



The Water Report™

Water Rights, Water Quality & Water Solutions in the West

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FISH PASSAGE & TREATY OBLIGATIONS

WASHINGTON STATE “CULVERT CASE” BEFORE THE NINTH CIRCUIT

by David Moon, Editor

INTRODUCTION

The 21st Annual Endangered Species Act Seminar, hosted by The Seminar Group in Seattle, Washington on January 23-24, 2014, included, among a number of very informative presentations, updates on the tribal treaty rights litigation known as the “Culvert Case” which is currently before the federal Ninth Circuit Court of Appeals (Ninth Circuit). This case is a continuation of landmark tribal treaty rights litigation first decided 40 years ago — i.e., the “*Boldt* decisions” which reaffirmed and protected tribal fishing rights reserved by the Tribes under mid-nineteenth century treaties.

Currently, the State of Washington (State) has appealed a US District Court order in the Culvert Case to replace or repair culverts that are blocking the migration of fish runs covered under the tribal treaties. This case primarily concerns over 800 culverts running under roads maintained by Washington State Department of Transportation (WSDOT) in need of attention. If the current injunction stands, the State estimates it will cost nearly two billion dollars to comply.

The tribal perspective on the case was presented by Alan Stay, who currently serves as a member of the Tribal Attorney’s Office of the Muckleshoot Indian Tribe (see Stay, *Treaty Tribes & Hatchery Fish*, TWR #99 (May 15, 2012)). Mr. Stay has previously worked on implementation of the “Culvert Case.” The State’s position was presented by Laura Watson, Deputy Solicitor General of the Washington Attorney General’s Office.

On March 29, 2013, US District Court Judge Ricardo Martinez ordered the State of Washington to accelerate work to replace and repair more than 800 fish run-blocking culverts within 17 years to help restore treaty-protected salmon runs. *U.S. v. Washington*, C70-9213 (March 29, 2013). On May 28, 2013, the State of Washington filed a Notice of Appeal in the case before the Ninth Circuit. The Tribes, as plaintiffs and intervenors, have filed a cross-appeal from an order that excluded some of the evidence they attempted to introduce in the case.

THE CULVERT CASE

Background: *United States v. Washington* continued

The Culvert Case was initiated by twenty-one Tribes and the United States as Subproceeding 01-1 of *United States v. Washington* in January 2001. This case occurs as a subproceeding because the federal district court retained continuing jurisdiction to implement an injunction and decree first enunciated in what is commonly known as the “*Boldt* case” — so named after Judge Boldt, who wrote the 1974 decision. *United States v. Washington*, 384 F. Supp. 312, 405-19 (W.D. Wash. 1974). In that 1974 case, the federal district court “entered a permanent injunction and decree to implement the Tribes’ right to a fair share of salmon under the six treaties that secure fishing rights in Western Washington.” Watson Presentation, page 2, citing the *Boldt* case.

Culvert Case

Environmental Damage

State Fish Passage Duty

Stevens Treaties

A subsequent decision — “Phase II” of *Boldt* — agreed with the Tribes “additional contention that the Treaties protected against the impacts of environmental damage to the fishery” — was activated in 1976. Stay at 4. The US and the Tribes asserted that the State had a duty, based on the Treaties, to avoid actions that would “significantly and adversely affect fish populations and fish habitats so as to significantly reduce the number or quality of fish available to treaty Indians.” *United States v. Washington*, Civil NO. 9213, US’ Amended and Supplemental Complaint for Declaratory Judgment at 6 (W.D. Wash. Aug. 17, 1976). However, the Ninth Circuit vacated this declaratory judgment by the federal district court “because it was decided without a factual context” — essentially putting Phase II on hold until such a “factual context” was presented. The Tribes then “sought a suitable factual vehicle for bringing the treaty habitat issue back to court. They found it in culverts.” Watson at 3. Thus, the current Culvert Case arose.

There were several attempts to settle the Culvert Case litigation without success. Cross-motions for summary judgment were filed in 2006. In 2007, the federal district court granted partial summary judgment to the Tribes, holding:

[T]hat the right of taking fish, secured to the Tribes in the Stevens Treaties, imposes a duty upon the State to refrain from building or operating culverts under State-maintained roads that hinder fish passage and thereby diminish the number of fish that would otherwise be available for Tribal harvest. The Court further declares that the State of Washington currently owns and operates culverts that violate this duty.

United States v. Washington, Civil No. 70-9213, Subproceeding 01-1, Order on Cross-Motions for Summary Judgment at 12 (W.D. Wash. Aug. 23, 2007). The “Stevens Treaties” is a reference to the series of treaties entered into between the US and tribes in the Puget Sound area and parts of eastern Washington. “Each of these treaties contained a provision that reserved to each of the signatory tribes the right to fish at all usual and accustomed grounds and stations off their respective reservations in common with citizens of the Territory.” Stay at 1.

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Treaty Indian Tribes in Western Washington



Culvert Case

Fishing Rights Deprived

Barrier Culverts

Beginning on October 13, 2009, the federal district court held a seven-day trial to determine “the appropriate remedy for the violation by the defendants of certain of the Plaintiff Tribes’ rights under treaties between the Tribes and the United States.” Judge Martinez noted that under his amended order of August 23, 2007, “the Court has ruled that the State of Washington has built and currently operates stream culverts that block fish passage to and from the Tribes’ usual and accustomed fishing places, depriving the Tribes of the fishing rights reserved in the treaties.” Subproceeding 01-1, Permanent Injunction at 1 (March 29, 2013).

Judge Martinez’ Permanent Injunction was extremely detailed in spelling out what was required of the State to correct the fish passage problems. Besides fixing existing culverts within the next 17 years, the injunction addressed future actions by the State: “Any new culvert constructed by the Defendants in the future on salmon waters within the Case Area and any future construction to provide fish passage at State barrier culverts on such waters shall be done in compliance with the standards set out in this injunction.” *Id.* at 3.

The injunction was accompanied by a Memorandum and Decision explaining the decision. In several sections of the Memorandum and Decision the Judge showed his obvious frustration with the State and its failure to take sufficient action following his earlier rulings, concluding that “[A]n injunction is necessary to ensure that the State will act expeditiously in correcting the barrier culverts which violate the treaty promises.” Memorandum and Decision at 35.

This litigation’s factual basis is also particularly significant due to the numerous Endangered Species Act (ESA) listings of salmonids in the Pacific Northwest. As found by Judge Martinez in his March 29, 2013, Memorandum and Decision at page 27: “Correction of fish passage barrier culverts is a cost-effective and scientifically sound method of salmon habitat restoration. It provides immediate benefit in terms of salmon production, as salmon rapidly re-colonize the upstream area and returning adults spawn there.” Fisheries scientists identified approximately 1,000 miles of stream habitat upstream of blocked culverts. Memorandum and Decision at 21.

For additional background information on the Culvert Case and the current status, see Moon, *Culvert Case Decided in Washington: Tribal Treaty Fishing Rights Victory*, TWR #110 (April 15, 2013) and *Culvert Case Appeal: Tribal Fish Passage*, Water Briefs, TWR #112 (June 15, 2013).

Tribal Position: Protection of Fishery Habitat

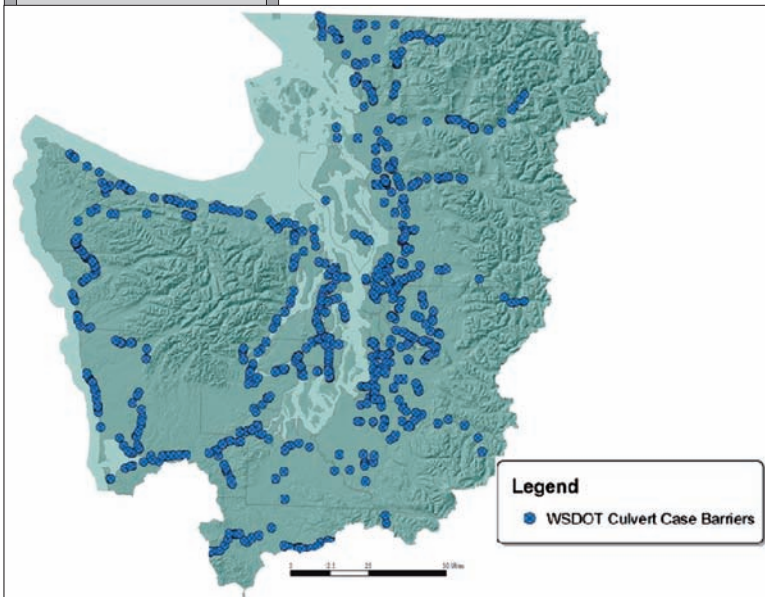
The issue of habitat protection and environmental damage to the salmon fishery caused by culverts with inadequate fish passage is central to the case. The Tribes’ basic position was laid out by Alan Stay under his discussion of Phase II (page 4).

Tribes have long understood the reality that should the fish disappear their treaty right would also vanish. Courts have long held that non-Indian or State interests could not interfere with the Treaty right to harvest by intercepting fish before they would otherwise be available to tribes. *United States v. Winans*, 198 US 371 (1905); *United States v. Washington*, 384 F. Supp.312 (W.D. Wash. 1974), aff’d 520 F.2d 676 (9th Cir. 1975); *Washington v. Washington Passenger Fishing Vessel Association*, 443 U.S. 658 (1979). Courts have also made clear over time that Treaty rights are reserved rights and that sufficient resources must be available to fulfill the purposes of those reservations found in Treaties. *Winters v. United States*, 207 US 564 (1908) (reserving enough water to carry out the purposes of the reservation).

Simply put, to allow fish to be taken through destruction of fish habitat, thus depriving Treaty tribes of an opportunity to harvest those fish is no different than allowing a prior non-Indian harvest: in both cases Treaty tribes are deprived of their Treaty opportunity and both takes are prohibited by the Treaty. Said differently, when the tribes negotiated the treaties and gave up vast areas of lands, the reservation of the right to fish carried with it the implied right to sufficient fish to make that right reserved meaningful. Quite obviously, if the state could cause a taking of the fish otherwise available to the tribes merely by causing their death through manipulations of their habitat, the Treaty reservation would be rendered meaningless.

Habitat Protection

Treaty-Implied Rights



Culvert Case	Treaty-Based State Duty to Preserve Fish Runs
Intent	<p>The intent of the Treaties was directly addressed by Judge Martinez in his March 2013 decision, with the Tribal position largely adopted in his findings. “The Treaties were negotiated and signed by the parties on the understanding and expectation that the salmon runs were inexhaustible and that salmon would remain abundant forever.” <i>Id.</i> at 32. The decision contained specific caveats about its basis and affect. “The State’s duty to maintain, repair or replace culverts which block passage of anadromous fish does not arise from a broad environmental servitude against which the Ninth Circuit Court of Appeals cautioned. Instead, it is a narrow and specific treaty-based duty that attaches when the State elects to block rather than bridge a salmon-bearing stream with a roadbed. The roadbed crossing must be fitted with a culvert that allows not only water to flow, but which insures the free passage of salmon of all ages and life stages both upstream and down. That passage is best facilitated by a stream simulation culvert rather than the less-effective hydraulic design or no-slope culvert.” <i>U.S. v. Washington</i>, C70-9213 (March 29, 2013); Memorandum and Decision at 35. The actual scope of the decision was narrowly limited to “only those culverts that block fish passage under State-owned roads.” <i>Id.</i> at 32.</p>
Narrow Duty	<p>A permanent injunction was granted by the Judge to compel State action within the next 17 years. The Judge’s findings regarding the injury and the impact on the Tribes is important to the case and worth quoting at length:</p>
Tribes’ Injuries	<p>This injury is ongoing, as efforts by the State to correct the barrier culverts have been insufficient. Despite past State action, a great many barrier culverts still exist, large stretches of potential salmon habitat remain empty of fish, and harvests are still diminished. Remedies at law are inadequate as monetary damages will not adequately compensate the Tribes and their individual members for these harms. Salmon harvests are important to Tribal members not only economically but in their traditions, culture, and religion; interests for which there is no adequate monetary relief.</p>
Equity	<p>The balance of hardships tips steeply toward the Tribes in this matter. The promise made to the Tribes that the Stevens Treaties would protect their source of food and commerce was crucial in obtaining their assent to the Treaties’ provisions. FF 2; citing <i>State of Washington v. Washington State Commercial Passenger Fishing Vessel Association (Fishing Vessel)</i>, 443 U.S. 658, 677 (1979). Equity favors requiring the State of Washington to keep the promises upon which the Tribes relied when they ceded huge tracts of land by way of the Treaties.</p>
Passage Threats	<p>It was the intent of the negotiators, and the Tribes’ understanding, that they would be able to meet their own subsistence needs forever, and not become a burden on the State treasury... The Tribes’ ability to meet their subsistence and cultural needs is threatened by the depletion of salmon stocks which has resulted from the continued existence of fish passage barriers. State action in the form of acceleration of barrier correction is necessary to remedy this decline in salmon stocks and remove the threats which face the Tribes. The State has the financial ability to accelerate the pace of barrier correction over the next several years and provide relief to the Tribes.</p>
	<p>Memorandum and Decision at 34.</p>
State’s Arguments on Appeal	The Treaties Impose No Duty on the State to Refrain from Development That Might Incidentally Impact Fish
Treaty-Based Rights	<p>US Supreme Court precedent has recognized three types of treaty-based rights:</p> <ul style="list-style-type: none"> • Tribes have a right to a fair share of the harvest of fish, up to 50%, so as to be afforded a moderate living (<i>Fishing Vessel</i>, 443 U.S. at 684-87) • Tribal fishers have the right to access their usual and accustomed off-reservation fishing grounds (<i>U.S. v. Winans</i>, 198 U.S. 371, 381-82 (1905)) • the State may not regulate the fishery unless such regulation is non-discriminatory and for conservation purposes (<i>Puyallup Tribe v. Dept. of Game</i>, 391 U.S. 392, 398 (1968))
State Duty	<p>In the Ninth Circuit, the State is asserting that the federal district court in the Culvert Case has “declared a fourth right: the right to prevent the State from making development decisions that might incidentally impact fish, and to force the State to restore fish runs that have diminished through a variety of natural and human causes.” Watson at 6.</p>
Third Party	<p>The State sees several problems with the decision to impose a duty on the State. “The State of Washington is not a party to the treaties. The treaties are agreements between the United States and the Tribes. The United States negotiators were concerned about the federal treasury, not the State’s. Washington did not become a state until 30 years after the treaties were ratified. How could the treaties impose a duty on the State to keep promises made by and on behalf of the United States government?” Watson at 5 (citations omitted).</p>

Culvert Case**Treaty
Language**

In her presentation, Watson went on to argue that the lack of specific Treaty language — in support of a state duty to avoid harm to the fishery and its habitat — should lead the Ninth Circuit to reject such a duty. “Although ambiguous treaty provisions are interpreted in favor of tribes, unambiguous treaty provisions are interpreted in accordance with their plain language. The 9th Circuit has thus rejected a treaty-based claim by the Skokomish Indian Tribe for damage to their fisheries and tribal lands arising from operation of a hydroelectric project. *Skokomish Indian Tribe v. United States*, 410 F.3d 506 (9th Cir. 2005). And in a case remarkably similar to the culvert case, the Idaho District Court rejected a treaty-based claim of the Nez Perce Tribe against a power company that operates dams on the Snake River, resulting in a diminishment of fish runs. *Nez Perce Tribe v. Idaho Power Co.*, 847 F.Supp. 791 (D. Idaho 1994).” Watson at 6-7.

**Treaty
Interpretation**

All the parties apparently acknowledge that no specific Treaty language spelled out a concrete duty to protect habitat or prevent environmental damage, since the parties to the Treaties in the 1850’s had “no reason to believe that fish would later become scarce.” Watson at 7. Alan Stay’s materials at 9, however, noted different precedent when it comes to treaty interpretation. “Special rules have been developed by courts to be used when interpreting and construing Indian treaties. These rules are not the same as rules of statutory construction that normally apply to the interpretation of a federal statute. Indian treaties must be construed liberally in favor Indians, *Choctaw Nation v. United States*, 318 U.S. 423,431 (1943); ambiguous expressions must be resolved in favor of Indians, *McClanahan v. Arizona Tax Commission*, 411 U.S. 164, 174 (1973); and treaties must be construed as Indians would have understood them, *Choctaw Nation v. Oklahoma*, 397 U.S. 620, 631 (1970).”

**Incentive
for
Treaties**

As noted above, the Tribes are essentially arguing that the clear intent of the Treaties was to enable the Tribes to continue to take fish forever and that without habitat protection (in this case adequate fish passage), these treaty rights would be meaningless. Judge Martinez addressed this issue in the Order on Cross Motions for Summary Judgment of August 23, 2007 at page 10: “It was thus the right to take fish, not just the right to fish, that was secured by the treaties. The significance of this right to the Tribes, its function as an incentive for the Indians to sign the treaties, and the Tribes’ reliance on the unchanging nature of that right, have been set forth in expert declarations provided by the Tribes.”

No Guarantee?

The State is asserting that there is no support for the duty imposed on it since there is no specific treaty language doing so. The Ninth Circuit must make its decision without unambiguous treaty language to guide them. Will the court view the treaty language as ambiguous provisions to be interpreted in favor of Tribes or will it agree with the State that the Treaties did not guarantee protection of the resource, especially as to an entity that was not a party to the Treaties? “However, rather than reach the obvious conclusion that the treaties therefore do not guarantee protection of the resource, the [federal district] court erroneously concluded that the negotiating parties’ mistaken belief of an inexhaustible fishery means that the Tribes retained an unwritten right to prohibit actions that could impact fish, and to compel third parties (like the State) to restore fish runs if they fall below a certain unspecified level.” Watson at 7.

**“Significant
Diminishment”****Open-Ended Duty Lacks the Precise Legal Formulation Required by the Ninth Circuit**

“The Ninth Circuit has made clear that any obligation under the treaties must be precisely defined. *United States v. Washington*, 759 F.2d at 1357. Here, the district court imposed liability on the state because of ‘the logical inference that a significant portion of [fish] diminishment’ can be attributed to state owned barrier culverts. Summ. J. Dec. at 8. The court neither articulated a baseline for measuring diminishment nor defined what qualifies as ‘significant diminishment.’ For example, is the relevant measurement of diminishment from the time of the treaties? Diminishment from the date of the first Boldt opinion? Diminishment from a recent salmon harvesting peak in the mid-1980’s? And what does it mean to ‘significantly’ diminish the resource? Does 5% diminishment violate the treaty? Or is it 10%? Or 1%? We don’t know because the district court didn’t tell us.” Watson at 7.

**Judge’s
Rationales**

Judge Martinez’ 35-page Memorandum and Decision contains 29 pages of Findings of Fact that address the state culverts, fish passage, State actions over the years, and specific facts concerning culvert design, among other things. The basis for his conclusions and decision are set forth in considerable detail in those findings and are available for our reader’s review upon request. Two conclusions reached by Judge Martinez illustrate his rationale concerning the impact of the culverts and the resulting damage to the Tribes (*Id.* at 33):

9. Where culverts block passage of fish such that adult salmon cannot swim upstream to spawn and juveniles cannot swim downstream to reach the ocean, those blocked culverts are directly responsible for a demonstrable portion of the diminishment of the salmon runs.
10. The depletion of salmon stocks and the resulting diminished harvests have harmed the Tribes and the individual members economically, culturally, and personally. It is not necessary that the Tribes quantify the amount of loss in order to demonstrate their entitlement to relief from further harm.

Culvert Case

Precise
Standard

Watson further explained the State's position on this argument as follows: "The breadth of the court's decision means that the State (and other non-parties to the treaties) could be sued over any actions that might incidentally impact fish runs. Indeed, several commentators are positively giddy with the possibilities. [citations omitted] The 'standard' articulated by the district court falls short of the Ninth Circuit's requirement that the court offer a precise legal formulation of clear rules to define the scope of the State's duty, if any." Watson at 8.

Watson's reference to the "standard" articulated by the district court refers back to the federal district court's discussion in the Order on Cross Motion for Summary Judgment of August 23, 2007 at 8: "The Tribes' showing that fish harvests have been substantially diminished, together with the logical inference that a significant portion of this diminishment is due to the blocked culverts which cut off access to spawning grounds and rearing areas, is sufficient to support a declaration regarding the culverts' impairment of treaty rights." At the very end of the Discussion section of that Order, Judge Martinez elaborates on why the duty on the State was imposed and the sideboards he was placing on that duty (*id.* at 12):

Limited
Scope of Order

In light of these affirmative assurances given the Tribes as an inducement to sign the Treaties, together with the Tribes' understanding of the reach of those assurances, as set forth by the Supreme Court in the language quoted above, this Court finds that the Treaties do impose a duty upon the State to refrain from building or maintaining culverts in such a manner as to block the passage of fish upstream or down, to or from the Tribes' usual and accustomed fishing places. This is not a broad "environmental servitude" or the imposition of an affirmative duty to take all possible steps to protect fish runs as the State protests, but rather a narrow directive to refrain from impeding fish runs in one specific manner. The Tribes have presented sufficient facts regarding the number of blocked culverts to justify a declaratory judgment regarding the State's duty to refrain from such activity. This duty arises directly from the right of taking fish that was assured to the Tribes in the Treaties, and is necessary to fulfill the promises made to the Tribes regarding the extent of that right.

United States Should Take Responsibility for Its Own Actions, Including the Approval and Funding of the State's Barrier Culverts

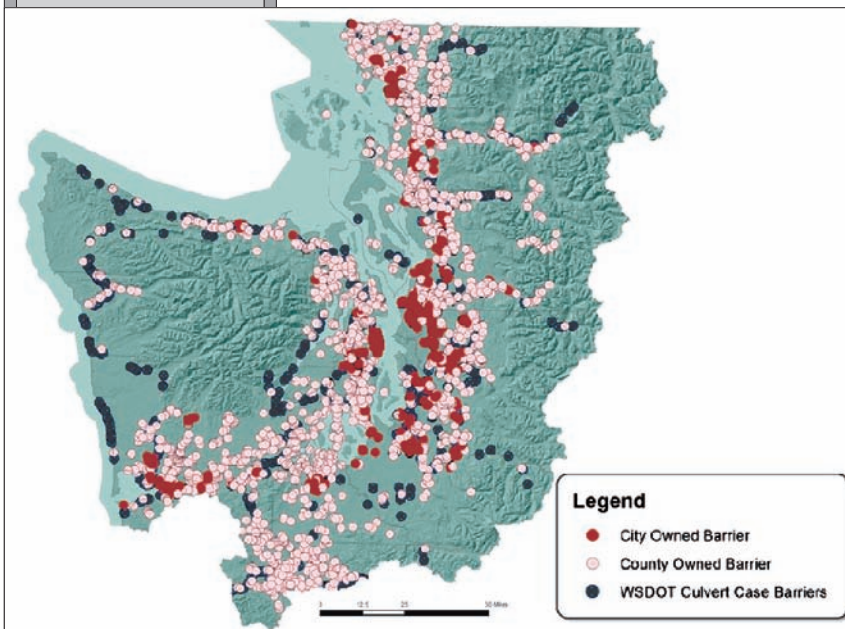
In the appeal to the Ninth Circuit, the State is arguing that the federal district court erroneously dismissed all of the State's equitable defenses and counterclaims against the United States, including its waiver defense. It also argues that the lower court erroneously found that the US has sovereign immunity from the State's counterclaims. The State is seeking to have the US found responsible for the damages and maintains that the State may assert counterclaims by way of a set-off or recoupment.

Waiver Defense

The State's waiver defense "is based on the fact that the State's barrier culverts were funded by the United States and were built to federal design standards. The United States also granted Clean Water Act permits to the State to construct the culverts." Watson at 8. As noted by Laura Watson in her materials, the federal district court refused to hear the State's evidence of waiver and instead "dismissed the defense as a matter of law based on its erroneous conclusion that binding authority precludes equitable defenses against the United States in cases involving tribal claims." *Id.*

The State obviously feels burned by the imposition of a state duty in this case that seemingly allows the US to walk away from its own responsibility. "The upshot — it's okay for the U.S. to force Washington to bear the entire cost of culvert repair even though the U.S. is equally or more responsible." Watson also noted the fact that the Culvert Case only covers State culverts and does not address county and city culverts, nor other fish passage impediments.

See Map of Culvert Locations.



Culvert Case

Injunction Principles

District Court Abused Its Discretion by Issuing an Injunction That Significantly Intrudes Into State Governmental Affairs

In the State's fourth argument on appeal, they assert that the federal district court disregarded four federalism principles that are required to be shown for an injunction to issue and thus, abused its discretion.

Four federalism principles apply before a federal court can issue an injunction against a state. First, the remedy must be no broader than necessary to address the federal law violation. Second, courts must grant deference to a state's institutional competence and subject matter expertise. Third, courts must take cost into consideration and not substitute their budgetary judgment for that of the state. And finally, relief must be fashioned so that it is the least intrusive into state governmental affairs. *Watson* at 9 (citations omitted).

Causes of Decline

Overbroad Injunction

The State is asserting that the "injunction is overbroad because the court ordered replacement of nearly every state-owned barrier culvert within the case area without any specific showing that those culverts have significantly diminished fish runs...or that replacing them will meaningfully improve runs." To bolster this argument, the State notes that everyone agrees "that the decline in salmon is attributable to numerous natural and manmade causes...and nobody testified that state-owned culverts are a significant cause of the decline." *Id.* at 9-10.

By contrast, Alan Stay vehemently pointed out that, "[T]he district court relied upon the agreed fact that blocking culverts resulted in, at a minimum, the lost of 200,000 fish in the case area." Stay at 6.

Judge Martinez previously addressed the State's assertion in the Order on Cross Motion for Summary Judgment (August 23, 2007) at 5, as follows:

Diminishment Evidence

The State argues that the Tribes have produced no evidence that the blocked culverts "affirmatively diminish[] the number of fish available for harvest". State's Reply, Dkt. # 319, p. 2. The Tribes have, however, produced evidence of greatly diminished fish runs. While there may be other contributing causes for this, the conclusion is inescapable that if culverts block fish passage so that they cannot swim upstream to spawn, or downstream to reach the ocean, those blocked culverts are responsible for some portion of the diminishment. It is not necessary for the Tribes to exactly quantify the numbers of "missing" fish to proceed in this matter.

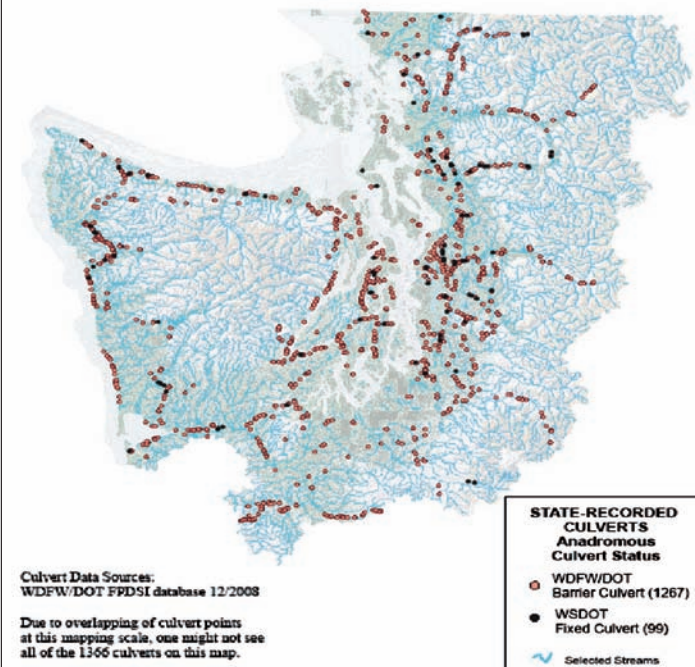
In the Memorandum and Decision (March 29, 2013) at 23, the Court noted the negative impact the culverts have and cited a State Study for support. "Fish passage barrier culverts have a negative impact on spawning success, growth and survival of young salmon, upstream and downstream migration, and overall production. According to 'Extinction is Not an Option: Statewide Strategy to Recover Salmon' (September 1999),

Unnatural physical barriers interrupt adult and juvenile salmonid passage in many streams, reducing productivity and eliminating some populations. Barriers may also cause poor water quality (such as elevated temperature or low dissolved oxygen levels) and unnatural sediment deposition. Impaired fish access is one of the more significant factors limiting salmonid productivity in many watersheds. Fish blockages or barriers are caused by dams, culverts, tide gates, dikes, and other instream structures...These structures block fish access to an estimated 3,000 miles of freshwater spawning and rearing habitat."

No Deference to State's Expertise in Salmon Recovery

The second part of this argument is that the district "court failed to defer to the State's expertise in salmon recovery." The State noted that years have been spent implementing a "comprehensive plan aimed at all categories of human activity that affect salmon..."

**Washington State
WDFW/DOT Fixed & Barrier Culverts
in the U.S. v. WA. Case Area**



<p>Culvert Case</p> <p>Culvert Focus</p> <p>Costs</p> <p>State's Actions</p> <p>Ongoing Injury</p> <p>Injunction Needed</p>	<p>However, one of Judge Martinez' Findings of Fact was that "[T]he correction of human-caused barriers is recognized as the highest priority for restoring salmon habitat in the Case Area. Declaration of Mike Henry, Ex. AT-004." (Memorandum and Decision, March 29, 2013, at 21). Watson maintained that focusing the injunctive relief solely on culverts fails to defer to the "comprehensive plan" and "will likely reduce funding available for other salmon restoration efforts." Watson at 10.</p> <p>Ignored Tremendous Costs of Injunction</p> <p>By erroneously ignoring the budgetary impacts on Washington of a two billion dollar injunction, the State argues that another required principle has been disregarded. This results in the federal district court substituting their budgetary judgment in place of the State's. Watson also made the point that the order requires the State "to use the most expensive culvert design, even though other, less expensive designs often work well to allow fish passage." Watson at 10.</p> <p>Naturally, Alan Stay's opinion of the situation is quite different. He mentioned that the proof at the trial regarding costs were "all over the map" but the main thing was that based on all the evidence Judge Martinez "believed that the costs could be met." Stay's materials also pointed out that a key State witness at trial testified that "within a highway project the correction of a blocking culvert was about as expensive as the guard rails." Stay PowerPoint.</p> <p>Least Intrusive Option</p> <p>Finally, the State takes exception with the specifics of the federal district court's injunction order, arguing that the injunction does not require the "least intrusive option available." Watson asserted that the State did not act in bad faith or shirk its responsibility and, thus, "prioritizing culverts above all other measures" intrudes into state salmon recovery efforts. "The court could have resorted to more detailed measures if the State halted its barrier corrections or failed to make appropriate progress. Instead, the court leapt to the most onerous remedy." Watson at 10 and PowerPoint.</p> <p>Judge Martinez in the Conclusions of Law (Memorandum and Decision, March 29, 2013), came to a different conclusion regarding the State's efforts.</p> <p>This injury is ongoing, as efforts by the State to correct the barrier culverts have been insufficient. Despite past State action, a great many barrier culverts still exist, large stretches of potential salmon habitat remain empty of fish, and harvests are still diminished. Remedies at law are inadequate as monetary damages will not adequately compensate the Tribes and their individual members for these harms. Salmon harvests are important to Tribal members not only economically but in their traditions, culture, and religion; interests for which there is no adequate monetary relief.</p> <p><i>Id.</i> at 34.</p>
<p>Editor's Note: <i>This article clearly relies heavily on the written materials and presentation made by Alan Stay and Laura Watson at the seminar. Both Mr. Stay and Ms. Watson noted that the views presented at the seminar were theirs alone and do not represent the views of the Tribes (Stay) or the State of Washington (Watson). Thus, quotes from their materials should be accepted with the same disclaimer.</i></p>	<p>An injunction is necessary to ensure that the State will act expeditiously in correcting the barrier culverts which violate the Treaty promises. The reduced effort by the State over the past three years, resulting in a net increase in the number of barrier culverts in the Case Area, demonstrates that injunctive relief is required at this time to remedy Treaty violations.</p> <p><i>Id.</i> at 35.</p> <p style="text-align: center;">CONCLUSION</p> <p>It is extremely difficult to predict the ultimate outcome of this case. The Ninth Circuit has the next decision to make, but where the case goes from there is still far from decided. Remand to the federal district court, an appeal to the US Supreme Court, or both may lie ahead. The Ninth Circuit is faced with issues that include the interpretation and scope of treaty rights, contractual issues, and the extent of the state's duty to protect the fishery, not to mention the equity issues grounded in the Treaties which underpin the entire dispute. As noted by Assistant Attorney General Watson in her presentation, "[T]he culvert litigation is not likely to end any time soon."</p> <p>FOR ADDITIONAL INFORMATION: DAVID MOON, The Water Report, 541/ 485-5350 or thewaterreport@yahoo.com</p> <p>Judge Martinez's orders of August 2007 and March 2013 are available upon request from <i>TWR</i></p>

Stormwater Ruling

Concrete Channel

Historic Flooding

SUPREME COURT STORMWATER RULING

Los Angeles Flood Control District v. NRDC

A STRANGE AND MEANDERING CASE

by Christopher Rich, Perkins Coie LLP (Portland)

“The Los Angeles River was a beautiful, limpid little stream, with willows on its banks. It was so attractive to me that it at once became something about which my whole scheme of life was woven, I loved it so much.”

William C. Mulholland

INTRODUCTION

Most visitors to downtown Los Angeles would not recognize the large, straight, trapezoidal, damp, concrete channel under the First Street Bridge to be a “river” as that term is commonly understood, but it is essentially the same basic water body that native tribes, Europeans and even William C. Mulholland encountered in prior centuries. Los Angeles is not unique in its efforts to channelize large portions of its river system for flood control, but it was certainly fervent in its efforts. It is, accordingly, with some irony, that the United States Supreme Court (US Supreme Court) case of *Los Angeles County Flood Control District v. NRDC*, 133 S.Ct. 710 (2013), which deals with ongoing human endeavors to channelize and control stormwater runoff, would prove to have such a meandering course.

LOS ANGELES FLOOD CONTROL — A BRIEF HISTORY

To better understand the case that wound its way through the US District Court, the Ninth Circuit, and eventually to the US Supreme Court, some history may be helpful.

Ten million years ago, the land that would become the Los Angeles River basin was under water. Through the forces of tectonic uplift and erosion, the land rose from the sea and meandering rivers flowed down the coastal plain to the sea. A thousand years ago, the Tongva Tribe had established villages throughout the basin. In 1769, Spanish explorer Gaspar de Portola described “a very spacious valley, well grown with cottonwoods and alders, among which ran a beautiful river...” that would later be named “El Río de Nuestra Señora la Reina de los Ángeles de Porciúncula” (The River of Our Lady Queen of the Angels of Porciuncula) and eventually simply the Los Angeles River. In 1781, settlers from Mexico established the Pueblo de Los Angeles, including construction of a main diversion ditch for domestic and irrigation water from the nearby river. In 1815, floods washed away the original Pueblo plaza, and the Los Angeles River changed course. For decades after, massive flooding was commonplace and the river frequently changed direction — sometimes dramatically (see “*A History of the Los Angeles River*” Appendix A, Los Angeles Dept of Public Works, 1997 — www.laep.org/target/units/river/tour/hist.html). In 1850, Los Angeles was incorporated as an American city. In 1914, massive flooding caused millions of dollars in damage and 45 people were killed.

In response to the devastating floods of 1914, efforts to control the Los Angeles River system began in earnest in 1915 via the adoption of the Los Angeles County Flood Control Act (Act) by the state legislature. The Act established the Los Angeles County Flood Control District (District) and empowered it to provide flood protection, water conservation, recreation, and aesthetic enhancement within its boundaries. The controversial first head of the District, James R. Reagan, succeeded in having major portions of the river system channelized for flood control — thus acting in opposition to the County Board of Engineers’ recommendation to control floodwaters



Aerial photo (from balloon) of Los Angeles, June 27, 1887
Seaver Center for Western Research, Natural History Museum of Los Angeles

Stormwater Ruling

upstream. *Id.*

According to the current Los Angeles County Department of Public Works, “[T]he Flood Control District encompasses more than 3,000 square miles, 85 cities and approximately 2.1 million land parcels. It includes the vast majority of drainage infrastructure within incorporated and unincorporated areas in every watershed, including 500 miles of open channel, 2,800 miles of underground storm drain, and an estimated 120,000 catch basins.” Los Angeles County Department of Public Works, <http://dpw.lacounty.gov/lacfd/>

The Los Angeles County Flood Control District encompasses

- 3,000 square miles
- 85 cities
- Approximately 2.1 million land parcels
- 6 major watersheds

Los Angeles River

San Gabriel River

Dominguez Channel & Los Angeles Harbor

South Santa Monica Bay

North Santa Monica Bay

Santa Clara River

Major Watersheds



Flood Control District Jurisdiction



STORMWATER & MS4 PERMITS

The US Supreme Court case of *Los Angeles Flood Control District v. NRDC* concerns a permit to regulate discharges of “stormwater.” “Stormwater” is defined by the federal Clean Water Act (CWA) to include “stormwater runoff, snow melt runoff, and surface runoff and drainage.” 40 C.F.R. §122.26(b)(13). When it rains or snows, water runoff from city streets, parking lots, landscaping, etc., can carry oil, grease, sediment, and other pollutants. This runoff often ends up traveling through complex and interconnected systems of catch basins, storm drains, and ditches — which eventually empty into surface waters. Cities and counties typically construct, own, and manage such stormwater systems which are termed “municipal separate storm sewer systems” commonly referred to as “MS4s.”

The regulatory definition of an MS4 (40 CFR 122.26(b)(8)) is: “a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created to or pursuant to state law) including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the Clean Water Act that discharges into waters of the United States; (ii) Designed or used for collecting or conveying storm water; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.”

Because stormwater can carry pollutants into surface waters, the CWA (and related implementing regulations) requires the operator of an MS4 serving a population of at least 100,000 to obtain a National Pollutant Discharge Elimination System (NPDES) permit before discharging stormwater into navigable waters. *See* 33 U. S. C. §§1311(a), 1342(p)(2)(C), and (D); 40 CFR §§122.26(a)(3), (b)(4), (b)(7); 40 CFR §122.26(b)(8) (2012); 40 CFR §122.26(b)(13).

The District operates such an MS4 system, and it is massive — an interconnection of thousands of collection and outfall points draining 84 cities and the County of Los Angeles — under an MS4 NPDES permit issued in 2001 by the State of California, California Regional Water Quality Control Board. [California Regional Water Quality Control Board, Los Angeles Region, NPDES Permit No. CAS004001, December 13, 2001, as amended (hereafter, MS4 Permit)]. In simple terms, this MS4 Permit authorizes the District to collect stormwater runoff from the included cities and county area and discharge this stormwater into various rivers and eventually into Santa Monica

Stormwater Ruling

BMPs

Monitoring Stations

Instream Criteria

Bay. Under the MS4 Permit, the District is a co-permittee along with the cities that are encompassed within the MS4 Permit area.

The District's MS4 Permit, like other MS4 permits, does not have express numeric effluent limitations, but rather attempts to regulate and improve stormwater discharges via implementation of "Best Management Practices" (BMPs) that address: public information and participation; industrial/commercial facilities; development planning; public agency activities; and eliminating illicit connection/discharges. In addition, the District's MS4 Permit requires monitoring of pollutants at seven "mass-emission monitoring stations." *Id.* Mass emission monitoring stations are automated in-stream monitors (located downstream of all discharge points) capable of measuring water quality concentrations of a range of pollutants, via chemistry analysis, thereby giving a cumulative picture of the pollutant load in the watershed. The District's MS 4 Permit required sampling during at least five storm events per station, per year. *Id.*

Correspondingly, the State of California is required under CWA §303 (a)-(c) to develop "water quality standards" for jurisdictional waters which include setting allowable instream pollutant levels. These instream pollutant levels ("criteria") may be set at specific numeric levels (e.g. parts per million or billion, etc.) or by narrative criteria (i.e., descriptive criteria without specific "numbers" to be met). Such water quality standards are adopted by states to protect specified beneficial uses (e.g. fishing, recreation, etc.) of a particular water body. Before the District's MS4 permit was issued, the State of California had adopted numeric water quality standards for the Los Angeles and San Gabriel Rivers (among others).

In *Los Angeles Flood Control District v. NRDC* conflict arose at the intersection of the MS4 Permit and state-adopted water quality standards,

DISTRICT COURT CITIZEN SUIT

Citizen Suit

Natural Resources Defense Council (NRDC) and Santa Monica Baykeeper (Baykeeper; name changed to "Los Angeles Waterkeeper") filed a federal CWA citizen suit in the US District Court, Central District of California, alleging that water quality data from four rivers downstream of the District's MS4 Permit discharges (including the San Gabriel River, Los Angeles River, Santa Clara River and Malibu Creek) showed an increase of pollutants that exceeded state-adopted **numeric** water quality standards, and that the District was, accordingly, violating its MS4 Permit. *NRDC v. County of Los Angeles*, No. 08 Civ. 1467(AHM), 2010 WL 761287 (C.D. Cal. Mar.2, 2010), amended on other grounds, 2011 WL 666875 (C.D. Cal. Jan.27, 2011) at 6. Such "citizen suits" are authorized under Clean Water Act, 33 U.S.C. §1365.

Pollution Cause

The federal District Court, after struggling with some factual questions about where the MS4 system ended and where the navigable waters began, and what evidence existed and was necessary to prove liability, eventually granted summary judgment in favor of the District. The federal District Court reasoned that while it was clear that data showed water quality standards were exceeded in the rivers, there were thousands of permitted dischargers upstream of the monitoring stations that contributed to the elevated pollutant levels, and the factual record was insufficient to prove that the District's MS4 had discharged the water containing the elevated pollutant levels being detected at these monitoring stations. 2010 WL 761287 at 7-8.

NINTH CIRCUIT DECISION ON APPEAL

"Discharged" Pollutants

NRDC and Baykeeper appealed to the Ninth Circuit Court of Appeals (Ninth Circuit), which examined the factual record presented to the District Court. The Ninth Circuit found that, with regard to Santa Clara River and Malibu Creek, there was a lack of evidence demonstrating that a portion of the MS4 controlled by the District "discharged" pollutants that passed through the monitoring stations (which the Ninth Circuit assumed to have been located in the rivers themselves) into waters of the United States. However, the Ninth Circuit also reversed the District Court's decision in part, finding that:

Point Source (Channelized)

The Los Angeles River and San Gabriel River Monitoring Stations are located in a channelized portion of the MS4 that is owned and operated by the District, when pollutants were detected, they had not yet exited the point source into navigable waters. As such, there is no question over who controlled the polluted stormwater at the time it was measured or who caused or contributed to the exceedances when that water was again discharged to the rivers — in both cases, the District. As a matter of law and fact, the MS4 is distinct from the two navigable rivers; the MS4 is an intra-state man-made construction — not a naturally

Stormwater Ruling

Monitoring Location

Exceedances

"Discharges" Prohibited

"Transfer" v. "Discharge"

Miccosukee

occurring Watershed River.

Natural Resources Defense Council v. County of Los Angeles, 673 F.3d 880, 900-901 (9th Cir. 2011).

The holding of the Ninth Circuit was clearly based on a factual assumption that the monitoring stations were located in portions of the MS4 system that were distinct from the rivers (i.e., before stormwater discharged into the Los Angeles and San Gabriel Rivers). The Ninth Circuit noted that the MS4 mass emission monitoring stations were located in "concrete channels" constructed for flood control purposes, and a discharge of pollutants occurred under the CWA when the polluted water detected at the monitoring stations "flowed out of the concrete channels" (controlled by the District) and emptied into downstream portions of the rivers that were unlined. *Id.* at 900. As would become apparent in the Supreme Court case, this factual assumption would prove to be incorrect — perhaps understandable, however, in light of the wholesale transformation of the Los Angeles River system over the last 100 years.

The Ninth Circuit declined to rule on a separate argument raised by NRDC/Baykeeper that the evidence of water quality standard exceedances was, ipso facto (by the fact itself), a violation of the MS4 Permit. Petitioners argued that according to the MS4 Permit, the purpose of mass-emissions monitoring is to: (1) estimate the mass emissions from the MS4; (2) assess trends in the mass emissions over time; and (3) determine if the MS4 is contributing to exceedances of water quality standards by comparing results to the applicable standards in the Basin Plan — and so it follows that evidence of water quality standard violations at the designated monitoring points should constitute a violation of the Permit. While the Ninth Circuit noted that this argument was appealing on its face, it ultimately rejected it, holding that the "Clean Water Act does not prohibit 'undisputed' exceedances; it prohibits 'discharges' that are not in compliance with the Act (which means in compliance with the NPDES)." 673 F.3d at 898.

US SUPREME COURT DECISION

Upon petition for certiorari by the District, the US Supreme Court granted certiorari (review) on one narrow question:

When water flows from one portion of a river that is navigable water of the United States, through a concrete channel or other engineered improvement in the river constructed for flood and stormwater control as part of a municipal separate storm sewer system, into a lower portion of the same river, can there be a 'discharge' from an 'outfall' under the Clean Water Act, notwithstanding this Court's holding in *South Florida Water Management District v. Miccosukee Tribe of Indians*, 541 U.S. 95, 105 (2004), that transfer of water within a single body of water cannot constitute a 'discharge' for purposes of the Act?

Los Angeles County Flood Control District v. NRDC, 133 S.Ct. 710, 712 (2013).

On this single question taken up by the US Supreme Court, Justice Ruth Bader Ginsburg wrote a unanimous, yet brief (five-page) opinion answering the question, above, with a fairly blunt "no." Justice Ginsburg held that the Ninth Circuit's decision was in conflict with the US Supreme Court's prior holding in *South Florida Water Management District v. Miccosukee Tribe*, 541 U.S. 95 (2004) (*Miccosukee*). In *Miccosukee*, the US Supreme Court unanimously held that the transfer of polluted water between "two parts of the same water body" (in *Miccosukee* the transfer of polluted water from a canal via a pump station into a reservoir was at issue) is not a discharge of pollutants under the Clean Water Act as the canal and reservoir were not "meaningfully distinct water bodies." *Miccosukee*, 541 U.S. at 109–112. See also, Glick, Richard, *NPDES Permit Requirements and the Miccosukee Case*, TWR #2.

Justice Ginsburg characterized the US Supreme Court's decision regarding *Los Angeles County Flood Control District v. NRDC* as "hardly surprising" noting that "the parties, as well as the United States as amicus curiae (friend of the court), agree that the answer to this question is 'no.'" 133 S. Ct. at 712–13. Indeed, in briefing, all parties had conceded that the Ninth Circuit made a factual error in assuming that the monitoring stations were located in a separate part of the MS4, as opposed to channelized portions



**Los Angeles River near present day downtown
Circa 1900**

Stormwater Ruling

Limited Review

of the rivers themselves. Thus, this presented a somewhat unique case where all parties agreed on the answer presented in the petition for certiorari — even before the case was heard by the US Supreme Court.

With the main question in the case not in dispute, NRDC/Baykeeper nonetheless attempted to convince the US Supreme Court that the Ninth Circuit had reached the right result, albeit for the wrong reason — arguing that the exceedances detected at the monitoring stations were by themselves sufficient to establish the District's liability under the CWA for upstream discharges. The US Supreme Court noted: that this argument had failed in the lower court; that it was outside the narrow question on which the US Supreme Court granted certiorari; and noted during oral argument that no cross-petition on this question had been filed. Accordingly, the issue was not taken up and, despite much oral argument about how the case should be disposed of, the US Supreme Court simply reversed and remanded back to the Ninth Circuit without any further instruction.

Exceedance Issue

NINTH CIRCUIT DECISION ON REMAND

The case would take another unexpected turn on remand back to the Ninth Circuit. After being reversed by the US Supreme Court, the Ninth Circuit in *Natural Resources Defense Council v. Los Angeles County Flood Control District*, No. 10-56017 (9th Cir. 2013), revisited an issue that it (and the District Court before it) had previously rejected, namely: could the data showing exceedances of water quality standards at the monitoring stations in the Los Angeles and San Gabriel Rivers be used to establish a violation of the MS4 Permit by the District?

The Ninth Circuit first had to overcome procedural objections from the District that the previous rejection of the plaintiffs' argument was a final decision and binding as law of the case. The Ninth Circuit reasoned that it was free to modify or revoke its judgment and it was not law of the case because no "mandate" had issued on this question and the US Supreme Court had expressly declined to address it. *NRDC v. County of Los Angeles*, 725 F.3d 1194, 1203-04. (9th Cir. 2013). [A "mandate" is the formal document and device by which an appellate court case is closed/transferred to another court's jurisdiction; a mandate is governed by Rule 41 of the Federal Rules of Appellate Procedure.] Once these procedural matters were dispatched, the Ninth Circuit engaged in an evaluation of the plain language of the MS4 Permit.

Permit Language

The Ninth Circuit determined that:

- the monitoring stations were intended to measure compliance with the MS4 Permit
- the District had selected the location of the monitoring points to be representative of the monitored activity
- the monitoring data showed that the level of pollutants exceeded instream water quality standards
- each MS4 permittee could be held responsible for discharges that contributed to water quality exceedances

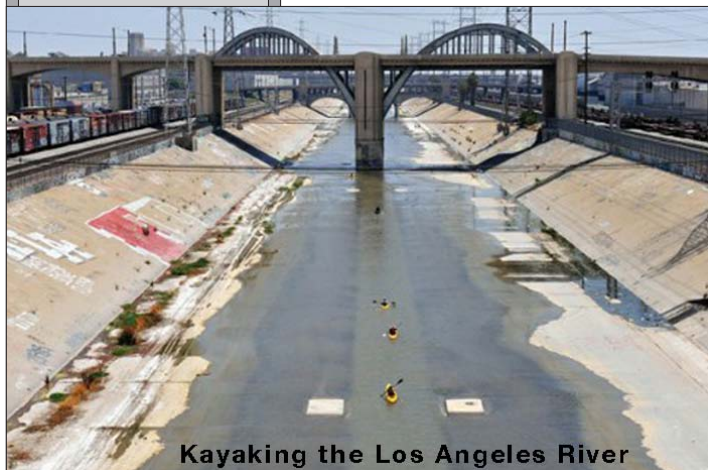
The Ninth Circuit did not engage in any detailed analysis of where "discharges" or "addition of pollutants" occurred. Indeed, the Ninth Circuit stated that the precise location of each outfall is irrelevant because the MS4 adds water downstream of the monitoring stations. *NRDC v. County of Los Angeles*, 725 F.3d 1194, 1210 (9th Cir. 2013).

New Monitoring Required

On an ongoing basis, some issues raised by the Ninth Circuit concerning the District's monitoring of discharges appear to be addressed via a new MS4 permit that was issued to the District just prior to oral

argument in the US Supreme Court case. The new MS4 permit requires monitoring at multiple individual MS4 outfall/discharge points versus placing monitors in the riverbeds. In light of the new permit, questions about who is contributing to water quality violations for specific discharges may be more clearly determinable in the future. However, liability and penalties for past violations still remained unresolved issues in the underlying case.

The Ninth Circuit also pointed to several other factors used in reaching its decision, including CWA language requiring each permittee to monitor its discharges to assess whether it is in compliance. The Ninth Circuit noted that the District (in a prior lawsuit against the City of Malibu) had taken the position that each permittee was individually liable for discharge exceedances, noting that the CWA has historically relied on self-monitoring



Kayaking the Los Angeles River

Stormwater Ruling

Supreme Court Appeal

Procedural Lessons

Single Water Body

Remaining Issues

to achieve compliance. Accordingly, the Ninth Circuit concluded that the District was individually liable for violations of the MS4 Permit and remanded the case to the US District Court for further proceedings consistent with the opinion. 725 F.3d at 1203-06.

WHERE IS THIS CASE GOING?

After the Ninth Circuit held the District liable on remand, the Ninth Circuit denied a petition by the District for rehearing by the full court (en banc) on September 26, 2013. *NRDC v. County of Los Angeles*, Order filed Sept. 26, 2013. However, on December 17, 2013, the Ninth Circuit granted the District's motion to stay issuance of mandate to allow another petition for certiorari to be filed with the US Supreme Court (due by January 24, 2014), and "the stay shall continue until final disposition by the US Supreme Court. Fed. R. App. P. 41(d)(2)(B)." *NRDC v. County of Los Angeles*, Order filed Dec. 17, 2013. While there is no certainty that the US Supreme Court will take up the District's new petition, the case continues for the foreseeable future.

CONCLUSION

SIGNIFICANCE OF *LOS ANGELES COUNTY FLOOD CONTROL DISTRICT V. NRDC*

The significance of *Los Angeles County Flood Control District v. NRDC* may prove to be less about the law than the legal process. There are some cautionary lessons to trial court petitioners about pleading complex facts with clarity to avoid confusion by judges, and for appellate practitioners who might, after this case, be encouraged to file cross-petitions out of an abundance of caution. Additionally, the case will no doubt be considered another sometimes contentious exchange of volleys between the US Supreme Court and the Ninth Circuit, particularly with regard to environmental cases.

As to the legal issues, the US Supreme Court soundly re-affirmed *Miccosukee* and the concept that transfers of polluted water between two different parts of the same water body — water bodies that are not meaningfully distinct — will not constitute an addition of pollutants for purposes of the Clean Water Act. This might dissuade some from challenging certain sources for Clean Water Act violations, e.g., water moving through dam operations or stormwater systems that might be considered part of the same jurisdictional water body.

Questions remain, however, about what portions of an MS4 are separate from jurisdictional waters, whether MS4 co-permittees are individually liable for downstream water quality standard violations, and what evidence is needed to hold co-permittees liable under MS4 permits when down-stream water quality standards are exceeded? Based on the experience in *Los Angeles Flood Control District v. NRDC*, these and related issues will likely continue winding through the legal system much like the once wild and unpredictable Los Angeles River.

Christopher Rich is a partner with Perkins Coie, LLP, in the firm's Environment, Energy & Resources national practice group. He focuses on complex environmental permitting and compliance under RCRA, the Clean Water Act (including stormwater) and the Clean Air Act, as well as resolution of state and federal governmental agency enforcement actions, resolution of citizen suits, and advising clients on all aspects of environmental cleanup of contaminated properties. For the past several years, he has acted as lead outside environmental counsel for the Umatilla Chemical Agent Disposal Facility (UMCDF) during the campaign to safely destroy 12% of the U.S. stockpile of chemical weapons. Chris was formerly with the Oregon Department of Environmental Quality, Office of Compliance and Enforcement. He received his J.D. from the University of Denver Sturm College of Law in 1991, and a B.S. from UCLA in 1987.



Managing Stormwater in the Northwest March 5th, 2014

For Complete Agenda & Registration Information:
www.nebc.org

Agenda At A Glance

TRACKS	A <i>Industrial</i>	B <i>Construction</i>	C <i>Municipal</i>	D <i>Cross-Cutting Issues</i>
7:00	Registration & Continental Breakfast			
8:15-9:15	Welcome & Keynote:			
9:30-10:45 SESSION 1	Industrial Stormwater Management Fundamentals	LID-Oriented Site Planning & Construction Protocols	A Consolidated Approach to Stormwater Management	LID – Long Term Performance & Operating Costs
10:45-11:15	Networking Break			
11:15-12:30 SESSION 2	Successful Industrial BMP Selection & Implementation	Construction Stormwater Management Fundamentals	Local Government on the Permitting & Enforcement Front Lines	Dealing With Contaminated Sites
12:30-2:00	LUNCH & Keynote Address: <i>George Harris, President, Northwest Marine Trade Association</i>			
2:00-3:15 SESSION 3	Managing Multiple Contaminants & Organics	Successful Construction BMP Selection & Implementation	Stormwater Education & Stewardship	Legal & Risk Issues for Stormwater Permittees
3:15-3:45	Networking Break			
3:45-5:00 SESSION 4	Tackling the Metals Challenge	Challenging Erosion & Sediment Control Situations	Retrofit Planning & GSI	Sampling & Testing – Doing it Right
5:00-6:30	Cocktail Reception			

Climate Change & Public Trust

Climate Change & Water Resources

Common Law Adaptation

Common Law Doctrines

Prior Appropriation

CLIMATE CHANGE & PUBLIC TRUST DOCTRINE

CLIMATE CHANGE, STATE PUBLIC TRUST DOCTRINES, & PPL MONTANA

by Robin Kundis Craig, Professor of Law at the University of Utah (Salt Lake City)

“It is not the strongest of the species that survives, nor the most intelligent; it is the one that is most adaptable to change.”

Attributed to Charles Darwin

INTRODUCTION

The world, including in the United States, is already feeling the impacts of climate change, necessitating investment in a range of adaptation measures. In no context is this fact more true than in water resources management. The United States’ water resources are among the very first of our natural resources that climate change is altering visibly and has significantly altered.

OBSERVABLE CHANGES TO US WATER RESOURCES INCLUDE:

- SMALLER SNOWPACK AND EARLIER SNOWMELT, which reduce natural water storage and releases in late summer
- LESS TOTAL PRECIPITATION AND PROLONGED DROUGHT, which reduce the annual flows of streams and rivers and increase pollution concentrations
- INCREASED WATER TEMPERATURES, which stress aquatic ecosystems (especially cold-water fish) and reduce the availability of water for cooling at facilities such as thermoelectric power plants
- RISING NUMBERS OF INCREASINGLY SEVERE STORM EVENTS, often alternating with drought, which challenge water storage infrastructure, exacerbate existing difficulties in water resource planning, and increase the risks of severe flooding, water pollution, and outbreaks of water-borne disease
- CONTAMINATION OF COASTAL AQUIFERS as a result of sea-level rise leading to increased saltwater intrusion, which reduces water supplies for many coastal cities or requires increased investment in water treatment and desalination

State and local governments will and should be using a variety of legal techniques to facilitate adaptation to these climate change impacts. Especially in the initial stages of adaptation, however, one particularly valuable legal tool available is the adaptability of common law. As Indiana Supreme Court Justice Donald Hunter observed in 1972, the doctrine of stare decisis (precedent):

cannot and must not be so strictly pursued to the point where our view is opaqued and reality disregarded. To do so is to envision the common law to be as immutable as the laws of the Medes and Persians, and thus render our system of jurisprudence forever impotent. The strength and genius of the common law lies in its ability to adapt to the changing needs of the society it governs.

Brooks v. Robinson, 259 Ind. 16, 22-23, 284 N.E.2d 794, 797 (Ind. 1972) (emphasis added).

Thus, in general, the common law provides states with a mechanism for adjusting legal doctrines to fit emerging social, cultural, and ecological realities — such as the changes associated with climate change.

Common law adaptability is equally, and perhaps especially true with regard to property rights. Despite trends in property law scholarship and constitutional “takings” jurisprudence that seemingly consider private property rights to be absolute, property rights have never been so. Indeed, even the United States Supreme Court (US Supreme Court) has recognized that private real property rights are subject to a variety of pre-existing, and generally public-minded, common-law doctrines — including: public nuisance law; the federal navigation servitude; and the doctrine of public necessity. *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1029 & n. 16 (1992).

States’ abilities to adjust private property rights — both real property rights and water rights — are likely to become increasingly important as they endeavor to cope with the weather, water, ecological, and public health challenges being exacerbated by climate change.

One well-recognized example of the need for adaptability exists under Western Water Law. In the western United States, the Doctrine of Prior Appropriation (“first in time, first in right”) still reflects the historical priorities of water rights established in the mid- to late 19th century. These rights often favor using large amounts of water for technologically inefficient agricultural irrigation and thus often do not reflect the priorities that modern society would implement if it could start from scratch. Modern needs and values — including water supply for growing cities and increased attention to maintaining instream flows for ecological, water quality, recreational, and aesthetic values — continue to struggle for their share. Indeed, in the West, climate change and prolonged drought have been underscoring the misalignment between traditional water law doctrines and emerging shortage realities for some time.

Climate Change & Public Trust

Eastern Conflicts

Evolutionary Doctrine

Public Right

States' Power

Navigable Waters

Public Trust

State Title

The increasing stress on water resources is leading to water conflicts in the Eastern US, as well. For example, in 2007, South Carolina sued North Carolina for an equitable apportionment of the Catawba River (*South Carolina v. North Carolina*, 558 U.S. 256, 259-60 (2010)), while in September 2013, Florida petitioned the US Supreme Court to file an original jurisdiction lawsuit against Georgia to equitably apportion the Apalachicola-Chattahoochee-Flint River Basin (petition and complaint available at: www.eenews.net/assets/2013/10/02/document_gw_03.pdf). Both lawsuits reflect growing water stress to which climate change is obviously adding.

This article asserts that the public trust doctrine is another state common-law doctrine that can inject needed flexibility into the law of water resource management and climate change adaptation more generally. Indeed, over the course of the United States' history, state public trust doctrines have already demonstrated considerable flexibility and adaptability, adjusting themselves from English common law to both the different geographic realities of the US and the public resource management needs of individual states. Many states explicitly describe their public trust doctrines as evolutionary, and many have broadened the scope of the public concerns that their doctrines protect — including recent decisions that extend state public trust doctrines explicitly to the atmosphere and to climate change's impacts.

PUBLIC TRUST DOCTRINES AS STATE COMMON LAW

The history of the public trust doctrine in the United States is generally traced back to Rome and specifically to the Institutes of Justinian, which declared ports and rivers to be public amenities and fishing to be a public right held in common. The root idea of the Roman public trust doctrine is that some natural amenities are too important to society as a whole to be put into purely private ownership.

As this concept descended into English law, the “public” part of the public trust doctrine became the Crown's right to control navigation and fishing for England's larger fish, such as sturgeon. As a result, even under the Magna Carta's declarations of citizens' rights, the Crown retained the right to remove all private fish weirs from the Thames, the Medway, and all other rivers in England.

The importance of rivers and other waterways to both sovereignty and public values became enshrined in American law, as well. As the US Supreme Court has recognized both explicitly and implicitly throughout its history, “[n]avigable waters uniquely implicate sovereign interests.” *Idaho v. Couer d'Alene Tribe of Idaho*, 521 U.S. 261, 284 (1997). However, with the notable exceptions of the federal government's overriding interest in maintaining navigation and its Commerce Clause regulatory authority, the sovereign and public interests in navigable waters were largely devolved to the states. When the thirteen original American states defeated England in the Revolutionary War, they inherited the English public trust tradition — and the Crown's rights — as part of their common law. The public trust doctrine thus remains one of the areas of law where the fact that there were states before there was a United States of America remains legally important. In particular, the US Supreme Court has made clear in a long series of decisions that both the original thirteen states (by conquest) and all later-admitted states (through a penumbral constitutional “Equal Footing Doctrine”) acquired title to the beds and banks of all tidally influenced waters and all waters that were “navigable in fact” at the time of statehood. *See, e.g., The Daniel Ball*, 77 U.S. 557, 563 (1870); *Barney v. City of Keokuk*, 94 U.S. 324, 336-38 (1876); *Shively v. Bowlby*, 152 U.S. 1, 11 (1894); *Utah v. United States*, 403 U.S. 9, 10 (1971); and *Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469, 476-81 (1988). [Editor's Note: as “penumbra” originally refers to an imperfect shadow outside the complete shadow of an opaque object, similarly, in a legal sense, “penumbral” refers to implied governmental powers arising from a specific rule — e.g., a body of rights held to be guaranteed by implication from other rights explicitly enumerated in the US Constitution.]

Nevertheless, the Court also suggested that the American public trust doctrine had a federal law component to it. Most importantly, in *Illinois Central Railroad Co. v. Illinois*, 146 U.S. 387 (1892), it upheld the State of Illinois's decision to invalidate a prior grant of large portions of the Chicago Harbor in Lake Michigan to private interests, concluding that the grant had never been legal in the first place. Specifically, the Court concluded that these submerged lands were impressed with a public trust from which the state could never completely free itself:

That the state holds the title to the lands under the navigable waters of Lake Michigan, within its limits, in the same manner that the state holds title to soils under tide water, by the common law, we have already shown; and that title necessarily carries with it control over the waters above them, whenever the lands are subjected to use. But it is a title different in character from that which the state holds in lands intended for sale. It is different from the title which the United States hold in the public lands which are open to pre-emption and sale. It is a title held in trust for the people of the state, that they may enjoy the navigation of the waters, carry on commerce over them, and

Climate Change & Public Trust

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have liberty of fishing therein, freed from the obstruction or interference of private parties....[This doctrine cannot] sanction the abdication of the general control of the state over lands under the navigable waters of an entire harbor or bay, or of a sea or lake. Such abdication is not consistent with the exercise of that trust which requires the government of the state to preserve such waters for the use of the public. The trust devolving upon the state for the public, and which can only be discharged by the management and control of property in which the public has an interest, cannot be relinquished by a transfer of the property. The control of the state for the purposes of the trust can never be lost, except as to such parcels as are used in promoting the interests of the public therein, or can be disposed of without any substantial impairment of the public interest in the lands and waters remaining.

Id. at 452-53.

As a result of this decision, moreover, most states and commentators still agree that the public uses of navigable waters classically protected under the public trust doctrine are navigation, commerce, and fishing.

State Law Matter

Nevertheless, the source of law for the *Illinois Central* decision is ambiguous, at best, although many states assumed (and some continue to assume) that the public trust doctrine in the US has an origin in federal common law or the US Constitution's penumbra. The US Supreme Court itself, however, has repeatedly clarified that public trust doctrines are a matter of state law. *Appleby v. City of New York*, 271 U.S. 364, 395 (1926); *Coeur d'Alene Tribe of Idaho*, 521 U.S. at 285. Most recently, for example, the Supreme Court declared in *PPL Montana v. Montana*, --- U.S. ---, 132 S. Ct. 1215 (2012), that:

The public trust doctrine is of ancient origin. Its roots trace to Roman civil law and its principles can be found in the English common law on public navigation and fishing rights over tidal lands and in the state laws of this country. Unlike the equal-footing doctrine, however, which is the constitutional foundation for the navigability rule of riverbed title, the public trust doctrine remains a matter of state law, subject as well to the federal power to regulate vessels and navigation under the Commerce Clause and admiralty power. While equal-footing cases have noted that the State takes title to the navigable waters and their beds in trust for the public, the contours of that public trust do not depend upon the Constitution. Under accepted principles of federalism, the States retain residual power to determine the scope of the public trust over waters within their borders, while federal law determines riverbed title under the equal-footing doctrine.

Id. at 1234-35 (citations omitted).

One interpretation of this language from *PPL Montana* is that the existence of the public trust doctrine — similar to state title to the submerged lands of navigable waters — still derives from the constitutional Equal Footing Doctrine. If so, state legislatures are limited in their abilities to completely eliminate the public trust doctrine with respect to the state-owned navigable waters within their borders — although the US Supreme Court has been far from explicit on this point. Beyond that potential constitutional limitation, however, the *PPL Montana* decision made it abundantly clear that the public trust doctrine's scope ("contours") is up to the individual states. Thus, declarations of where the public trust doctrine applies and what public interests it protects are now largely left to the common law (and statutory) pronouncements of each state. In this sense, therefore, there are now 50+ state and territorial public trust doctrines — as opposed to some national approach.

This broad state authority gives states the ability to adapt their individual state public trust doctrines to the particular and evolving needs of the citizens within their borders. Indeed, many states have already evolved their public trust doctrines to protect new public priorities. There is no reason to doubt that climate change can and will drive such common-law adjustments further.

Scope of Trust

State Authority & Evolution

FLEXIBILITY AND ADAPTABILITY OF STATE PUBLIC TRUST DOCTRINES

The public trust doctrines in the United States already reflect several adaptations from English common law to meet the geographic realities and local needs of this country. The first of these, historically, was the adoption of "navigability in fact" as a basis for establishing sovereign title to submerged lands. In England, the Crown owned the submerged lands of tidally influenced waters. This legal test suits the reality of English geography, where all major (and most minor) waterways are in fact subject to the ebb and flow of the tide. The United States, however, contains a number of publicly important and navigable waterways that are not tidally influenced. The Mississippi River, for example, is tidally influenced upstream only to about Baton Rouge. Nevertheless, in response to riparian landowners' attempts to control traffic on the Mississippi farther north, the Iowa Supreme Court declared in 1856 that the river could not be private property. *McManus v. Carmichael*, 3 Clarke 1, 4, 1856 WL 139, at *4 (Iowa 1856). Similar protections for public rights despite the nation's different geography from England are reflected in the US Supreme Court's adoption of a federal "navigable in fact" test for state ownership of submerged lands, discussed above.

Not all states, however, recognize the navigable-in-fact test for sovereign title as a matter of state law.

Tidal Lands

Sovereign Title

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For example, Maryland, Massachusetts, and New Jersey still use only the English common-law tidal test for both state title to submerged lands and their public trust doctrines. However, given the fact that these are small coastal states, it is not clear that their citizens have lost much (if anything) as a result of the states' adherence to the tidal test. Kentucky is a different matter, and the legal rules in Kentucky are different as a result. Specifically, for purposes of dividing state-owned submerged lands from privately-owned submerged lands, Kentucky adheres to the tidal test, with the result that all submerged lands in Kentucky are privately owned. Nevertheless, the Kentucky courts recognize an easement for the public to use all navigable-in-fact waters despite the private ownership of underlying lands. As a result, public rights of use are not dependent upon public ownership of the submerged lands — an evolution of state public trust doctrine law that has become more common across the United States.

Float Test

Indeed, the next important expansion of public trust doctrines in the US came in states that extended the types of waters subject to the doctrine beyond those for which the state owned the submerged lands. This expansion has taken two basic forms. First, many states use a state-law definition of “navigable water” for public trust purposes that is broader than the federal test for state title to submerged lands. Thus, for example, in 1869 the Oregon Supreme Court adopted a log floatation test to determine which rivers in Oregon were subject to public rights, concluding that:

[W]e think it the rule that best accords with common sense and public convenience, for these rapid streams, penetrating deep into the mountains, are the only means by which timber can be brought from these rugged sections, without great labor and expense; and by their use large tracts of timber, otherwise too remote or difficult of access, can be rendered of great value, as the country shall grow and timber become scarce.

Felger v. Robinson, 3 Or. 455, 458 (1869).

Recreational Purposes

A similar (and similarly, blatantly utilitarian) decision to adapt public trust law to evolving local needs came from the Arkansas Supreme Court in 1980, when it decided that all rivers navigable for recreational purposes were subject to public rights. Noting that the state's “definition of navigability is...a remnant of the steamboat era,” the court concluded that emerging public needs required an evolved definition:

Arkansas, as most states in their infancy, was mostly concerned with river traffic by steamboats or barges...We have had no case regarding recreational use of waters such as the Mulberry. It may be that our decisions did or did not anticipate such use of streams which are suitable, as the Mulberry is, for recreational use. Such use would include flatbottomed boats for fishing and canoes for floating or both. There is no doubt that the segment of the Mulberry River that is involved in this lawsuit can be used for a substantial portion of the year for recreational purposes. Consequently, we hold that it is navigable at that place with all the incidental rights of that determination.

State v. McIlroy, 268 Ark. 227, 236, 237, 595 S.W.2d 659, 664, 664-65 (Ark. 1980).

Finally, Alaska has by statute defined “navigable water” to include all waters useful for floating logs and “landing and takeoff of aircraft,” Alas. Stat. Ann. § 38.05.965(13), making Alaska the only state to use seaplanes as a method of determining where the public has rights in waterways.

Alaska's Aircraft Test

Public Ownership of Water

The second way that states have expanded the waters covered by their public trust doctrines is through declarations that the state or the public owns all the waters of the state. These declarations are especially common in the West, and many western states have relied on them to extend public rights to all waters within the state, regardless of who owns the submerged lands. Thus, as one example, the Utah Supreme Court has made clear that, as a corollary of public ownership of the waters of the state, “[i]rrespective of the ownership of the bed and navigability of the water, the public, if it can obtain lawful access to a body of water, has the right to float leisure craft, hunt, fish, and participate in any lawful activity when utilizing that water.” *J.J.N.P. Co. v. State by & through Division of Wildlife Resources*, 655 P.2d 1133, 1137 (Utah 1982); see also *Conatser v. Johnson*, 194 P.3d 897, 899-903 (Utah 2008) (expanding the description of this public easement).

Expansion of Interest

A third legal adaptation of state public trust doctrines to evolving public needs has been to expand the uses and interests that the doctrine protects. By far, the most common such state expansion has been to protect recreational uses of waters. But the public interests and uses protected can be even more expansive. For example, under South Carolina's public trust doctrine, “everyone has the alienable right to breathe clean air; to drink safe water; to fish and sail; and recreate upon the high seas, territorial seas and navigable waters; as well as to land on the seashores and riverbanks.” *Sierra Club v. Kiawah Resort Associates*, 319 S.C. 119, 127-28, 456 S.E.2d 397, 402 (S.C. 1995) (quoting Syridon and LeBlanc, *The Overriding Public Interest in Privately Owned Natural Resources: Fashioning a Cause of Action*, 6 Tul. Envtl. L.J. 287 (1993)). In addition, several states have now extended their public trust doctrines to protect ecological integrity, including California, Hawai'i, and Texas. *Marks v. Whitney*, 491 P.2d 374, 380 (Cal. 1971); *In re Water Use Permit Applications*, 9 P.3d 409, 448 (Haw. 2000); *Goldsmith & Powell v. Texas*, 159 S.W.2d 534, 535 (Tex. Civ. App. 1942).

Ecological Integrity

Thus, states have already evolved their common-law public trust doctrines in multiple ways to accommodate geographical and ecological realities and changing public priorities and needs. We should

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Evolution Recognized

Ecological Integrity

Doctrine Extended

State Duty?

Property Rights

Water Rights

expect, therefore, that climate change impacts on water (and other) resources will inspire further evolutions in state public trust doctrines to aid climate change adaptation efforts.

EVOLVING PUBLIC TRUST DOCTRINES

FLEXIBLE PUBLIC TRUST DOCTRINES AND STATE ADAPTATIONS TO CLIMATE CHANGE

Three emerging aspects of state public trust doctrines heighten their usefulness to states seeking to adapt to climate change impacts, particularly impacts to water resources and aquatic ecosystems. First, at least five states have already explicitly declared their public trust doctrines to be evolutionary and hence specifically intended to respond to changing social, cultural, and ecological circumstances like climate change. For example, in 1971 the California Supreme Court declared that “[t]he public uses to which tidelands are subject are sufficiently flexible to encompass changing public needs. In administering the [public] trust the state is not burdened with an outmoded classification favoring one mode of utilization over another.” *Marks v. Whitney*, 6 Cal.3d 251, 259, 491 P.2d 374, 380 (Cal. 1971). See also *National Audubon Society v. Superior Court*, 33 Cal.3d 419, 434, 658 P.2d 709, 719 (Cal. 1983), (*National Audubon Society*) which held that “[T]he objective of the public trust has evolved in tandem with the changing public perception of the values and uses of waterways.” The New Jersey Supreme Court similarly decided that “[t]he public trust doctrine, like all common law principles, should not be considered fixed or static, but should be molded and extended to meet challenging conditions and the needs of the public it was created to benefit.” *Borough of Neptune City v. Borough of Avon-by-the-Sea*, 294 A.2d 47, 54-55 (N.J. 1972); see also *Raleigh Avenue Beach Association v. Atlantis Beach Club, Inc.*, 185 N.J. 40, 55, 879 A.2d 112, 121 (N.J. 2005) (quoting this language)(*Raleigh Avenue Beach Association*). Additional examples, Illinois, Hawai’i, and Vermont, are three other states that have explicitly declared their public trust doctrines to be evolutionary in this sense. *People ex rel. Scott v. Chicago Park District*, 66 Ill.2d 65, 78, 360 N.E.2d 773, 780 (Ill. 1976); *Robinson v. Ariyoshi*, 65 Haw. 641, 673-76, 658 P.2d 287, 310-11 (Haw. 1982)(*Ariyoshi*); *State v. Central Vermont Railway*, 153 Vt. 337, 342, 571 A.2d 1128, 1130 (Vt. 1989).

Second, many states have already declared that their public trust doctrines protect ecological integrity, and some states are beginning to expand this concept to the atmosphere and to climate change itself. In Hawai’i, for example, “[t]he maintenance of waters in their natural state constitutes a distinct ‘use’ under the water resources trust.” *In re Water Use Permit Applications*, 94 Haw. 97, 136, 9 P.3d 409, 448 (Haw. 2000). States that have recognized such “ecological public trusts” have already connected pollution prevention (*Goldsmith & Powell v. State*, 159 S.W.2d 534, 535 (Tex. Civ. App. 1942)) and maintenance of ecological integrity (*Marks v. Whitney*, 6 Cal.3d at 259-60, 491 P.2d at 380) to their public trust doctrines. This connection gives them the option of adding a public trust review of human actions that affect ecosystems which are already responding to climate change impacts. As the California Court of Appeals recognized in 1994, “considerations of environmental protection have become a major factor in balancing the allocation of water for domestic consumption against public trust requirements such as fisheries, estuarine ecosystems, riparian habitat, and other in-stream uses.” *Brydon v. East Bay Municipal Utility District*, 24 Cal. App. 4th 78, 203 (Cal. App. 1st Dist. 1994). In addition, Connecticut and Texas already extend their public trust doctrines to the atmosphere — and Texas explicitly to climate change — while Arizona and New Mexico are actively contemplating such extensions. Conn. Gen. Stat. Ann. §§ 22a-16 to 22a-17; *Bonser-Lain v. Texas Commission on Environmental Quality*, No. D-1-GN-11-002194 (201st Jud. Dist. Ct. Travis City. Tex. July 9, 2012); *Butler ex rel. Peshlakai v. Brewer*, 2013 WL 1091209, at *1, *5-*6 (Ariz. App. Mar. 14, 2013); *Sanders-Reed v. Martinez*, No. D-101-CV-2011-01514 (1st Jud. Dist. Ct. N.M. July 14, 2012). Moreover, the Michigan Court of Appeals has implicitly recognized a potential claim under the Michigan Environmental Protection Act (MEPA) if official actions or responses to climate change destroy the air, water, or public trust in these resources. *Citizens for Environmental Inquiry v. Department of Environmental Quality*, 2010 WL 446047, at *3 (Mich. App. Feb. 9, 2010). In states where climate change is explicitly adopted into the public trust doctrine analysis, climate change adaptation could potentially become an official state duty, geared to protecting as much of the public interest in and rights to natural resources and ecosystems as possible in light of climate change impacts. However, contrary opinions do still persist, see *Svitak ex rel Svitak v. State*, 2013 WL 6632124, at *1, *2 (Wash. App. Div. 1 Dec. 16, 2013), which dismissed a climate change-based claim that the atmosphere is a public trust resource in Washington).

Finally, the public trust doctrine is at least in part a property rights doctrine, and states can use it both to adjust the balance between public and private rights in natural resources and to defend the resulting legislation from constitutional claims that the state has “taken” private property without just compensation. With respect to the public trust doctrine’s ability to adjust property rights, California is perhaps most famous for allowing its public trust doctrine to modify even long-existing state water rights. *National Audubon Society*, 33 Cal.3d at 440-41, 658 P.2d at 723-24. Hawai’i has taken the same approach allowing the modification of existing rights, including modification of groundwater rights. *Ariyoshi*, 65 Haw. at 676, 658 P.2d at 311-12; *In re Water Use Permit Applications*, 94 Haw. at 132-33, 9 P.3d at 444-45. Meanwhile,

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"Takings" Claims

Insulation

Public Interest Balance

Water Stress Point

Wisconsin has declared that "riparian rights...are subject to and limited by the public trust doctrine." *R.W. Docks & Slips v. State*, 244 Wis.2d 497, 508, 628 N.W.2d 781, 787 (Wis. 2001)(*R.W. Docks & Slips*). New Jersey has used its public trust doctrine to adjust the public-private balance along its beaches, recognizing a right in the public to access public ("wet sand") beaches across private property (the "dry sand" beach). *Raleigh Avenue Beach Association*, 185 N.J. at 51-55, 879 A.2d at 119-21. As water resources become more stressed throughout the country, this ability to adjust the public and private rights to those scarce resources may prove a valuable climate change adaptation tool.

State climate change adaptation measures justified by state public trust doctrines should be insulated from constitutional regulatory "takings" claims. In the language of the US Supreme Court's decision in *Lucas*, a state's public trust doctrine is a "background principle" of its property law. Indeed, various states have already used their public trust doctrines as a successful defense to regulatory takings and other private-property-based claims in a variety of contexts. See, e.g., *Fabrikant v. Currituck County*, 174 N.C. App. 30, 41-42, 621 S.E.2d 19, 27 (N.C. App. 2005) (dealing with beach access); *R.W. Docks & Slips*, 244 Wis.2d at 508, 628 N.W.2d at 787 (upholding the state's denial of a dredge permit); *Coastal Petroleum v. Chiles*, 701 So.2d 619, 624-25 (Fla. 1997) (upholding the state's denial of offshore oil and gas leases); *Orion Corp. v. State*, 109 Wash.2d 621, 641-42, 659-60, 747 P.2d 1062, 1073, 1082-83 (Wash. 1987) (noting that Washington's Shoreline Management Act is at least partially insulated by the state public trust doctrine); *Montana Coalition for Stream Access v. Curran*, 210 Mont. 38, 53, 682 P.2d 163, 171 (Mont. 1984) (finding no taking as a result of the public's public trust right to use streams for recreation).

CONCLUSION

At minimum, state public trust doctrines always balance public interests in — and uses of — water resources against private interests and property rights in those same waters. Historically, many state courts have already interpreted public trust doctrines in often blatantly utilitarian ways to promote evolving perceptions of the overall public good and to support emerging public values, such as environmental protection. These interpretations have allowed states to tailor their public trust doctrines to particularly local needs and concerns, such as Alaska's need for seaplanes and New Jersey's increased valuation of public beach access.

As we wade into an era of climate change induced impacts, it is worth noting that at least 16 states have already adopted ecological public trusts, and at least five have openly declared their public trust doctrines to be evolutionary. Given the evolutions of the public trust doctrine that have already occurred, these states are particularly well-suited to wield their public trust doctrines as legal aids to climate change adaptation. In particular, public trust doctrines could be particularly helpful to states seeking to adjust and re-calibrate the balance of public and private rights, including private property rights, enmeshed in water and other natural resources as climate change impacts reduce the available supply of these resources and/or increasingly stress the ecosystems of which they are a part.

Climate change is, after all, about "change" — and insisting on a static legal regime and absolute property rights will not work as states are forced into a more adaptive mode. Water in particular is already becoming a legal stress point, requiring new balancing among competing uses.

In a number of states, public trust doctrines are already powerful common-law tools for facilitating climate change adaptation by facilitating a needed rebalancing of public and private rights. Their example can help describe a path forward for other states needing to adapt their policies to better meet the water resources management challenges brought about by climate change.

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WATER BRIEFS

**RIO GRANDE WATER SW
UPPER & LOWER BASIN STUDIES**

Two reports issued in mid-December as part of the US Bureau of Reclamation's (Reclamation's) WaterSMART program evaluate current and future water conditions in the Upper and Lower Rio Grande Basin.

Lower Rio Grande Basin Study

The *Lower Rio Grande Basin Study* (Study) evaluates the impacts of climate change on water demand and supply imbalances along the Rio Grande along the United States/Mexico border from Fort Quitman, Tex., to the Gulf of Mexico. The Study found a shortfall of 678,522 acre-feet of water per year will need to be met in the Lower Rio Grande Basin by 2060 due to increased demand and climate change.

Key findings include:

- Climate change is likely to result in increased temperatures, decreased precipitation and increased evapotranspiration in the study area. As a result of climate change, a projected 86,438 acre-feet of water per year will need to be added to the 592,084 acre-feet per year of supply shortfall predicted in the existing regional planning process in 2060, for a total shortfall of 678,522.
- Water supply imbalances exacerbated by climate change will greatly reduce the reliability of deliveries to all users who are dependent on deliveries of Rio Grande water via irrigation deliveries.

The Study acknowledges that all water management strategies recommended through the recently adopted regional water plan are part of a needed portfolio of solutions for the Study Area.

Seawater desalination, brackish groundwater desalination, reuse and fresh groundwater development were examined as alternatives to meet future water demands. Analysis found that regional brackish groundwater systems would best meet the planning objective. An appraisal-level plan formulation and evaluation process was conducted to determine potential locations of each regional brackish groundwater desalination system.

Upper Rio Grande Impact Assessment

The *Upper Rio Grande Impact Assessment* (Assessment) reports on a potential growing gap between water supply and water demand in the Upper Rio Grande Basin.

According to the Assessment, increasing temperatures and changes in the timing of snowmelt runoff could impact the amount of water available on the upper Rio Grande in the future.

The Assessment was conducted by Reclamation in partnership with Sandia National Laboratories and the US Army Corps of Engineers. It includes a detailed evaluation of the climate, hydrology and water operations of the upper Rio Grande basin of Colorado and New Mexico. It also evaluates the potential impacts associated with climate change on streamflow, water demand and water operations in the Upper Basin.

Temperatures will increase four to six degrees Fahrenheit by the end of the 21st century, according to the climate modeling used in the Assessment. Although the modeling projects that total annual average precipitation will not change considerably, it is likely that snowpack will decrease and there will be earlier and smaller spring snowmelt runoff and an increase in the frequency, intensity, and duration of both droughts and floods.

All models used for the study consistently project an overall decrease in water availability. Rio Grande supplies are projected to decrease by an average of one-third from current supplies. The water supply from the San Juan-Chama Project, which is imported to the Rio Grande, is projected to decrease by an average of one-quarter.

All of these impacts would contribute to a larger gap between water supply and demand and lead to future water management challenges

For info: Reclamation's WaterSMART Program website: www.usbr.gov/watersmart/

**TEXAS V. NEW MEXICO TX/NM
SUPREME COURT LAWSUIT PROCEEDS**

On January 27, the US Supreme Court (Court) ordered that Texas can proceed with its lawsuit in the Court against New Mexico concerning the allocation of water in the Rio Grande Basin. *State of Texas v. State of New Mexico and State of Colorado*, No. 141, Original. Texas initiated its original action against New Mexico in 2013.

Texas is alleging that New Mexico violated and continues to violate the 1938 Rio Grande Compact (Compact), an interstate water contract between

Texas, New Mexico and Colorado, by allowing illegal and unauthorized diversions and use of surface water and groundwater hydrologically connected to surface water in New Mexico below Elephant Butte Reservoir — water that was apportioned to Texas by the Compact and allocated under the Rio Grande Project operations. Texas asks that New Mexico be ordered to stop the illegal diversions and compensate Texas for damages it has incurred because of New Mexico's unlawful activities since 1938. Texas asserts that the Rio Grande Compact water apportioned to it does not reach the Texas state line. In essence, Texas is requesting the Court to interpret and enforce the Compact. *See* Water Briefs, *TWR* #119 for additional background information.

By taking the case, the Supreme Court confirms that Texas has established that the case has merit and that it raises important and serious issues that should be addressed by the Court. The order also allows New Mexico to file a motion to dismiss the action within 60 days, in the nature of a motion under Rule 12(b)(6), Federal Rules of Civil Procedure. Other briefing will then follow if New Mexico files the motion.

For info: Court filings available at: www.scotusblog.com/case-files/cases/texas-v-new-mexico-and-colorado/; Terry Clawson, TCEQ, 512/ 239-5000

**STORED RECHARGE WA
STORMWATER CAPTURE & "RE-TIMING"**

The Washington Department of Ecology (Ecology) is partnering with the Upper Skagit Indian Tribe to develop a water storage and stream flow enhancement project in the Fisher Creek subbasin of the Skagit River. The Skagit River Basin Stream Flow Enhancement/Groundwater Mitigation Program (Program) seeks to improve flow conditions by capturing stormwater runoff and retiming flows through a managed recharge facility to enhance flows during low-flow periods. The Upper Skagit Tribe will focus initially in the Fisher Creek subbasin. Since 2011, the Fisher Creek subbasin has been closed to new uses of groundwater. The Tribe may expand the program to provide appropriate enhancement/mitigation in other subbasins.

The proposed Program plan will include two components: 1) a managed groundwater recharge project

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to enhance current stream flows and offset flow-related impacts from new groundwater uses in each subbasin; and 2) a fee-based mitigation program to assign “mitigation credits” to individual property owners and to recover the costs of the groundwater recharge project. The goal of the project is to demonstrate that “retiming” stormwater runoff through managed groundwater infiltration can provide enhanced stream flows and be an effective mitigation tool for new groundwater development. If the mitigation program is approved by Ecology, individual property owners will contract to receive the “mitigation credits,” representing proportionate benefits from the groundwater recharge project. The Upper Skagit Tribe’s stream flow enhancement/groundwater mitigation program will incorporate rigorous adaptive-management protocols and extensive monitoring and evaluation. The adaptive management protocols will ensure that future development is aligned with proven and sustainable mitigation benefits and that project facilities are managed appropriately. As the project progresses, draft products will be available for review and comment.

For info: Jacque Klug, Ecology, 425/649-7270, jacque.klug@ecy.wa.gov or www.ecy.wa.gov/programs/wr/nwro/skagit-sfe-gmp.html; Jessica Kuchan, Mentor Law Group, 206/838-7650, kuchan@mentorlaw.com or www.mentorlaw.com/skagit-county-and-north-snohomish-county-water-mitigation/

BRISTOL BAY ASSESSMENT AK SALMON & MINING IMPACTS

The US Environmental Protection Agency (EPA) on January 15 released its final Bristol Bay Assessment describing potential impacts to salmon and ecological resources from proposed large-scale copper and gold mining in Bristol Bay, Alaska. The report, *An Assessment of Potential Mining Impacts on Salmon Ecosystems of Bristol Bay, Alaska*, concludes that large-scale mining in the Bristol Bay watershed poses risks to salmon and Alaska Native cultures. Bristol Bay supports the largest sockeye salmon fishery in the world, producing nearly 50% of the world’s wild sockeye salmon with runs averaging 37.5 million fish each year. To assess potential mining impacts to salmon resources, EPA

considered realistic mine scenarios based on a preliminary plan that was published by Northern Dynasty Minerals Ltd. and submitted to the US Securities and Exchange Commission. EPA also considered mining industry references and consulted mining experts. Numerous risks associated with large-scale mining are detailed in the assessment.

EPA examined the risks from routine operation. Depending on the size of the mine, EPA estimates 24 to 94 miles of salmon-supporting streams and 1,300 to 5,350 acres of wetlands, ponds, and lakes would be destroyed. EPA estimates an additional 9 to 33 miles of salmon-supporting streams would experience altered streamflows likely to affect ecosystem structure and function. Reviewing water and wastewater management, EPA found that extensive quantities of mine waste, leachates, and wastewater would have to be collected, stored, treated and managed during mining and long after mining concludes. Consistent with the recent record of similar mines operating in the US, polluted water from the mine site could enter streams through uncollected leachate or runoff, in spite of modern mining practices. Under routine operations, EPA estimates adverse direct and indirect effects on fish in 13 to 51 miles of streams. EPA also looked at the potential impact from tailings dam and concluded that failure of a tailings storage facility dam that released only a partial volume of the stored tailings would result in catastrophic effects on fishery resources.

The assessment found that the Bristol Bay ecosystem generated \$480 million in economic activity in 2009 and provided employment for over 14,000 full and part-time workers. The region supports all five species of Pacific salmon found in North America: sockeye, coho, Chinook, chum and pink. In addition, it is home to more than 20 other fish species, 190 bird species, and more than 40 terrestrial mammal species, including bears, moose and caribou.

EPA produced the report with its authority to perform scientific assessments under Clean Water Act section 104. As a scientific report, this study does not recommend policy or regulatory decisions.

For info: EPA Bristol Bay Assessment at: www.epa.gov/bristolbay

INSTREAM TRANSFERS CA LEASES PIONEERED

On January 3, Reed Watson of PERC (Property and Environment Research Center of Bozeman, Montana), published a report entitled *Scott River Water Trust: Improving Stream Flows the Easy Way* (Report). The Report notes that from headlines and court cases, it appears that it is practically impossible to transfer water in California without first wading through years of red tape and litigation. Issues related to endangered species, conveyance, and third-party impacts preclude all but the largest and most profitable agriculture-to-municipal transfers.

The Report highlights work being done by the Scott River Water Trust. Without much fanfare, the Scott River Water Trust (Trust) in Siskiyou County, California has pioneered the use of low-volume, low-cost water leases to enhance environmental flows. The Trust negotiates voluntary agreements that pay farmers along the Scott River and its tributaries to leave water instream for salmon and steelhead, particularly during periods of drought and low flows. During these specified low-flow periods — typically 30-90 days — farmers refrain from diverting their water rights; after the low-flow periods, they can once again use the water rights for irrigation and/or stockwater. The Scott River is a tributary to the Klamath River in northern California.

According to the Report, the success of the Scott River Water Trust can be replicated throughout California, despite all of the red tape normally entangling instream flow transfers. “Unlike outright purchases, the trust never acquires an ownership interest in the water, allowing it to bypass the complicated and time-consuming regulatory review process. Instead, ownership remains with the farmer, and no one other than the trust and water user are involved in this relatively simple transaction.” Report at 4-5. The case study presented also demonstrates how water markets can facilitate both economic growth and municipal development while also enhancing environmental flows and strengthening agricultural communities.

“Summer leases during the first three years of operation added approximately 279 to 330 acre-feet of water to priority streams, improving 3.7

WATER BRIEFS

to 6.1 miles of instream rearing habitat. Fall leases during the same time period accounted for an additional 280 to 481 acre-feet added to the Scott River's mainstem, benefitting up to 53 miles of spawning habitat." *Id.* at 6-7. More details regarding the Trust's leasing program and results are available in the Report.

For info: Report available at: <http://perc.org/sites/default/files/pdfs/Final-Scott%20River%20Water%20Trust.pdf>

CWA ENFORCEMENT WY

OIL SPILL FINES & RESTITUTION

Nadel and Gussman Rockies, LLC (NGR), an oil and gas production company based in Tulsa, Oklahoma, will pay a total of \$1 million in fines, restitution and community service contributions after pleading guilty to Clean Water Act (CWA) violations stemming from its role in the illegal discharge of more than 4,700 gallons of crude oil into a tributary of the North Platte River near Rawlins, Wyoming. The company is also required to implement a new compliance program to ensure future compliance with all environmental laws and regulations applicable to oil and gas companies leasing lands from the federal government.

On January 31, US District Judge Alan Johnson ordered NGR to pay a \$357,500 criminal fine and a total of \$430,500 in restitution, of which \$200,000 will go to the Oil Spill Liability Trust Fund, a federal fund used to finance oil spill response activities and provide compensation for damages. The remaining \$230,500 will go to Carbon County, WY, the county in which the oil spill occurred. Of that amount, \$80,500 will be used to purchase equipment and supplies necessary to respond to and clean up oil spills in the county, while the remaining \$150,000 will be equally distributed to the Little Snake River, Saratoga-Encampment-Rawlins, and Medicine Bow Conservation Districts to improve water quality and conserve local natural resources.

NGR will also make a community service payment of \$212,000 to be divided equally between the Yellowstone Park Foundation and the Grand Teton National Park Foundation for projects to enhance, protect and preserve the natural resources of each

park. "The defendant's production and storage practices put the environment at serious risk," said Jeffrey Martinez, Special Agent in Charge of EPA's criminal enforcement program in Wyoming. "In addition, the company provided false information to EPA and BLM emergency responders, and did not begin cleanup activities until ordered to do so by the EPA. It is appropriate, therefore, that in addition to a criminal fine, the company will be required to pay to improve Wyoming's natural environment and to implement a compliance plan to ensure this doesn't happen again."

The case began in May, 2011, when a local resident noticed an oily sheen on Emigrant Creek near Rawlins. BLM employees confirmed there had been a discharge of oil into the creek and that it appeared to have originated from an oil tank storage system owned and operated by NGR. BLM requested EPA's assistance for emergency clean-up. A joint criminal investigation conducted by EPA's Criminal Investigation Division and BLM's Special Investigation Group later determined that Patrick Ely, an independent contractor for NGR, routinely drained production water from NGR's tank system directly to the ground as authorized by NGR Operations Manager, Hugo Cartaya. As a result, about 375,000 gallons of production water containing high levels of arsenic and 113 barrels of oil (approximately 4,746 gallons) were discharged in mid-April, 2011. Although Ely reported the oil spill to NGR Operations Manager Hugo Cartaya, the spill went unreported to the National Response Center until directed by the BLM and EPA.

On November 22, 2013 NGR pleaded guilty to violating the CWA by negligently discharging a harmful quantity of oil into a waterway under federal jurisdiction. In September 2013, the Grand Jury in Cheyenne indicted Cartaya, charging him with eight felony counts, including discharge of oil into the waters of the US and making false statements. Mr. Cartaya has pleaded not guilty and his trial is scheduled to begin on February 18, 2014.

For info: Richard Mylott, EPA Region 8, 303/ 312-6654; Oil Spills/National Response Center at: www2.epa.gov/emergency-response/national-response-center

HATCHERY V. WILD FISH OR

ESA/NEPA DECISION

The long-running controversy pitting wild fish against hatchery fish has resulted in a victory for wild fish in federal district court. On January 16, US District Court Judge Ancer Haggerty issued his decision which concluded that the National Marine Fisheries Service (NMFS) violated the federal Endangered Species Act and the National Environmental Policy Act (NEPA) by approving the State of Oregon's management of the Sandy River Hatchery. "There is very little evidence to suggest a hatchery can restore a wild population of fish and the Sandy hatchery is generally not intended to achieve any recovery goals. Rather, it is undisputed that hatchery operations can pose a host of risks to wild fish." *Native Fish Society and McKenzie Fly Fishers v. NMFS*, et al., Case No. 3:12-cv-00431-HA (Jan. 16, 2014); Opinion and Order at 8.

The Native Fish Society and McKenzie Fly Fishers (plaintiffs) sued NMFS due to what they referred to as a "last ditch effort to prevent the extinction of Chinook, steelhead and coho salmon in the Sandy River." The plaintiffs asserted that "the State of Oregon had received NMFS' blessing under the Endangered Species Act to continue to drown the river with over a million hatchery fish." (Press Release). The hatchery genetic management plans (HGMPs) that were approved by NMFS "provide for the release of approximately 1,000,000 smolts into the Sandy Basin each year: 300,000 spring Chinook, 500,000 coho, 160,000 winter steelhead, and 75,000 summer steelhead." *Opinion* at 10. Historically, the Sandy River Basin supported sizeable runs of native wild salmonids, but by 2010, "there were an estimated 1,330 spring Chinook, 901 coho, and 969 winter steelhead spawners." *Id.* at 8.

The plaintiffs argued that NMFS should have analyzed a broad range of alternatives and prepared an Environmental Impact Statement under NEPA. The groups also argued that the agency allowed too many hatchery fish to interbreed with the wild fish, and that weirs and acclimation ponds that were supposed to prevent interbreeding were not likely to succeed. The plaintiffs' claims for relief alleged that "the state defendants' operation of the Sandy

WATER BRIEFS

Hatchery causes ‘take’ of threatened fish species in violation of § 9 of the ESA, and that NMFS’ approval and funding of the Sandy Hatchery’s operations violates the ESA, NEPA, and the APA.” *Id.* at 3.

For info: Decision available at: <http://nativefishsociety.org/wp-content/uploads/12-431-Opinion-on-Summary-Judgment-1-16-141.pdf>

FRACKING RESOLUTION CA SAN FRANCISCO BAN

On January 14, the San Francisco Board of Supervisors approved a measure urging a halt to hydraulic fracturing in California because of fracking’s threats to the State’s air, water, and efforts to fight dangerous climate change. Other local jurisdictions in California have weighed in on the issue of fracking, calling for greater regulation, bans or moratoriums, including Marin County, Santa Cruz County, Ventura County and Santa Barbara County.

For info: Judson True, Office of Supervisor David Chiu, 415/ 554-7451, judson.true@sfgov.org

ENFORCEMENT REPORT US EPA COMPLIANCE REPORT

On February 7, the EPA released its annual enforcement and compliance results, demonstrating a focus on violations that have the most impact on public health.

EPA listed highlights from fiscal year 2013. EPA’s cases resulted in criminal sentences requiring violators to pay more than \$4.5 billion in combined fines, restitution and court-ordered environmental projects that benefit communities, and more than \$1.1 billion in civil penalties. In the Deepwater Horizon cases, EPA pursued justice for Gulf Coast residents, resulting in over \$3.7 billion going back to benefit the Gulf States and communities impacted by the spill. Walmart paid more than \$80 million in fines and penalties for mishandling pesticides and hazardous waste and was required to commit to cutting edge hazardous waste handling systems, as well as compliance and training programs that will protect employees and nearby residents.

EPA pushed to ensure that companies take responsibility and clean up the toxic pollution they create. In a landmark settlement, AVX Corporation committed to pay over

\$366 million to clean up contamination in Massachusetts’s New Bedford Harbor, the largest single-site cash settlement in Superfund history. EPA also noted that it is working with cities to cut discharges of raw sewage and contaminated stormwater to the nation’s waters through integrated planning, green infrastructure, and other innovative approaches. Recent settlements with Seattle and King County, Washington and Wyandotte County, Kansas require cities to initially provide relief to overburdened communities most impacted by sewage discharges. Other examples of innovative settlements cited were San Antonio, Texas and Jackson, Mississippi.

For info: Report available at: www2.epa.gov/enforcement/enforcement-annual-results-fiscal-year-fy-2013

WATER QUALITY TRADING US NUTRIENT PERMIT LIMITS

The Electric Power Research Institute recently announced the publication of a technical report, *Case Studies of Water Quality Trading (WQT) Being Used for Compliance with Nutrient NPDES Permit Limits*. The report is designed to address the potential for using water quality trading to meet compliance obligations under National Pollutant Discharge Elimination System (NPDES) permits. This report aims to provide transparency on NPDES permits that incorporate water quality trading through a series of 18 case studies.

For info: Jessica Fox, EPRI, 650/ 855-2138, jfox@epri.com or <http://wqt.epri.com>

STORMWATER TOOL US CLIMATE ASSESSMENT CALCULATOR

On January 30, EPA released phase II of the National Stormwater Calculator and Climate Assessment Tool package. The updated calculator includes future climate vulnerability scenarios. The calculator is a desktop application that estimates the annual amount of stormwater runoff from a specific location. The calculator now includes: changes in seasonal precipitation levels; the effects of more frequent high-intensity storms; and changes in evaporation rates based on validated climate change scenarios by the Intergovernmental Panel on Climate

Change. The tool is designed to better prepare for climate impacts by helping build safer, sustainable, and more resilient water infrastructure.

The updated calculator includes climate models that can be incorporated into the calculation of stormwater runoff. This adds future climate scenarios to last year’s Phase I release, which included local soil conditions, slope, land cover, and historical rainfall records. Users can enter any US location and select different scenarios to learn how specific green infrastructure changes, including inexpensive changes such as rain barrels and rain gardens, can reduce stormwater runoff. This information shows users how adding green infrastructure, which mimics natural processes, can be one of the most cost-effective ways to reduce stormwater runoff.

For info: Cathy Milbourn, EPA, 202/ 564-7849 or milbourn.cathy@epa.gov; National Stormwater Calculator and Climate Assessment Tool at: www.epa.gov/nrmrl/wswrd/wq/models/swc/

TMDL REPORT US GAO RECOMMENDS CHANGES

The federal Clean Water Act (CWA) aims to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” Under the CWA, states must establish water quality standards. For waters that do not meet these standards, states must develop Total Maximum Daily Loads (TMDLs), subject to EPA approval. TMDLs set targeted limits for pollutants. EPA and states issue permits for point sources, whereas they generally provide voluntary incentives to reduce nonpoint source pollution.

GAO was asked to examine the TMDL program, specifically: (1) EPA’s and states’ responsibilities in developing and implementing TMDLs; (2) what is known about the status of long-established TMDLs; (3) the extent to which such TMDLs contain features key to attaining water quality standards; and (4) the extent to which TMDLs exhibit factors that facilitate effective implementation. GAO asked water resource experts to review a random sample of 25 long-established TMDLs and surveyed state officials who are responsible for implementing a representative sample of 191 long established TMDLs.

WATER BRIEFS

Of about 50,000 TMDLs developed and approved, nearly 35,000 were approved more than five years ago, long enough for GAO to consider them long-established. State officials GAO surveyed in its representative sample of 191 TMDLs reported that pollutants had been reduced in many waters, but few impaired water bodies have fully attained water quality standards.

The sample of 25 TMDLs reviewed by water resource experts GAO contacted seldom contained all features key to attaining water quality standards. According to the National Research Council and EPA, these features — some that are beyond the scope of EPA's existing regulations — include identifying pollution causing stressors and showing how addressing them would help attain such standards; specifying how and by whom TMDLs will be implemented; and ensuring periodic revisions as needed. The experts found, however, that 17 of 25 long-established TMDLs they reviewed did not show that addressing identified stressors would help attain water quality standards; 12 contained vague or no information on actions that need to be taken, or by whom, for implementation; and 15 did not contain features to help ensure that TMDLs are revised if need be. GAO's review showed that EPA's existing regulations do not explicitly require TMDLs to include these key features, and without such features in TMDLs — or in addition to TMDLs — impaired water bodies are unlikely to attain standards.

In response to GAO's survey, state officials reported that long-established TMDLs generally do not exhibit factors most helpful for attaining water quality standards, particularly for nonpoint source pollution (e.g., farms and stormwater runoff). The officials reported that landowner participation and adequate funding — factors they viewed as among the most helpful in implementing TMDLs — were not present in the implementation activities of at least two-thirds of long-established TMDLs, particularly those of nonpoint source TMDLs. Because the CWA addresses nonpoint source pollution largely through voluntary means, EPA does not have direct authority to compel landowners to take prescribed actions to

reduce such pollution. In GAO's survey, state officials knowledgeable about TMDLs reported that 83 percent of TMDLs have achieved their targets for point source pollution (e.g., factories) through permits, but that 20 percent achieved their targets for nonpoint source pollution. In 1987, when the act was amended to cover such pollution, some members of Congress indicated that this provision was a starting point, to be changed if reliance on voluntary approaches did not significantly improve water quality. More than 40 years after Congress passed the CWA, however, EPA reported that many of the nation's waters are still impaired, and the goals of the act are not being met. Without changes to the act's approach to nonpoint source pollution, the CWA's goals are likely to remain unfulfilled.

GAO recommends that EPA issue new regulations for TMDL development, adding key features. Further, Congress should consider revising the CWA's approach to addressing nonpoint source pollution. EPA did not comment on the matter for Congress — the agency agreed with the need to add key features to TMDLs but did not agree to issue new regulations. GAO believes new regulations are needed.

For info: Report at: www.gao.gov/assets/660/659496.pdf; Jose A. Gomez, GAO, 202/ 512-3841 or gomezj@gao.gov

WATER ACTION PLAN CA

KEY ACTIONS IDENTIFIED

As California experiences one of the driest winters on record, the California Natural Resources Agency, the California Environmental Protection Agency, and the California Department of Food and Agriculture on January 22, 2014, released the final *California Water Action Plan* (Plan), laying out goals and vision for the next five years. The plan will guide State efforts to enhance water supply reliability, restore damaged and destroyed ecosystems, and improve the water infrastructure resilience.

The Governor's proposed 2014-15 budget lays a fiscal foundation for implementing near-term actions for the

plan, recommending \$618.7 million in funding for water efficiency projects, wetland and watershed restoration, groundwater programs, conservation, flood control, and integrated water management.

The Governor's proposed budget would provide \$472.5 million in State Proposition 84 funds to the California Department of Water Resources (CDWR) for integrated regional water management. The bond funds would leverage local and federal investment in projects that reduce demand, build supply, and offer additional benefits such as wildlife habitat and flood management. The budget also placed immediate emphasis on water and energy use efficiency, and wetlands and coastal watershed restoration to further support the resiliency of water supply and ecosystems during this dry weather period.

The governor's budget also would allow CDWR to better monitor the groundwater resources that provide more than one-third of California's supplies in dry years, and supports the development of a State backstop for sustainable groundwater management practices by the State Water Resources Control Board, should local efforts to do so not materialize.

The Plan describes strategies to address a number of identified Key Actions.

KEY ACTIONS INCLUDE:

- Make conservation a California way of life.
- Increase regional self-reliance and integrated water management across all levels of government.
- Achieve the co-equal goals for the Delta.
- Protect and restore important ecosystems.
- Manage and prepare for dry periods.
- Expand water storage capacity and improve groundwater management.
- Provide safe water for all communities.
- Increase flood protection.
- Increase operational and regulatory efficiency.
- Identify sustainable and integrated financing opportunities.

For info:

The Plan is available online at: www.calepa.ca.gov/Publications/Reports/2014/WaterPlan.pdf

February 18-19 CA

Water 101 - The Basics & Beyond Course, Davis. UC Davis. For info: Water Education Foundation, 916/ 444-6240, feedback@watereducation.org or www.watereducation.org

February 18-20 WA

Northwest Hydroelectric Ass'n Annual Conference, Seattle. Marriott Downtown Waterfront Hotel. For info: Jan Lee, NWA, 503/ 545-9420, h20kw@aol.com or www.nwhydro.org

February 18-20 CO

Tamarisk Coalition's 11th Annual Conference, Grand Junction. Colorado Mesa University. For info: 970/ 256-7400 or www.tamariskcoalition.org

February 20 CA

A Conference on Water, Sacramento. 1123 J Street. Presented by Capitol Weekly & UC Center.

February 20 CA

Planning & Environmental Law Course, Sacramento. Sutter Square Galleria, 2901 K Street. For info: UC Davis Extension, http://extension.ucdavis.edu/

February 20-21 NV

2014 Family Farm Alliance Annual Conference, Las Vegas. Monte Carlo Resort. For info: www.familyfarmalliance.org

February 20-21 NM

Land & Water Summit 2014: Drought as an Opportunity for Change, Albuquerque. Sheraton Airport Hotel. Sponsored by Xeriscape Council of New Mexico & Arid LID. For info: www.xeriscapenm.com/?goback=%2Egde_39697_member_5798425832774979585#%21

February 21 CO

Colorado Water Law Conference - 12th Annual, Beaver Creek. Westin Riverfront. For info: CLE Int'l, 800/ 873-7130 or www.cle.com

February 24 WA

The Art of Negotiating Environmental & Land Use Agreements: Tools & Tips for Effective Dispute Resolution Seminar, Seattle. WSBA Conf. Ctr., 1501 4th Ave., Ste. 308. For info: www.mywsba.org/OnlineStore/ProductDetail.aspx?ProductId=56760111&page=none&mt=

February 25 MT

Soyitapi: The Place of Water in the Blackfeet Universe - Lecture, Missoula. University of Montana, University Center Theatre, 7-8:30 pm. For info: www.grizalum.org/

February 25 GA

American Water Works Ass'n & World Environment Federation Utility Management Conference, Savannah. Hyatt Regency. For info: www.awwa.org/conferences-education/conferences.aspx

February 25 TX

Keeping Your Head Above Water: Maximizing Alternate Water Sources - Central Texas Water Conservation Symposium, San Marcos. San Marcos Activity Center. Presented by Texas Water Foundation. For info: www.texaswater.org

February 25-26 NM

Hydrology & Water Scarcity in the Rio Grande Basin Conference, Albuquerque. Crowne Plaza Hotel. Presented by the National Ground Water Ass'n. For info: www.ngwa.org/Events-Education/conferences/Pages/5034feb14.aspx

February 25-27 DC

2014 ACWA DC Conference, Washington. The Liason Capitol Hill. Presented by Ass'n of California Water Agencies. For info: https://acwa.eventready.com/index.cfm?fuseaction=reg.info&page=Welcome&event_id=1462®id=~~~&flow=reg

February 25-28 TX

Environmental Awareness Bootcamp, San Antonio. Hyatt Place San Antonio. For info: www.epaalliance.com/environmentalbootcamp-feb14.html

February 26 NE

A Vision for Ultra-High Resolution Integrated Water Cycle Observation & Prediction System Seminar, Lincoln. UNL East Campus, Hardin Hall Auditorium, 3:30-4:30pm. Presented by Nebraska Water Center. For info: http://watercenter.unl.edu/

February 26 OR

Communicating the Value of Water to Your Customers Workshop, Salem. Salem Convention Ctr., 200 Commercial Street SE. Presented by Oregon Ass'n of Clean Water. For info: Janet Gillaspie, gillaspie@oracwa.org or www.oracwa.org/documents

February 26-27 Canada

International Conference on Stormwater and Urban Water Systems Modeling, Toronto. Marriott Courtyard Toronto Brampton. For info: www.chiwater.com/Training/Conferences/conferencetoronto.asp

February 26-28 TX

SPCC & Stormwater Compliance Workshop, San Antonio. Hyatt Place San Antonio. For info: www.epaalliance.com/spccstormwaterworkshop-feb14.html

February 26-28 NV

Lower Colorado River Tour, Las Vegas. Presented by Water Education Foundation. For info: www.watereducation.org/toursdoc.asp?id=2979

February 27 CO

2014 Martz Winter Symposium: Natural Resources Industries & the Sustainability Challenge, Boulder. Wolf Law Bldg. For info: www.colorado.edu/law/research/gwc/events

February 27 CA

Compensatory Mitigation for Streams Under the Clean Water Act: Reassessing Science & Redirecting Policy Seminar, Sacramento. Cal EPA Bldg., 1001 I Street, 1-2:30 pm. Webcase: www.calepa.ca.gov/broadcast/. For info: www.waterboards.ca.gov/water_issues/programs/stormwater/hydromodification.shtml

February 27-28 CA

3rd Annual Hydraulic Fracking Seminar, Santa Monica. Bacara Resort. For info: The Seminar Group, 800/ 574-4852, email: info@theseminargroup.net, or website: www.theseminargroup.net

February 27-March 2 OR

Public Interest Environmental Law Conference: "Running Into Running Out", Eugene. University of Oregon. Presented by the Environmental & Natural Resources Law Center. For info: http://pielc.org/

February 28 OR

Freshwater Trust Gala & Auction, Portland. Kridel Grand Ballroom. For info: Dominique, FT, 503/222-9091 x14 or Dominique@thefreshwatertrust.org

February 28 CA

Project Planning for Permit Integration Course, Sacramento. Sutter Square Galleria, 2901 K Street. For info: UC Davis Extension, http://extension.ucdavis.edu/

March 3-7 NC

Nexus 2014: Water, Food, Climate & Energy Conference, Chapel Hill. University of North Carolina, Friday Ctr. Presented by the Water Institute at UNC. For info: http://nexusconference.web.uncc.edu/?doing_wp_cron=1369772477.6436951160430908203125

March 4 MT

Unseating the Lords of Yesterday: Water Law's Historical Roots & Future Challenges - Lecture, Missoula. University of Montana, University Center Theatre, 7-8:30 pm. Prof. Michelle Bryan Mudd. For info: www.grizalum.org/

March 5 CA

ACWA 2014 Legislative Symposium, Sacramento. Sacramento Convention Ctr. Presented by Ass'n of California Water Agencies. For info: www.acwa.com/news/state-budget-fees/acwa-2014-legislative-symposium-be-held-march-5

March 5-7 TX

Texas Water Conservation Ass'n Annual Convention, The Woodlands. Waterway Marriott Hotel. For info: http://www.twca.org/

March 6-7 CA

NEPA Conference, San Francisco. Hotel Nikko. For info: CLE Int'l, 800/ 873-7130 or www.cle.com

March 10 OR

Environmental Insurance Conference, Portland. World Trade Center Two. For info: Holly Duncan, Environmental Law Education Center, 503/ 282-5220 or www.elecenter.com

March 11 MT

Connecting Landscapes, Rivers & Groundwater - Lecture, Missoula. University of Montana, University Center Theatre, 7-8:30 pm. For info: www.grizalum.org/

March 11 OH

Ohio River Basin Trading Project Stewardship Credit Transaction Event 2014, Cincinnati. Westin Hotel. Presented by Electric Power Research Institute. For info: http://wqt.epri.com/

March 12 NE

A New Approach to Source Water Protection Planning: Groundwater Site Investigations Seminar, Lincoln. UNL East Campus, Hardin Hall Auditorium, 3:30-4:30pm. Presented by Nebraska Water Center. For info: http://watercenter.unl.edu/

March 13-14 NV

Law of the Colorado River Conference, Las Vegas. Bellagio. For info: CLE Int'l, 800/ 873-7130 or www.cle.com

March 13-14 CA

Planning & Environmental Law Course, Sacramento. Sutter Square Galleria, 2901 K Street. For info: UC Davis Extension, http://extension.ucdavis.edu/

March 16-18 CA

2014 WaterReuse California Annual Conference, Newport Beach. Marriott Hotel. Presented by WaterReuse Ass'n. For info: www.watereuse.org/conferences/california/14

March 17-19 UT

2014 Utah Water Users Water Law & Policy Seminar, St. George. The Dixie Center. For info: http://conference.usu.edu/uwuw

March 18 MT

Riverscapes in Flux: Current Challenge in the Conservation of Native Fish - Lecture, Missoula. University of Montana, University Center Theatre, 7-8:30 pm. For info: www.grizalum.org/

March 21 CA

ACWA Small Hydro Workshop & Tour, Rancho Cucamonga and Rialto. Presented by Ass'n of California Water Agencies. For info: www.acwa.com/events/small-hydro-workshop-tour

March 25 MT

Are We Running Out of Water? Challenges & Opportunities for Water Management in Western Montana - Lecture, Missoula. University of Montana, University Center Theatre, 7-8:30 pm. For info: www.grizalum.org/

March 25-28 LA

Advanced Environmental Awareness Bootcamp, New Orleans. Hilton Garden Inn CBD/French Quarter. For info: www.epaalliance.com/advenvironmentalbootcamp-mar14.html

March 26-27 CA

18th Children's Water Education Festival, Irvine. University of California. For info: www.childrenwaterfestival.com/

March 26-28 BC

GLOBE 2014: 13th Biennial International Conference & Exhibition on Business, Sustainability & the Environment, Vancouver. Vancouver Convention Ctr. For info: http://2014.globeseries.com/

March 27 AZ

Santa Cruz River Research Days - 6th Annual, Tucson. Joel D. Valdez Downtown Library. Presented by Sonoran Institute. For info: http://tiny.cc/scrrd



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CALENDAR

(continued from previous page)

March 27 **CA**
2014 Executive Briefing -The Water Education Foundation, Sacramento. Red Lion Hotel Woodlake & Convention Ctr. For info: www.watereducation.org/doc.asp?id=850

March 27-28 **TX**
Texas Water Law Conference, San Antonio. La Cantera. For info: CLE Int'l, 800/ 873-7130 or www.cle.com

March 30-April 2 **CO**
Sustainable Water Management Conference, Denver. The Curtis Hotel. Presented by American Water Works Ass'n. For info: www.awwa.org/conferences-education/conferences/sustainable-water-management.aspx

April 1-4 **DC**
Western States Water Council's 174th (Spring) Council Meeting, Washington. Crystal Gateway Marriott Hotel. For info: www.westernstateswater.org/

April 2 **NE**
The Potential to Increase Agricultural Water Use Efficiency through Variable Rate Irrigation Seminar, Lincoln. UNL East Campus, Hardin Hall Auditorium, 3:30-4:30pm. Presented by Nebraska Water Center. For info: <http://watercenter.unl.edu/>

April 3-4 **CA**
California Water Policy Conference 23: Tangled Up in Blue, Claremont. Claremont McKenna College, Roberts Environmental Ctr. For info: www.acwa.com/events/california-water-policy-23-tangled-blue

April 4 **ID**
Resilient Cities - Environment/Economy/Equity: Idaho Law Review Symposium 2014, Boise. For info: Stephen Miller, UI, millers@uidaho.edu or www.uidaho.edu/law/law-review/symposium

April 6-9 **DC**
Water Policy Conference, Washington. The Liason. Presented by Ass'n of Metropolitan Water Agencies. For info: www.amwa.net/cs/conferences/future

April 7-9 **DC**
National Ass'n of Clean Water Agencies Water Policy Forum & Fly-In, Washington. Capital Hilton. For info: www.nacwa.org/index.php?option=com_content&view=article&id=7&Itemid=4

April 8 **AZ**
Closing the Gap Between Water Supply & Demand - WRRC 2014 Annual Conference, Tucson. University of Arizona. Presented by Water Resources Research Center & the Arizona Dept. of Water Resources. For info: www.wrcc.arizona.edu

April 8-10 **MT**
Curbing the Flow: Positive Solutions for Storm Water Management Conference, Billings. For info: <http://mtwatercourse.org/home/page.php?pageID=46>



Managing **STORMWATER** in the Northwest

March 5, 2014 — Tacoma, WA



Presented by the Northwest Environmental Business Council
Agenda and Registration Information: www.nebc.org