 2023, through May 15, 2024, time period. None of the three options would authorize commercial or ocean salmon sport fishing off California until April 2024. The alternatives were approved by the PFMC for public review today.

FOR INFO https://www.pcouncil.org/documents/2023/03/pacific-fishery-management-council-releases-alternatives-for-2023-west-coast-salmon-fisheries-march-10-2023.pdf/

COAL POLLUTION US

POWER PLANTS

On March 8, the Biden-Harris Administration announced it is proposing to strengthen wastewater discharge standards that apply to coal-fired power plants. The US Environmental Protection Agency (EPA) proposal follows the latest science and applies EPA's longstanding authority under the Clean Water Act to reduce discharges of toxic metals and other pollutants from these power plants into lakes, streams, and other waterbodies.

Coal-fired power plants discharge large volumes of wastewater into waterways such as ponds, lakes, rivers, and streams. The discharges include pollutants such as selenium, mercury, arsenic, nickel, bromide, chloride, and iodide, nutrient pollution, and total dissolved solids. Exposure to these pollutants can harm people and ecosystems through contamination of drinking water sources, recreational waters, and aquatic life.

EPA's proposed rule would establish more stringent discharge standards for three types of wastewater generated at coal-fired power plants: flue gas desulfurization wastewater, bottom ash transport water, and combustion residual leachate. The proposed rule also addresses wastewater produced by coal-fired power plants that is stored in surface impoundments (for example, ash ponds). The proposal would define these "legacy" wastewaters and seeks comment on whether to develop more stringent discharge standards for these wastewaters.

EPA is also proposing changes to specific compliance paths for certain "subcategories" of power plants. The Agency's proposal would retain and refresh a compliance path for coal-fired power plants that commit to stop burning coal by 2028. The Agency is issuing a direct final rule and parallel proposal to allow power plants to opt into this compliance path. Additionally, power plants that are in the process of complying with existing regulations and plan to stop burning coal by 2032, would be able to comply with the proposed rule.

EPA estimates that the proposed rule would reduce pollutants discharged through wastewater from coal-fired power plants by approximately 584 million pounds per year.

FOR INFO www.epa.gov/eg/steam-electric-power-generating-effluent-guidelines

CALENDAR

April 16-18 CA

CMUA 2023 Annual Conference, San Diego. Rancho Bernardo Inn. Presented by California Municipal Utilities Association. For info: www.cmua.org >> Events

April 16-19 MN

Sustainable Water Management Conference, Minneapolis. Hyatt Regency Minneapolis. Presented by American Water Works Association. For info: www.awwa.org/Events-Education/Sustainable-Water-Management

April 18 CA & WEB

Public Hearing on Amendments to California's Water Quality Enforcement Policy, Sacramento. CalEPA Headquarters Building, 1001 I Street, Second Floor; 9:30 am Pacific Time. For info: www.waterboards.ca.gov/water_issues/programs/enforcement/water_quality_enforcement.html

April 18-21 CA

AC23 - 2023 CWEA Annual Conference: "One Community One Purpose", San Diego. Town & Country Resort. Conference of the California Water Environment Association.
For info: www.cwea.org

April 19 WEB

Idaho Brownfields Conference - NEBC Virtual Conference, Presented by Northwest Environmental Business Council. For info: www.nebc.org/ >> Conferences

April 20-21 TX

Texas Wetlands Conference: Funding Priorities, the *Sackett* Decision & the Future of Texas Projects, Galveston. Tremont House. For info: CLE International: 800/ 873-7130 or www.cle.com

April 24-25 UK

Smart Water Systems 12th Annual Conference, London. Copthorne Tara Hotel. Presented by SAE Media Group; New Technologies & Latest Developments. For info: www.smart-water-systems.com

April 26-28 CO

52nd Spring Conference on Environmental Law, Denver. Grand Hyatt Denver. Presented by the American Bar Association. For info: environ@americanbar.org

April 27 CA

Ecology Law Quarterly 2023 Environmental Awards Banquet, Berkeley. Bancroft Hotel. Presented by Center for Law, Energy, & the Environment. For info: www.law.berkeley.edu/research/clee/events/elqbanquet23/

May 2 CO

2023 WateReuse Colorado Conference, Boulder. SEEC Bldg., University of Colorado - Boulder. Presented by WateReuse. For info: www.watereuse.org

May 4 WEB

Water Rights in Utah Seminar: Protect Your Client's Water Rights and Use, Live Online Seminar. Presented by Smith Hartvigsen Law Firm with National Business Institute; Use Promo Code FSPN50A for $50 Off Registration Fee. For info: https://www.nbi-sems.com/96511

May 5 AZ

32nd Annual Desert Horticulture Conference, Tucson. El Conquisdator Hotel. Plants and Design, Plant Health, and Water/Urban Landscapes. For info: https://cals.arizona.edu/deserthort/

May 7-10 AZ

National Association of Environmental Professionals Annual Conference , Phoenix. Sheraton Phoenix Downtown Hotel. Annual Conference & Training Symposium. For info: www.naep.org/

May 8-10 NE

Water for Food Global Conference, Lincoln. Nebraska Innovation Campus Conference Center. Presented by the Daugherty Water for Food Global Institute; Innovative Ways to Improve Water & Food Security by Increasing Farmers' Resiliency to a Changing Landscape. For info: https://waterforfood.nebraska.edu/

May 9-11 NC

20th Annual Climate Prediction Applications Science Workshop: Understanding Socio-Economic Value of Climate Data, Prediction, Information & Services, Ashville. The Collider. Presented by the National Weather Service. For info: https://www.weather.gov/climateservices/cpasw

May 9-11 CA

ACWA 2023 Spring Conference & Exhibition, Monterey. Monterey Conference Center. Presented by Association of California Water Agencies. For info: www.acwa.com/events/

May 9-11 AZ

96th Annual AZ Water Association Conference & Exhibition, Phoenix. Phoenix Convention Center. For info: https://www.azwater.org/ >>Events & Training

May 11 WEB

Clean Water, Complicated Laws: How to Participate in the MCL Development Process - 2023 Water Quality Webinar Series, Free Webinar on Water Quality Issues, Laws & Regulations; 10:00-10:30am Pacific Time. Presented by Best, Best & Krieger. For info: https://bbklaw.com/news-events/webinars >> Clean Water

May 11-12 HI

International Conference on Drought and Water Resources, Honolulu, Online Presentation. World Academy of Science, Engineering and Technology Event. For info: https://waset.org/conferences-in-may-2023-in-honolulu/program

May 11-12 CA

California Water Association Spring Conference, Sacramento, Kimpton Sawyer Hotel. For info: https://calwaterassn.com/

May 16-17 TX

Environmental Trade Fair & Conference, Austin. Austin Convention Center. Presented by the Texas Commission on Environmental Quality; Agency Staff Leads Over 100 Courses & Discussions. For info: https://www.tceq.texas.gov/p2/events/etfc/etf.html

May 16-19 ID

2023 National Pretreatment Workshop, Boise, Grove Hotel. National Association of Clean Water Agencies (NACWA) Event. For info: www.nacwa.org/conferences-events/events/

May 17-19 CA

Bay Delta Water Tour, Sacramento. Tour Travels into the Sacramento-San Joaquin Delta. Presented by Water Education Foundation. For info: https://www.watereducation.org/tour/bay-delta-tour-2023

May 18-19 AZ

Law of the Colorado River: The Next Century of River Policy - 23rd Annual Conference, Scottsdale. Hilton Hotel. For info: CLE International: 800/ 873-7130 or www.cle.com

May 19 AZ & WEB

Annual Water Utility Leadership Forum - Northern Arizona Municipal Water Users Association (NAMWUA), Flagstaff. High Country Conference Center; Hybrid: In-Person & Virtual Event. Colorado River Projections, Permit Compliance & Reporting Tips. For info: https://namwua.org/water-utilites-leadership-forum

May 21-25 NV

2023 World Environmental & Water Congress Conference, Henderson, Green Valley Ranch Resort Spa and Casino. RE: "Adaptive Planning and Design in an Age of Risk and Uncertainty" For info: www.ewricongress.org

May 23 UT

2023 Utah Water Conservation Forum Spring Conference, West Jordan, Conservation Garden Park. RE: Water Conservation Strategies; Tech Comparisons; Ordinances & Standards. For info: http://www.utahwaterconservationforum.org/

The Water Report
Water Rights, Water Quality & Water Solutions in the West
3615 W. Hills of Gold Dr. Tucson, AZ 85745

CALENDAR

May 22-24 NV

Western States Water Council 2023 Spring (201st) Meetings, Reno. Peppermill Resort Spa Casino. Field Trip 5/22; Meetings 5/23-5/24. For info: https://westernstateswater.org/upcoming-meetings/

May 23-24 PA

2023 Choose Clean Water Conference, Harrisburg, Hilton Harrisburg. RE: Chesapeake Bay Watershed Efforts. For info: www.choosecleanwater.org/

May 23-26 HI

Hawai'i Rural Water Association Training & Technical Conference, Big Island, King Kamehameha's Kona Beach Hotel. RE: Emerging Contaminants, Water & Wastewater Technical Training. For info: www.hrwa.net/hrwa-conference.html

May 31-June 2 ME

Association of Environmental & Resource Economists - Annual Summer Conference, Portland . Holiday Inn by the Bay. For info: www.aere.org/aere-summer-conference

June 1 OR

Immerse: 40 Years to Remember, A Future to Impact - The Freshwater Trust's Celebration, Portland. Castaway Portland; 6:00pm-9:00pm Pacific Time. TFT's 40th Anniversary. For info: www.thefreshwatertrust.org

June 1 WA

Contaminated Properties in the Northwest Conference, Seattle. TBA. In-Person & Live Webcast. For info: The Seminar Group: 206/463-4400, info@theseminargroup.net or theseminargroup.net

June 5-8 OR

Eighth Interagency Conference on Research in the Watersheds, Corvallis. LaSells Stewart Center: Oregon State University. Conference & Field Trips. For info: ICRWatersheds.org; Krista Jones, USGS, kljones@usgs.gov

June 6-7 TX

Texas Groundwater Conference: Everything Aquifers & Groundwater Management, Austin. Norris Conference Center. Presented by American Ground Water Trust. For info: https://agwt.org/events

June 6-7 NM

"STRATCOMM:H2O" - 2023 Strategic Water Communications Workshop, Santa Fe, Hilton Santa Fe Historic Plaza. National Association of Clean Water Agencies (NACWA) Event. For info: www.nacwa.org/conferences-events/events/

June 7-8 WEB

Water Law in Washington Seminar, Live Interactive Online Broadcast. For info: Law Seminars Int'l, 206/ 567-4490, registrar@lawseminars.com or www.lawseminars.com

June 8 WEB

Clean Water, Complicated Laws: Water Quality Trading & Stormwater In-Lieu Fees - 2023 Water Quality Webinar Series, Free Webinar on Water Quality Issues, Laws & Regulations; 10:00-10:30am Pacific Time. Presented by Best, Best & Krieger. For info: https://bbklaw.com/news-events/webinars >> Clean Water

June 8-9 CO

Crisis on the Colorado River: From Short-Term Solutions to Long-Term Sustainability - 43rd Annual Colorado Law Conference on Natural Resources, Boulder. University of Colorado School of Law (Wittemyer Courtroom). Presented by the Getches-Wilkinson Center and the Water & Tribes Initiative. For info: www.getches-wilkinsoncenter.cu.law >> Events

June 11-14 Canada

ACE 23: The World's Premier Water Conference, Toronto. Enercare Centre, Beanfield Centre & Headquarter Hotel. Presented by American Water Works Association; Long-Term Vision of the Future of Water - Chart a Course for a Sustainable Water Sector.
For info: www.awwa.org/ace