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Water Rights, Water Quality & Water Solutions in the West

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COLORADO'S WATER PLAN

by Jayla Ryan Poppleton
Under the Direction of the Colorado Water Conservation Board

INTRODUCTION

Lying West of the 100th Meridian, Colorado is an arid state, receiving an average 16 inches of precipitation each year. As a result, its water resources have been carefully distributed and administered since before statehood. The plan governing water use and written into the State constitution in 1876 is the Colorado Prior Appropriation Doctrine — the State's legal mechanism for water distribution. Under prior appropriation, the first user to put water to beneficial use and obtain a decreed water right has the protected right to continue to use that water before others who hold water rights obtained on later dates. Water rights are considered private property rights, and can be transferred between willing buyers and sellers with approval of Colorado's water courts. Many adaptations to the prior appropriation system have been implemented over the years, but the essential tenets still hold. Leadership and compromise have enabled the State to continue effectively working within this system, while protecting emerging values, such as the establishment of water rights to keep water in streams to serve both recreation and the environment. At the same time, the market has the ability to dictate much of Colorado's water picture — and faced with a growing laundry list of competing water supply challenges, the State is drafting its first official, comprehensive plan for ensuring a sound water future.

Colorado's Water Plan is building upon more than a decade of work to evaluate future water supply needs in the State and is a grassroots, collaborative effort to ensure the State's ongoing vibrancy across all communities and industries.

BACKGROUND

In 2002, the worst drought in more than a century struck Colorado — and didn't lift for two more years. Fields of barley and corn went unwatered, burning up in late summer. Municipalities enacted severe watering restrictions. Reservoir storage emptied, reaching dangerously low levels for some cities and towns. Keenly aware of its vulnerability, the State embarked on a comprehensive study to evaluate future water supplies and demands across Colorado, resulting in its first Statewide Water Supply Initiative, completed in 2004 (*see* Water Briefs, *TWR* #84). Population growth, climate change, agricultural needs, water for recreation and the environment — all of these factors were taken into account. The results of that study, which have since been updated, were glaring. The State faced significant discrepancies between forecasted water demands and the ability of current or planned water projects to adequately meet those demands.

Most of the State's waters were already "fully appropriated" — i.e., entirely claimed for use under existing water rights. Moreover, nearly all the State's rivers are subject to complex, interstate agreements — Colorado's "water tower" of Rocky Mountain snowmelt flows beyond state lines in every direction to serve more than 30 million people in 18

Colorado Water Plan

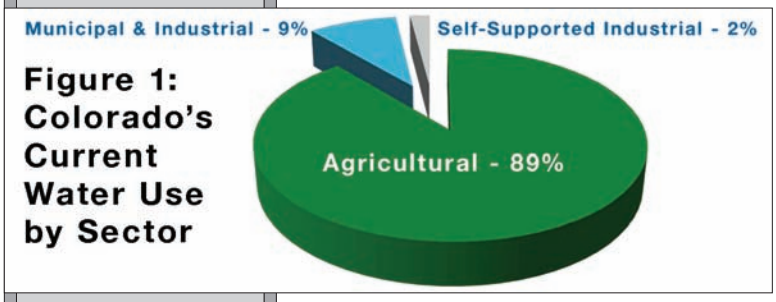

Figure 1: Colorado's Current Water Use by Sector

Basin Roundtables

Interbasin Committee

Colorado River

states and Mexico. These conditions left the State with almost no "new" water to develop. Consequently, statewide water demand would primarily either be met by transferring water from one use to another, or, possibly, by developing additional water from the Colorado River Basin and bringing it east across the Continental Divide. Currently, 89 percent of Colorado's diverted water is used in agriculture (*see* Figure 1), enabling the irrigation of more than 3.1 million acres of fertile ground. Moving forward with the status quo would result in more and more of the State's irrigated land being "dried up" to meet the water needs of cities and industries — an undesirable outcome. At the same time, previous proposals for new transmountain diversions had not been met favorably by Coloradans residing in regions of the Colorado River system. With either scenario bound for contention, a comprehensive, locally driven planning process was born.

The State legislature enacted the Colorado Water for the 21st Century Act (HB05-1177) in 2005, establishing nine basin roundtables to represent each of eight river basins and the Denver metro area (*see* Figure 2). Each roundtable, by law, gave representation to industrial, agricultural, recreational, and environmental interests, plus water utilities, county and city government officials, and water conservancy and water conservation districts. For the past nine years, these volunteer groups have conducted more than 800 public meetings. They evaluated their basins' water supply needs for both consumptive and "nonconsumptive" uses (i.e., uses such as fisheries or kayak parks that do not remove water from the stream) and conducted a myriad of studies and implementation projects. In addition, HB 1177 established an Interbasin Compact Committee (IBCC) consisting of representatives from each of the basin roundtables along with seven appointees of the Governor. That umbrella group has convened several times a year to discuss statewide solutions and how water could be shared across basins while respecting each region's legal, economic, and quality-of-life concerns.

The bottom-up process has received ongoing technical assistance from the State's water planning and policy agency, the Colorado Water Conservation Board (CWCB), which has simultaneously conducted its own correlating studies. These have included multiple updates to the Statewide Water Supply Initiative as well as an evaluation of the impacts of climate change on future water supply and an assessment of future water availability in the Colorado River Basin. The Colorado River is a lynchpin in much of the State discussion, as it not only supplies the majority of the State's water but is also shared between seven states and Mexico and is subject to the terms of the 1922 Colorado River Compact and 1948 Upper Colorado River Basin Compact.

The results of the CWCB's studies have only underscored the critical need for comprehensive planning, collaboration, and problem solving in the face of acute water supply challenges. After more than nine years, some of the most difficult — and crucial — questions remain. These include how, in the face of potentially shrinking water supplies, Colorado can protect its beautiful places and sustain a vibrant recreation and tourism industry while also maintaining a viable agricultural economy and meeting the pressing needs of its growing cities?

Figure 2: Colorado's Nine Basin Roundtable Boundaries

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Colorado Water Plan

Basin Implementation

Grassroots Up

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"The Gap"

Solution "Legs"

"New Supply"

COLORADO'S WATER PLAN

Enter Governor John Hickenlooper, the former Denver mayor who took state office in 2011. Two years later, in his third state-of-the-State address, Governor Hickenlooper praised those responsible for basin roundtable accomplishments while asserting the need for a formalized State water plan that would "stand on the shoulders of their work."

"The Governor's a businessman," says James Eklund, now director of CWCB but then serving as legal counsel for the Governor. "For him to look at an input as critical to a business as water is to Colorado, and for us to lack some sort of plan for how we'd strategically react if that resource or that input were cut in half or reduced by some percentage point — he just couldn't imagine." In May 2013, the Governor issued an executive order directing CWCB to draft Colorado's Water Plan (Plan) by December 2014 and have it finalized the following year.

Under the guidelines of the Governor's order, the Plan is to be drafted primarily based on Basin Implementation Plans developed by each of the basin roundtables. Those plans will identify strategies to address water supply gaps on a local level and will be submitted in draft form to the CWCB in late July 2014. The State Plan will also rely on consensus achieved over nearly a decade by the IBCC.

The timeline for putting the Plan together is ambitious, but some believe it was necessary. "The roundtable folks are both intimidated and excited — intimidated because of the schedule and how fast this is supposed to come together and excited to be reaching this milestone," says John McClow, CWCB board member and general counsel for the Upper Gunnison River Water Conservancy District. McClow, who is also a member of the Gunnison Basin Roundtable and has engaged in the process since the very first meeting, says, "In my opinion, we had a lot of time to get ready…All the foundational material is there. It's just a matter of gathering it up and stating solutions for the needs. That's where it's getting tough."

Eklund says the Governor's order has reinvigorated the water community. "In 2014, we have this renewed interest and vigor and energy in the basin roundtable process that has occurred because Colorado's Water Plan has said, 'Not only do we value what comes out of these basin roundtables, but they're really going to write the Plan from the grassroots up.' Those stakeholders are the best situated to analyze what's going on in their basins and what needs to happen going forward to make their basin successful and sustainable."

The time for identifying solutions couldn't be more ripe. In the past two decades, Colorado has experienced its driest climate conditions on record. The most recent iteration of the Statewide Water Supply Initiative (SWSI), completed in 2010, forecasts a Colorado population of between 8.6 million and 10 million people by 2050 — i.e., nearly double what it was in 2008. Water demands associated with that growth are estimated to be an additional 600,000 to 1 million acre-feet, outpacing planned water projects or projects currently underway by as much as 630,000 acre-feet. This discrepancy between increased future water demands and currently anticipated future water project deliveries is referred to as "The Gap" and is dependent on actual population growth seen in coming years as well as the success rate of planned projects.

"We can't grow the next five million people between now and 2050 the same way we grew the last five million people — that will be unsustainable," says Eklund. "So we have an intentional moment in front of us. We need to take a look at our values and what we want to do and try to get there on purpose. Otherwise, our only option is to throw up our hands and say, 'Yeah, the status quo's fine and we're just going to ride it out until things get so bad that people question the foundational doctrine of prior appropriation.'"

Instead, Colorado's Water Plan (Plan) will uphold the system of prior appropriation by ensuring future challenges are met. "We don't have the same buffer between us and inaction that we used to have," says Eklund. "I'm a big believer in our system of prior appropriation, and the Governor and the administration are too, and we want to see its continued success."

In addition to clearly documenting the water supply needs and challenges around the State, the Plan will incorporate a range of solutions referred to as "the four-legged stool." The four legs are four foundational strategies for meeting the gap, spread across communities and industries so that no one feels an inordinate degree of "pain" from a reduction in supply. The Plan's four legs include: implementing planned projects and processes to provide additional water supplies; pursuing more aggressive water conservation measures; strategically planning for limited agricultural to municipal transfers; and a category referred to as "new supply" — though this term is seen by some as a misnomer,

Coming as no surprise to anyone familiar with Colorado water, the "new supply" leg continues to prove most contentious. McClow notes that at least one basin roundtable has said, "Let's call a spade a spade: 'new supply' is a transmountain diversion from the Colorado Basin." This refers to diverting water from one of four river basins in Colorado that constitute part of the Colorado River Basin and moving

Colorado Water Plan

Proportion Goal

it east to Colorado's populous Front Range. Although not a new concept — 24 such transmountain diversions are already in place — some point to the final increment of water under Colorado's Colorado River Compact allotment and question not only how much is really there, but also whether developing it is worth the risk.

The Plan will ultimately be a package of all four legs, says Eklund. The goal is to be intentional in influencing "which leg of the stool we want to see in what proportion," he says. Not only will the Plan support the implementation of projects identified in the Basin Implementation Plans for meeting municipal and industrial needs, but also for sustaining agriculture, recreation, and the environment through policy development, funding, and more effective and efficient permitting.

ADDRESSING UNCERTAINTY

OPTIONS UNDER THE LAW OF THE RIVER

Unequal Needs

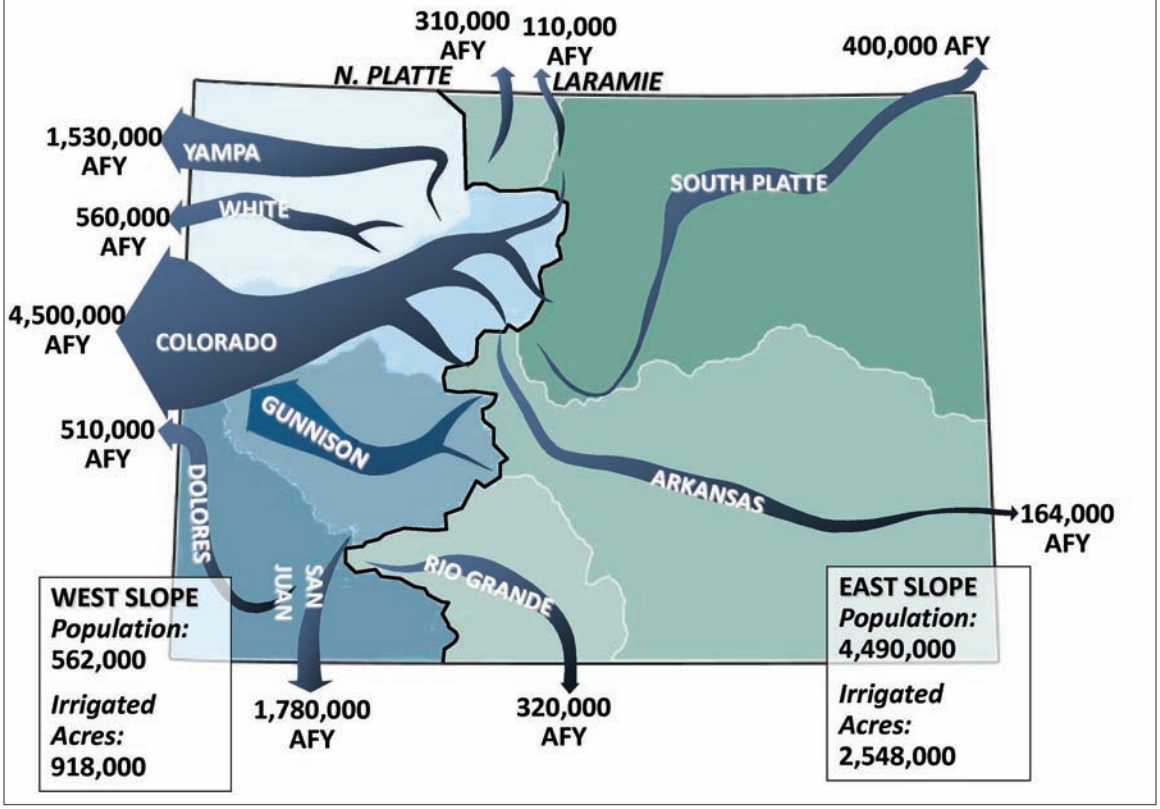
The spine of the Rocky Mountains, which splits Colorado almost exactly in half, is also the Continental Divide, which determines the direction water will flow. Westward the water flows as part of the vast Colorado River System that currently peters out just shy of the Pacific Ocean's Sea of Cortez. Eastward the water eventually releases into the Atlantic Ocean's Gulf of Mexico. This "divide" has long complicated water matters in Colorado, as the State's water resources are both unequally distributed and unaligned with the State's geographic population density. While nearly 80 percent of the State's water runs to the west, more than 80 percent of the State's population resides to the east (*see* Figure 3).

"New Supply" Tap

The transmountain diversions already in place to address that inequity in Colorado carry approximately 650,000 acre-feet across the divide each year. "New supply" would mean further tapping the Colorado River's relative abundance. Representatives on East Slope roundtables currently believe another sizeable project, even if it only delivered water in wet or average years, is necessary. After all, based on SWSI 2010's population projections, while the State's West Slope is expected to grow fastest over the next several decades, the East Slope will continue to shelter the vast majority of the State's inhabitants. It is also in those eastern South Platte and Arkansas river basins, as well as the Denver Metro region, where the expected water supply gap is largest.

Figure 3:

Colorado Population, Irrigated Acres, and River Flows



Colorado Water Plan

"Buy and Dry" Alternatives

Irrigation Losses

Interstate Issues

Colorado River Compact

"Buy and dry" is a term used to refer to the purchase of irrigated land and then selling off of the irrigation water rights to a municipality to support its growth. In order to avoid continued permanent "buy and dry" of irrigated acres to supply municipal needs, all basins are pursuing demand reduction through conservation as well as alternative water-sharing agreements with farmers. These agreements include rotational fallowing or intermittent transfers where, in drought years, irrigation water could be leased by thirsty cities while farmers leave fields unplanted. Such agreements, however, only go so far in meeting the demand while preserving thriving agricultural communities. SWSI 2010 predicts that — due to agricultural transfers and other factors , including urbanization, climate change and groundwater depletion — the State could lose between 500,000 and 700,000 irrigated acres. In the South Platte Basin alone, 224,000 acres are expected to be dried up, representing 27 percent of the acreage presently under irrigation in the State's most fruitful agricultural region. It's a future no Coloradan necessarily wants to see; hence, the target being drawn on the "bucket" of the Colorado River.

This is where Colorado's Water Plan intersects with interstate issues. The development of additional water from the Colorado River system — which under Colorado's roundtable process consists of the Colorado mainstem, Yampa/White/Green, and Gunnison basins plus a collection of eight tributaries known as the Southwest Basin — links Colorado to the rest of the seven Colorado River Basin states. This is "because we have a compact between the Upper Basin and the Lower Basin that divides the river," says McClow (*see* Figure 4). "[The 1922 Colorado River Compact] requires that the upper division states — Colorado, Wyoming, Utah, New Mexico — may not deplete the flows of the Colorado River at Lee Ferry below a certain level, which means that we have to let a certain amount of water go downstream."

"Each time we remove additional water from the Colorado River system, and send it to the Front Range, the flow of water going to Lee Ferry is less," he continues. "So, at some point, we have to decide how much more of that water we're going to take out of the Colorado River and send east, because we are at risk of not being in compliance with the Colorado River Compact."

Figure 4: Upper & Lower Colorado River Basin Boundaries

Although the Colorado River Compact (Compact) has no specific provisions for a "Compact call" — where the Upper Basin states would be curtailed from using their post-1922 water rights in order to meet the non-depletion requirement to the Lower Basin — it does authorize that "any state can bring an action to enforce the terms of the Compact," according to McClow.

Over the years, the Colorado River Basin states have "been tweaking the Law of the River in little bits and pieces," says McClow, who also serves as Colorado's representative to negotiations with the other six basin states, the US, and Mexico as well as Commissioner to the Upper Colorado River Commission. Interim agreements, such as the 2007 shortage guidelines established by the seven states and the Department of the Interior or the 2001 surplus guidelines between the same parties, have allowed the states to "keep getting along," he says. These agreements expire in 2026 and the states will need to revisit these issues in the coming years. (*See* Water Briefs, *TWR* #47 regarding 2007 shortage guidelines.)

For Colorado, those unresolved issues mean that planning around a "Compact call" may not be an effective approach. However, as far as "new supply" is treated in the Colorado Plan, McClow says, "What we must do with the Plan is say: 'these are the alternative scenarios that could

Colorado Water Plan

Risks

Supply Projects

Wet-Year-Only Diversions

Water Plan Website

Stakeholder Guides

Public Input

"Living" Document

occur and these are the responses that we will have for each of those scenarios.' The key is, if the supply is insufficient to meet the demand, and that means we have over-developed the resource, what do we do? Who takes the hit? Who has the risk? Who has to stop using water or reduce their use of water? We've been very successful in developing consensus around everything else, but this one thing is where the battle lines are drawn at the moment. The Interbasin Compact Committee (IBCC) is making progress in reaching that consensus, I think."

Eklund hopes IBCC will hand CWCB a package articulating what both sides of the divide could come to terms with in starting the discussion about a specific new supply project. He notes the importance of taking the regulatory climate in 2014 under consideration. "The projects that are going to be built in the next several years are projects that are going to be cooperative in nature, have beneficiaries on both sides of the divide, and really talk about using current infrastructure or expanding current infrastructure as opposed to building brand new infrastructure," Ekland states. "We've got to have win-win solutions."

Perhaps the most promising suggestion so far was discussed by the IBCC during its April 2014 meeting: a transmountain diversion that would only operate intermittently, during wet years when all of the senior water rights and pre-existing demands in the Colorado River Basin had already been met, to fill reservoirs with water earmarked for the Front Range. Related questions that could be addressed in the Plan, says Eklund, are: "What defines those years? And if you can define them so that folks are happy on both sides of the State, are there enough of them to counsel building a project that would bring water through existing infrastructure?"

PUBLIC PROCESS

A PLAN FOR THE PEOPLE, BY THE PEOPLE

From the beginning, the public has been invited and encouraged to participate and provide input in what has been a very transparent roundtable planning process. If anything, public engagement has only ramped-up since work commenced on Colorado's Water Plan.

Not only are the State's major stakeholder groups officially represented at the roundtables, but all meetings — including those for the roundtables, the IBCC, and the CWCB Board — are open to the public. In addition, roundtables are now actively reaching out in their basins to generate further awareness and interest in the Plan by hosting meetings specifically targeted at reaching an audience that has yet to engage in the discussion. Additionally, the State maintains a website (www.coloradowaterplan.com) where visitors can find the Plan's working drafts for review, status updates, and comprehensive calendars for all meetings and other Plan-related events taking place across the State. "Anyone is welcome to go on [the website] and to read through the framework for the water plan or the draft chapters and submit comments, so it's a very open process," says Kate McIntire, outreach, education, and public engagement specialist for the CWCB.

CWCB has also written a series of "stakeholder guides" targeted to key stakeholder groups in which the agency's staff have identified specific information that, explains McIntire, "would be most helpful in the planning process for those communities to submit." The guides were first posted to the website in February 2014 and have been recently updated.

Public input can be submitted via email, web form or in person during CWCB's bi-monthly board meetings. To date, the agency has received more than 500 comments — and none go unscrutinized. "We talk about every single email, every single web form that was submitted, and we really try to think hard about how the input fits in," says McIntire.

The website and modern tools for information sharing in general have proven to be great assets in enabling such a high degree of public participation. Meaningful public participation is helping to meet the goals of the legislators that passed HB 1177 back in 2005 and with carrying forward to the Governor's order being currently executed.

"Getting information out there has really assisted with enhancing the level of collaboration going on throughout the planning process," emphasized McIntire. Not only is the Plan discussed and the website referenced at every talk given by CWCB staff around the State, but the agency has worked with partners to crosslink to its website and maintain a robust social media presence for the percentage of its audience who are "really tapped in," says McIntire.

In the end, the range of interests being represented and input received will ensure the Plan's usefulness, longevity, and overall success. That's not to say Colorado's Water Plan won't evolve over time. Referred to as a "living" document, updates are anticipated to occur at regular intervals that allow some time for implementation. Public outreach and education will be essential long past the development phase of the Plan, so that "communities continue to understand what their connection to the Plan is and can continue to be part of creating solutions," says McIntire.

Colorado Water Plan

Specificity

Agile Approach

Permitting Process

Consensus Encouraged

THE STATE'S ROLE

Colorado's 2015 Water Plan won't identify specific State-supported projects, as is done in some other states' water plans. "If you look at Texas' plan, which has been around since the sixties, you see a plan that has basically graduated to a list of all the water projects in the state and a justification for funding infrastructure," says Eklund. "That level of specificity's not where we're going with our plan." Eklund says Colorado needs to be cognizant of the skepticism that continues to permeate the water community in anticipation of the draft Plan's release.

"This isn't going to be some silver-bullet document that solves all the State's water problems by any stretch," says Eklund. "But you've got to have a foundation to stand on. We may not go as far as some people hoped and yet too far for others. But if we have a fundamental premise that everybody understands and isn't too upset about, then subsequent iterations of this plan can progress to make Colorado more and more agile."

Part of that will mean looking at changes that could be implemented to minimize the cost and time associated with permitting water projects. The federal government looks to the State for two pieces of its permitting process: Clean Water Act (CWA) compliance and wildlife mitigation. "Rather than making those rules less rigorous — we don't want to dumb them down or make them less robust, they need to be robust because really they're the check on making sure a project is right by the environment — but we've got to be more efficient with that permitting process," says Eklund. He suggests the Plan could articulate a path for water projects that would allow the State to be "ready to do that work at the front end of a project's permitting life."

The State would also encourage project proponents to work with local stakeholders to resolve contentious issues up front, instead of dragging it out over decades. Given local consensus and favorable decisions on those State regulatory pieces early on, the State would then be positioned to endorse a project. "Right now, we can't," says Eklund. "It would be pre-decisional, because we usually wait until the very end to do those two pieces of work, the wildlife mitigation and CWA compliance."

"At some point, we're going to have to be more agile and flexible as a state in either building water projects or influencing water decisions or financing water investment," Eklund says. "We're not very agile right now."

While the Plan will be an evolving one, having it in place will put the State leaps and bounds ahead of where it was ten years ago. "It isn't necessarily going to be a finished product," says McClow. "But it'll be good — much better than we've had in the past."

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Colorado Water Plan website: www.coloradowaterplan.com

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Water Quality Trading

WATER QUALITY & TEMPERATURE TRADING IN THE TUALATIN BASIN

TEN YEARS OF COMMUNITY-DRIVEN WATERSHED HEALTH EFFORTS

by Laura Porter, Bruce Roll, Raj Kapur, and Anil Devnani, Clean Water Services (Hillsboro, Oregon)

INTRODUCTION

NPDES Temperature Requirements

Nearly ten years into its trading program, Clean Water Services (the District), a public utility district that serves more than 536,000 customers in the urban portion of Washington County in northwest Oregon, has met the temperature requirements of its National Pollutant Discharge Elimination System (NPDES) permit in part by planting trees instead of installing chillers to cool effluent from its wastewater treatment plants. This "watershed" approach — involving "temperature trading" — has kept utility rates low, saved over $100 million in avoided costs, and improved the health of the watershed far beyond simply meeting narrowly defined regulatory temperature requirements. The program has catalyzed extensive coordination among diverse partners now working together towards a shared vision of a healthier watershed. This collective effort is having beneficial impacts well beyond just those required for meeting NPDES permit requirements including: partners planting over four million trees and shrubs; enhancing and conserving 15,000 acres of land; and planting native vegetation along more than 60 stream miles.

Watershed Approach Benefits

In addition to addressing regulatory requirements, temperature trading has been a key driver for leveraging multiple water quality and ecological benefits. This community-driven approach has: helped build a green economy; leveraged funding from multiple sources; improved habitat for fish, birds and other wildlife; increased climate change resilience and carbon sequestration; and developed the social capital needed to ensure long term stewardship of restored areas.

Multiple Benefits

This article summarizes the last ten years of temperature trading and as such is one of the first case studies chronicling ten years of full-scale community-based trading. The article discusses the benefits of community-based trading and the many opportunities available for leveraging local, state, and federal dollars to expand the breadth and depth of large watershed-scale restoration. It concludes with an overview of some of the challenges the watershed approach will face as it continues to evolve.

This article also serves as an update to "*Water Quality & Temperature Trading: Regulatory Innovation in the Tualatin Basin*" (Bruce Cordon, *TWR* #24, February 2006).

BACKGROUND

"End-of-Pipe" Approach

Water quality regulation for wastewater treatment has long emphasized an "end-of-pipe" approach traditionally typified by regulatory limits on piped effluent outfalls to surface waters. Despite its successes, the traditional approach has struggled to address non-point source pollution and often forces utilities to invest in costly treatment technology to meet discharge requirements. In addition, this approach was not designed to meet the many diverse ecological needs required for a healthy watershed. To address these issues the District helped create a new model for meeting regulatory compliance. In 2004, the District was issued a watershed-based permit that allowed for "water quality trading" to accomplish water quality goals primarily through targeted improvements to the watershed, as opposed to technological fixes at District facilities. In this article the ideas and processes used to develop the watershed-based permit are collectively called "the watershed approach." The intent of this approach is to provide a positive outcome for both the environment and the economy.

NPDES Permit Adaptation

The watershed approach includes:

Watershed Approach Components

- Using a watershed scale as a geographic frame of reference
- Recognizing the relationships between the various organisms and activities, both human and natural, that occur within a watershed
- Acknowledging the contribution of natural resources to human well-being
- Emphasizing incentives, rather than mandates, as inducements for desired behavior
- Recognizing the role markets can play in bringing about environmental improvements
- Emphasizing public/private and regulated/non-regulated entity partnerships
- Being flexible concerning the ways regulated entities can meet regulatory goals

Point & Nonpoint Targets

In this manner, the watershed approach targets both point and nonpoint pollution sources to accomplish and enhance multiple water quality and ecological benefits. It also improves the economic efficiency of regulatory compliance as it improves opportunities for restoration throughout the watershed.

Water Quality Trading

TMDL Thermal Allocations

Technology Options

Thermal Trading Development

Permit Compliance

Shade Effect Modeling

Economic Efficiency

Trading Factors

THE WATERSHED-BASED PERMIT

The District owns and operates four wastewater treatment plants in the Tualatin River watershed, and — along with its 12 member cities and Washington County — implements the **m**unicipal **s**eparate **s**torm **s**ewer **s**ystem (MS4) NPDES permit program in urban Washington County.

In 2001, a Temperature Total Maximum Daily Load (TMDL) for the Tualatin River was published by the Oregon Department of Environmental Quality (ODEQ). The TMDL includes thermal load allocations for two of the District's Advanced Wastewater Treatment Facilities — the Rock Creek and Durham plants. As such, the District knew that thermal load allocation would become a requirement of its 2004 NPDES permit.

Faced with the enormous task of cooling fifty million gallons of effluent per day, the District pondered the available traditional options: either install refrigeration equipment at the treatment facilities or build a new pipeline to transfer the effluent to the much larger Willamette and Columbia Rivers. The cost of either approach — both in excess of a hundred million dollars — was prohibitive. In addition, either approach would require enormous amounts of electricity. Ultimately, the District concluded that the technology-based approach, which would require mechanical cooling, was resource intensive and cost prohibitive, and would do little to improve watershed health.

Fortunately, ODEQ and the District were willing to consider nontraditional options, and were assisted in this respect by a grant from the US Environmental Protection Agency (EPA). The grant helped fund the development of the 2004 watershed-based permit, which was initially issued on February 26, 2004, and reissued on July 27, 2005. The permit included innovative provisions that allowed "water quality trading" for temperature. Specifically, it allowed the District to offset excess thermal loads of its wastewater treatment facilities by establishing a thermal trading program which includes: 1) planting trees, to increase the amount of shade along streams; and 2) flow restoration, which increases the amount of water available in the river. Shade reduces the extent to which the sun heats the stream. Additional flow spreads that thermal energy gain over more water, thereby decreasing a temperature change, and also increases flow speed, which reduces the time available for solar radiation to increase the temperature of the river.

As predicted, water quality trading has proven to be very cost-effective when compared to technology-based options in addition to providing an opportunity to substantially improve overall watershed health.

THE TEMPERATURE MANAGEMENT PLAN

The details of how the District would use shade and flow restoration to meet permit requirements were worked out in an ODEQ-approved Temperature Management Plan. From the outset, it was recognized that the plan would need to contain several departures from the traditional approach. First, given the nature of shade and its creation, permit compliance could not be expected immediately; nor could it be determined by simply measuring stream or treatment facility effluent temperature. It would take time to plant enough trees to provide the needed shade, and it would take even longer for the trees to grow high enough to produce shade-effects — much longer than the five-year period for which an NPDES permit is issued. Recognizing this, the plan gives the District five years to plant enough trees to meet permit requirements. The plan gives the District shade credit as soon as the trees are planted, based on an estimate of how much shade the trees will be producing twenty years later. The shade estimates are calculated using the "Shade-a-Lator" module of a "Heat Source Model" developed by ODEQ (www.deq.state.or.us/wq/tmdls/tools.htm). To compensate for the time lag between tree planting and the amount of shade created in 20 years, the plan also requires the District to create twice as much shade as the ODEQ model indicates is necessary to offset the excess thermal load.

WATER QUALITY TRADING

According to EPA:

> Water quality trading is an innovative approach to achieve water quality goals more efficiently. Trading programs allow facilities facing higher pollution control costs to meet their regulatory obligations by purchasing environmentally equivalent (or superior) pollution reductions from another source at lower cost, thus achieving the same water quality improvement at lower overall cost.
>
> Where watershed circumstances favor trading, it can be a powerful tool for achieving pollutant reductions faster and at lower cost. Trading works best when there is a driver that motivates facilities to seek pollutant reductions; sources within the watershed have significantly different costs to control the pollutant of concern; and watershed stakeholders and the state regulatory agency are willing to try an innovative approach and engage in trading design and implementation issues.
>
> (EPA website, http://water.epa.gov/type/watersheds/trading.cfm, accessed March 25, 2014).

Water Quality Trading

Credit Exchange

Community Based Model

Incentives & Benefits

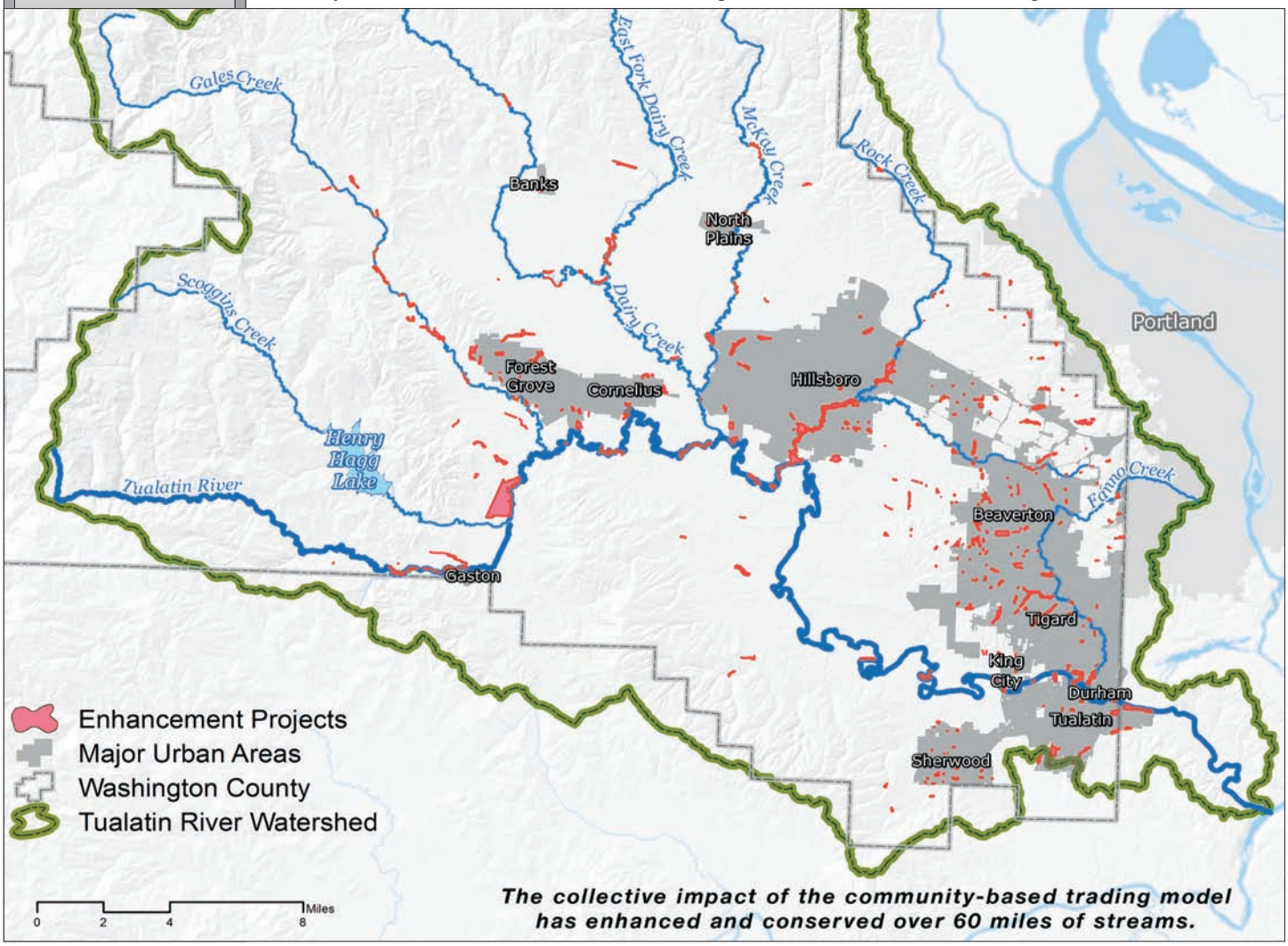
EPA also states that trading can occur directly between two or more point sources or through an exchange. Trading can also occur between a point source and a nonpoint source, either directly or through an exchange. A credit exchange is where a third party — such as a person, organization, or website — facilitates trading. A credit exchange can also include a reserve of credits held in case of failed trades. These are the basic trading scenarios; others may exist. (*see* EPA's *Frequently Asked Questions About Water Quality Trading* at: http://water.epa.gov/type/watersheds/trading/tradingfaq.cfm#10).

WATER QUALITY TRADING: THE DISTRICT'S APPROACH

To create enough shade to offset the excess temperature load, the District developed new programs that utilize water quality trading.

The District chose to focus on a community-based trading model instead of a market-based model for several reasons. The community-based model targets partnerships with similar restoration goals and develops shared programs that amplify additional ecological benefits. This approach leverages existing local, state, and federal resources and then applies these resources in a coordinated, focused restoration strategy. In rural settings, the District is primarily focused on agricultural land along streams and partnerships are developed through the local Tualatin Soil and Water Conservation District (TSWCD). In urban settings, this approach utilizes a network of cities and non-profit organizations to implement restoration programs along urban streams.

The District was able to help fund landowner incentive programs aimed at creating stream shade in rural areas while still substantially lowering its permit compliance costs. Moreover, the trees have produced many additional environmental benefits, such as: increased species habitat; removing pollutants from runoff; helping to control erosion; carbon sequestration; and increased resiliency to climate change. This could not be said for the technology-based solutions, which, in addition to being expensive and narrowly focused, would have caused increased pollution due to their substantial power needs.



Water Quality Trading

Tools Development

Riparian Restoration

Per Acre Payments

Buffer Maintenance

Ag Community Involvement

Stream Buffers

Restoration Contracts

Rural Planting Programs

Two tools were developed to address water quality needs in agricultural areas: 1) Enhanced Conservation Reserve Enhancement Program (ECREP); and 2) Vegetated Buffer Areas for Conservation Program (VEGBAC). As explained below, these tools were developed by partnering with agencies well-trusted by the agricultural community — TSWCD, US Department of Agriculture's (USDA's) Natural Resource Conservation Service, and USDA's Farm Service Agency — and by listening to the needs of the agricultural community. The local landowners and agency staff were invaluable in building these programs and continue to be important in program implementation.

ECREP

In order to address water quality needs in agricultural areas, the District partnered with the TSWCD to develop voluntary incentive-based tools for riparian restoration. Working with a Local Committee composed of farmers, foresters, and various stakeholder groups, the first tool developed by this partnership was "ECREP" — which was a modified version of USDA's Conservation Reserve Enhancement Program (CREP).

Before discussing the changes to the program, some background is in order. CREP had been available to farmers in the Tualatin Basin since the late 1990's, but no landowners had signed up for the program. Although the program had achieved some popularity in other parts of Oregon, it did not provide the kind of incentives needed for it to be successful in the Tualatin watershed. Two studies were then conducted to determine what was needed to increase its popularity (Viatella, Kathy, and Rhee, Donna, "*The Oregon Conservation Reserve Enhancement Program: An Opportunity for Achieving Healthy Watersheds*" (2002); Oregon Department of Agriculture and Oregon Association of Conservation Districts, "*Evaluation of the Conservation Reserve Enhancement Program*" (2002)).

The Local Committee reviewed these studies and looked at how CREP had been modified in other states to make it more successful. On the basis of this information, four things became clear. First, the annual per acre payments to farmers for farmland converted to buffer areas were too low, especially in areas like the Tualatin Basin, with highly productive land. Second, farmers were not compensated enough to maintain buffer areas after the site clearing and planting work was completed. Most farmers received less than ten dollars per acre per year for maintenance, but the actual cost, especially during the first five years, could be several hundred dollars per acre. Third, there was insufficient agency staff available to market the program and process enrollment applications. Finally, additional tools were needed to provide for the various needs of a diverse agricultural community.

In designing ECREP, the Local Committee made changes that reflected the information it had collected. ECREP increased annual payments, and TSWCD hired staff to market and manage the program. The TSWCD board of directors is composed of farmers and small woodland owners, and its staff work closely with landowner groups on a daily basis. TSWCD also shared office space with local USDA staff. Under ECREP, USDA retained many of the responsibilities it had under CREP. The shared office promoted coordination between all those involved in operating the program. Finally, while the District supported the program financially and performed a general oversight function, most of the program was implemented by the agricultural community.

VEGBAC

The next program the Local Committee developed was called Vegetated Buffer Areas for Conservation and Commerce. In 2014, the program is being slightly modified and the name is changing to Vegetated Buffer Areas for Conservation Program. VEGBAC provides incentives for rural landowners to plant native trees and shrubs in stream buffer areas. The program, which is also administered by the TSWCD, aims to provide shade to streams and cool water temperatures. VEGBAC offers a restoration alternative to landowners who either do not qualify for ECREP or prefer more flexibility over higher benefits. Moreover, when temperature trading began, no one in the local area had signed up for CREP in the past and there were no guarantees that ECREP would fare much better. VEGBAC was developed to provide a simpler, no-strings-attached alternative.

Under VEGBAC, a landowner enters into a restoration contract with TSWCD. TWSCD provides all necessary conservation planning, specifications, and planting material at no charge to the landowner. With landowner input, TSWCD, in conjunction with USDA's Natural Resource Conservation Service (NRCS), develops a conservation plan for the site. All restoration activities, including site preparation, seeding, planting, and maintenance is implemented by TSWCD. The landowner is required to pay for a portion of these activities for the first five years of the contract and TSWCD maintains the project area for the duration of the contract. Before work begins, TSWCD and the landowner develop a schedule and access plan indicating how and when TSWCD and its contractors can enter the landowner's property.

Water Quality Trading

Water Rights Leasing

Unlike ECREP, VEGBAC is a strictly local program — the federal and state governments have no role in its funding or management — and the landowner does not receive annual payments for the riparian restoration activities. However, landowners can qualify for a one-time bonus payment if 50% or more of the stream bank within a two-mile segment of stream is enrolled in VEGBAC or ECREP. Also, landowners can qualify for additional lump sum payments by electing a longer 15 or 30-year agreement. In addition, landowners who lease water rights to the State of Oregon for instream use may be eligible for payment through The Freshwater Trust, a nonprofit organization and VEGBAC partner. The Freshwater Trust works with the local Watermaster to determine if a landowner's water right qualifies for the lease.

Program Improvements

Program Enhancements

Several changes are underway in 2014 that enhance these programs. These changes: streamline the programs; reflect users' interests; provide a longer protection of investment; and are expected to increase enrollment, project connectivity, and landowner interest and attachment to projects.

Program enhancements include:

- Minimum buffer width increased from 10 feet to a minimum of 30 feet
- Contract terms increased, discontinuing the previous five-year duration and now providing 10-, 15-, and 30-year options
- All site preparation, planting, and maintenance is performed by TSWCD and its partners
- Easement options replaced with Restoration Partnership Agreement and lump sum payments
- Landowners receive results of vegetation monitoring

Landowner Interest

Since ECREP and VEGBAC were implemented in January of 2005, the programs have received significant interest from landowners. By the end of 2014, nearly 70 landowners will be enrolled in ECREP and VEGBAC programs. Given the level of interest in the programs, along with the progress made on its own buffer re-vegetation projects within its service area, the District has met the shade benchmark established in its temperature management plan. ECREP and VEGBAC have made agricultural restoration a reality in the watershed. As noted above, prior to these programs the CREP program in the Tualatin basin hadn't any enrollment.

Public Property Partners

Urban Planting Program

The District has also partnered with its member cities and Washington County to plant trees and shrubs on public property within urban areas. More recently, the District has partnered with Metro (an elected regional government serving three counties and 25 cities in the Portland metropolitan area) and Tualatin Hills Park and Recreation District to plant a diversity of trees and shrubs on their properties. Through these local government partnerships, the District is able to access property for planting and restoration. In return, the property owner receives planning, planting materials, and long-term stewardship of their sites.

The District has developed strong partnerships with local nonprofits, including: Friends of Trees; SOLVE; Raindrops to Refuge; The Wetlands Conservancy; and others. Nonprofit organizations have been very successful at planning and facilitating large volunteer work parties, often planting thousands of trees in a single morning. Not only does this stretch the rate-payer dollar, it also gets the community involved in planting events which translates into local site ownership and long-term stewardship.

Volunteers Planting: At a recent community event nearly 100 volunteers planted several hundred trees and shrubs to improve watershed health. Volunteers have fun, stretch rate-payer dollars,and develop local site buy-in.

Temperature Trading - Flow Restoration

Another component of the District's temperature trading program is restoring flow in the Tualatin River using its stored water in Hagg Lake (Scoggins Reservoir) and Barney Reservoir. As currently implemented, flow restoration primarily benefits the mainstem Tualatin River. Many of the tributaries of the Tualatin River lack sufficient flow during the dry season to provide good water quality and support aquatic habitat. Over the last few years, the District has conducted pilot studies which restored flows in some Tualatin River tributaries. The pilot studies have shown that enhancing flow in the tributaries results in improved water quality — lower temperatures and higher dissolved oxygen levels — improvements which are reasonably expected to provide broader ecological benefits. The District plans to work cooperatively with the Oregon Water Resources Department, Tualatin Valley Irrigation District, and local farmers to continue implementing the tributary flow restoration program.

Water Quality Trading

Leverage Programs

Observations & Lessons Learned

The District has learned that many landowners want to manage their land in a way that provides good economic benefits but also enhances watershed health. By providing expertise and financial incentives to landowners, long-term partnerships have been forged. In rural areas, TSCWD is the lead agency, while in urban areas there is a mix of inter-governmental coordination and nonprofit organizations providing volunteer manpower to build community support of projects.

ECREP and VEGBAC have also helped open the door for landowners to leverage additional resources and benefits through other state and federal voluntary incentive programs, including: the Environmental Quality Incentive Program; Agricultural Water Enhancement Program; Wildlife Habitat Incentive Program; Oregon Watershed Enhancement Board Small Grant Program; Oregon Riparian Tax Incentive Program; Oregon Wildlife Habitat Conservation and Management Program; and Nonpoint Source Pollution Control Facilities Tax Credit. These additional funding sources have made it possible to expand the program faster and into larger areas — thereby improving watershed health at a faster rate than would have occurred under regulatory requirements alone.

By implementing a watershed approach and partnering with diverse stakeholders, the District and its partners have collectively enhanced and conserved 15,000 acres of land and over 60 miles of streams — thereby accomplishing a profoundly positive impact on the basin's natural resources. This effort represents a great example of the beneficial collective impact — a diverse group of stakeholders from different sectors working together to solve a challenging social problem using a common agenda, aligned efforts, and common measures of success (*see* www.fsg.org/OurApproach/CollectiveImpact.aspx). By partnering with cities, farmers, other governmental organizations, nonprofits, volunteers, industry, and others, project sites are linking together — which improves river and watershed health and provides lower management costs, higher water quality and habitat values, and more system resilience.

Moving forward all these planting programs is now collectively called the "Tree For All" program — which brings together both urban and rural partners. More information can be found at www.JoinTreeForAll.org.

"Tree For All" brings together urban & rural partners www.JoinTreeForAll

Thermal Load Offset

Flow Release

Added Benefits

Beaver Colonization

RESULTS

The District is meeting its permit requirements and more.

Watershed-Based Permit Requirements

The District's Temperature Management Plan established a five-year schedule to offset the excess thermal load from the Advanced Wastewater Treatment Facilities. During the initial five-year period (February 2004 through January 2009), the District conducted over 30 miles of riparian plantings which over time will result in 590 million kilocalories per day of thermal load being blocked (i.e., by shade) and which translates into 295 million kilocalories per day of thermal credits using the 2:1 trading ratio specified in the Temperature Management Plan. The District also released an average of 35 **c**ubic **f**eet per **s**econd (cfs) of stored water throughout July and August during each year of the five-year period — this flow restoration generated 508 million kilocalories per day of credits at the Rock Creek Advanced Wastewater Treatment Facility and 347 million kilocalories per day of credits at the Durham Advanced Wastewater Treatment Facility. Using a combination of flow restoration and riparian planting projects, the District has offset the excess thermal loads from the Rock Creek and Durham facilities. Since the permit has been administratively extended, the District continues flow restoration activities and is banking additional riparian planting projects for when the permit is renewed.

Ecosystem Benefits

The District's temperature trading program supports numerous ecosystem benefits beyond meeting the requirements of the watershed-based NPDES permit. The ecosystem benefits of riparian shading activities include: improved stream functions (bank stabilization, peak flow attenuation, habitat creation); increased diversity of aquatic and terrestrial plant and animal species; filtering of stormwater runoff; and improved water quality.

Increased complexity of structure and diversity of restored riparian forests and forested and scrub shrub wetlands (i.e., areas dominated by woody vegetation less than twenty feet tall) support many important ecosystem functions. One example of this is colonization of some stream reaches by beavers, a keystone species for stream function in the basin. By raising the water table, beavers promote floodplain wetlands with enhanced plant, animal, and geomorphic diversity in comparison to the original simplified and degraded stream. These features and resultant geomorphic diversity may also provide cool water refuges for cold-water fish, including steelhead listed under the federal Endangered Species Act. Furthermore, the enhancement of riparian areas within and outside the District's service area improves the overall health of the Tualatin River watershed and creates partnerships with positive outcomes for water quality.

Water Quality Trading

Departing from Tradition

Reforestation Goals

Additional Options

One Million Trees

The District's release of stored water also provides multiple ecosystem benefits. Flow restoration: provides cooling effects; buffers against temperature changes; and results in higher dissolved oxygen levels to support aquatic life. Flow restoration, along with the release of the highly treated discharges from the District's Rock Creek and Durham AWTFs, provides a sustainable base flow to the mainstem Tualatin River during the dry season.

CONCLUSION

LOOKING TO THE FUTURE: CHALLENGES & OPPORTUNITIES

It is clear that the District's 2004 NPDES permit and the landowner incentive programs it spawned are a departure from traditional regulation. The overall effort contains many of the elements of the watershed approach, including: water quality trading; public-private partnerships; economic incentives; regulatory flexibility; and a watershed perspective on water quality management. ECREP, VEGBACC, and our community planting programs have been successful in helping the District meet its permit obligations and demonstrate that the watershed approach can be more economically efficient than the traditional approach.

To address the thermal load associated with the projected growth in its service area, the District continues to implement a strategy that includes creating shading for thermal load reduction activities to reduce the thermal load discharged from the wastewater treatment facilities, and a thermal load trading program to offset the remaining thermal load from the wastewater treatment facilities.

In 2004, the infrastructure was nascent for an extensive reforestation program that would improve not only the health of the Tualatin River but that of the entire county. It took time for the plant nurseries to build up to current production capacities, contractors to find and fill the native plant installation niche, and our communities to rise to the challenge. In 2005, the cities were challenged to plant one million trees in twenty years. They met that challenge in less than ten years because of the collective impact of diverse partnerships toward the common goal of reforestation.

The District is strengthening partnerships with the Tualatin Soil and Water Conservation District and developing collaborative projects with Metro, Tualatin Hills Park and Recreation District, US Fish and Wildlife Service, and others to enhance riparian corridors, floodplain wetlands, and adjacent natural areas to improve overall watershed health. These partnerships result in large-scale restoration projects that will have a considerable landscape level impact on the ecological health of the Tualatin River watershed. As projects evolve over time, the District is exploring approaches to increase resiliency of the natural system, such as introduction of shady herbaceous plants or increased shrub diversity. In regards to emerging scientific understanding of ecological processes, the District is interested in potential cooling effects of restored wetlands and braided channels, which have more accounting complexity than typical sites. The District is also working to identify core cold water habitat areas in the Tualatin River watershed and will include this information in the screening criteria for riparian project selection. Recognizing the ecological benefit of beavers, the District is also exploring the impacts beavers have on temperature regimes and the ecological health of the watershed.

The District will continue developing its rural and urban tree planting programs and continue to explore flow restoration opportunities. Also, the District and its partners — through the collective impact — now have the capacity to plant one million native trees and shrubs in one year. This was not possible when the program began in 2004. Now, due to the efforts of everyone involved, one million trees will be planted over the course of ten months. Starting in September 2014, the District kicks off a Tree For All campaign that will plant "One Million, in One Year, for One Water" (www.JoinTreeForAll.org).

The collective impact, the watershed approach, and temperature trading have made the impossible possible.

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Texas Litigation & Legislation

Diversions Impact

ESA "Take"

TCEQ Permitting

TEXAS WATER LAW LITIGATION & LEGISLATIVE UPDATE

by Shauna Fitzsimmons and Brian Sledge, Sledge Fancher, PLLC (Austin, TX)

TEXAS LITIGATION UPDATE

ENDANGERED SPECIES LITIGATION:
The Aransas Project v. Shaw, et al.
No. 2:10-cv-075, 2013 WL 943780 (S.D. Tex. Mar. 11, 2013)

On March 11, 2013, the US District Court for the Southern District of Texas issued its decision in *The Aransas Project v. Shaw, et. al*., in what has become known as the whooping crane lawsuit. The Aransas Project (TAP) filed suit against the Texas Commission on Environmental Quality (TCEQ) alleging that the practices of TCEQ violated the federal Endangered Species Act (ESA). Specifically, TAP alleged that TCEQ's water management policies caused an insufficient amount of freshwater flows in the Guadalupe and San Antonio Rivers, which resulted in the deaths of twenty-three whooping cranes. TAP argued that the deaths of the whooping cranes constituted a "take" of the cranes under the ESA and requested declaratory and injunctive relief.

The court ruled in favor of TAP and held that TCEQ officials were liable for the unlawful "take" of the whooping cranes in violation of the ESA. In reaching its decision, the court found that increased withdrawals from the Guadalupe and San Antonio Rivers resulted in less water and higher levels of salinity, which led to a reduction in the cranes' food sources, and ultimately their death. The court also opined that Senate Bill 3, enacted by the Texas Legislature in 2007 to establish the Environmental Flows (e-flows) process for each basin and bay system in the State, fell short of federal requirements to protect the whooping cranes.

The court initially issued an order enjoining TCEQ from approving new water permits in the Guadalupe and San Antonio River Basins unless TCEQ is able to demonstrate to the court that the withdrawals will not result in a further "take" of whooping cranes. The court later amended its order to add language that would allow TCEQ to issue new permits in the Guadalupe and San Antonio River Basins only if necessary to protect the public's health and safety. The court order also provides that TCEQ must seek an Incidental Take Permit and develop a Habitat Conservation Plan (HCP) within 30 days of the date of the ruling, each of which require TCEQ to undergo an extensive federal approval process that will ultimately govern the way that TCEQ manages the freshwater flows in the Guadalupe and San Antonio Rivers. The court order states that the court will retain jurisdiction over the case during the formulation of the HCP and awards TAP attorney fees, court costs, and expert witness fees incurred in the case.

Both the Guadalupe Blanco River Authority (GBRA) and the Texas Solicitor General, on behalf of TCEQ officials, filed motions for the judgment of the district court to be stayed, or on hold, until after the case is appealed and a final judgment is issued. The district court judge denied the motions to stay, but the federal Fifth Circuit Court of Appeals granted GBRA's and the Texas Solicitor General's motions to stay the case and requests for an expedited appeal. Oral arguments on the merits of the case were held August 2, 2013, and the parties are now awaiting the appellate court's decision.

The implications of this case could be far reaching for water usage not only in Texas but across the nation. In addition to holding TCEQ officials vicariously liable under the ESA, the *TAP v. Shaw* decision portends to require the TCEQ to change its decision-making process for issuing surface water permits, taking into consideration the effect its permitting process may have on endangered species under the ESA. As a result, this decision could potentially impact any entity that currently obtains water under the state's appropriative system, including river authorities, municipalities, or any permittee whose diversion could affect a river's ultimate yield into a bay or estuary. The Fifth Circuit Court of Appeals' decision — and perhaps if further appealed, the US Supreme Court's decision — in this case could also impact the management of e-flows and freshwater withdrawals in other river basins across the nation. Although the processes of managing e-flows and issuing permits under a permit system are mandated by statute, based on the district court's rational, the implementation of these processes may potentially be rendered inadequate to protect the whooping cranes or other endangered species and, thus, are in violation of federal requirements under the ESA. Therefore, it is clear that the decision in *TAP v. Shaw* stands to impact not only TCEQ's regulation of surface water in the State's river basins in Texas, but it has the potential to impact the regulation of surface water in various other river basins across the nation.

For additional information on this case, *see* Taylor, *TWR* #110; and Water Briefs, *TWR* #110.

ESA "Take"

Under the ESA, the "take" of a threatened or endangered species is defined as: "To harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct; may include significant habitat modification or degradation if it kills or injures wildlife by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering."
ESA Section 10(a)(1)(B) allows for permits for the "incidental take" of threatened or endangered species, defined as a take which "results from, but is not the purpose of, carrying out an otherwise lawful activity." Application for an Incidental Take Permit is subject to certain requirements, including preparation by the permit applicant of a species conservation plan, generally known as a Habitat Conservation Plan (HCP).

Source: US Fish & Wildlife "*Endangered Species Glossary*" www.fws.gov/ENDANGERED/esa-library/pdf/glossary.pdf

Texas Litigation & Legislation

Historic Use Permit

Groundwater Use

Conversion to Surface Water

Regulatory "Taking"

Groundwater Ownership

Regulatory "Taking"

Distinct from "taking" under the ESA, regulatory "taking" refers to the Takings Clause of the US Constitution's Fifth Amendment and similar provisions under state law. The federal government and each state has the power of eminent domain (the power to take private property for "public use"). The Takings Clause, the last clause of the Fifth Amendment, limits the power of eminent domain by requiring that "just compensation" be paid if private property is taken for public use.

GROUNDWATER RIGHTS, REGULATION, AND PLANNING LITIGATION:

***Edwards Aquifer Authority v. Day* —** 369 S.W.3d 814 (2012)

In February 2012, the Texas Supreme Court released its long-awaited decision on groundwater ownership and use in *Edwards Aquifer Authority v. Day*. While there are several issues addressed in the opinion, arguably the most discussed part of the ruling is the court's affirmation that the owner of land also owns the groundwater below his property in place.

Background: Plaintiff-landowners R. Burrell Day and Joel McDaniel (hereafter "Day") purchased a tract of property in 1994 within the boundaries of the Edwards Aquifer Authority (EAA). The property contained an old water well used primarily for irrigation and recreational uses during the 1970s. Under the EAA Act (Act), which mandates the authority of the EAA, anyone who sought to produce groundwater within EAA's boundaries was required to file an application for a historic use permit. The filing of a historic use permit application required proof that groundwater was beneficially used between June 1, 1972, and May 31, 1993, the historic use period. Day submitted evidence that the previous owner used 700 **a**cre-**f**eet (AF) of water from the well during the historic use period. Day's evidence showed that most of the 700 AF was continuously drained into a nearby lake on the property and was stored there until it was used for irrigation. Day showed that 14 AF of groundwater was used directly from the well for irrigation purposes during the historic use period. As a result, EAA granted the permit for only 14 AF, 686 AF less than the amount Day requested.

Groundwater vs. Surface Water: The Texas Supreme Court first addressed whether the raw groundwater that Day pumped from the aquifer and then allowed to drain by gravity flow into the reservoir for subsequent use should be regulated as groundwater or as surface water. The court held that, under the facts presented in the case, the EAA was correct to have considered the water that was allowed to migrate into, and therefore stored in, the reservoir as surface water subject to the exclusive permitting authority of TCEQ. Because 686 AF of the amount of groundwater Day requested in the application became surface water, the court held that EAA was correct in its decision to grant the historic use permit for 14 AF.

Groundwater Ownership: Day also argued that regardless of the groundwater versus surface water distinction, EAA's decision to deny the application for the remaining 686 AF of groundwater resulted in a taking of his property for a public purpose without providing just compensation, in violation Article I, Section 17(a) of the Texas Constitution. As a matter of first impression, the court likened groundwater ownership to its previous decisions in oil and gas cases, where it recognized an owner's right to the oil and gas minerals beneath the surface as a severable property right that was capable of valuation for tax purposes. The court reasoned that groundwater should be treated like oil and gas in the context of ownership. The court also referred to Texas Senate Bill 332, passed in 2011, which explicitly recognized private ownership of groundwater in place as real property. This legislation, now codified in Section 36.002 of the Texas Water Code, recognizes that groundwater withdrawals are subject to reasonable regulation by groundwater conservation districts, as they are the State's preferred method of regulation, but that districts' regulation cannot become so restrictive as to effectuate a taking of private property.

Future Takings Claims: Because EAA successfully argued at the trial court that Day did not have a vested interest in place to groundwater, the trial court did not reach the merits of the takings claim and the Texas Supreme Court therefore could not make a decision on whether a taking actually occurred. The court did, however, provide commentary on the legal test that is employed to help determine whether a regulatory taking has occurred — often referred to as the *Penn Central* takings test. *See Penn Central Transportation Co. v. New York City*, 438 U.S. 104 (1978). The court discussed each of the elements of the test, which include a review of the economic impact of the regulation, the extent to which the regulation interferes with investment-backed expectations of the property owner, and the character and purpose behind the regulation.

Although the Texas Supreme Court remanded the case to the district court to determine whether the EAA's permitting decision constituted a taking that requires compensation under the Texas Constitution, the parties reached a settlement agreement on June 20, 2013, and the case was dismissed. According to the terms of the settlement agreement, the EAA agreed to pay Day (the sole successor in interest to all property and claims subject of the litigation originally filed by both Day and McDaniel) a sum of $950,000 to dismiss the case with prejudice. However, the settlement agreement does not authorize Day to produce any additional groundwater. Additionally, it is important to note that the settlement does not serve as an admission of a taking and does not serve as legal precedent on the state of groundwater management in Texas. Ultimately, although the issue on remand of whether the EAA's permitting decision constituted a taking was dismissed, the Texas Supreme Court's determination that landowners have a vested ownership interest in place to the groundwater beneath their property is, in and of itself, a milestone in the continuing development of groundwater rights in Texas.

For additional information concerning this case, *see* Water Briefs*, TWR* #97; McCarthy, *TWR* #99; and Trejo, *TWR* #119.

Texas Litigation & Legislation

Regulatory Taking

***Edwards Aquifer Authority v. Bragg* —** No. 04-11-000018-CV, (Tex. App.-San Antonio, Aug. 28, 2013)

The dispute between the Braggs and the EAA includes a long line of court decisions. At issue was whether EAA's actions constituted a taking under the Texas Constitution. Most recently, the Fourth Court of Appeals (Court of Appeals) in San Antonio, Texas affirmed the district court's decision that the Braggs, commercial pecan growers, suffered a regulatory taking when EAA denied one permit and partially granted another permit requested by the Braggs to provide water to their two pecan orchards.

Plaintiffs Glen and JoLynn Bragg (hereafter "Braggs") owned two pecan orchards in Hondo, Texas, within the boundaries of EAA. The Braggs applied to EAA for groundwater permits for wells located on each of their orchards. Pursuant to the state-mandated regulatory permitting scheme under the Edwards Aquifer Authority Act (the "Act"), which gives preference to historic users, EAA denied one of the Braggs' permits and only partially granted the other permit in an amount less than requested. The Braggs filed a lawsuit against EAA asserting various constitutional and state claims. The district court held that the Braggs had a compensable taking claim against EAA based on EAA's denial of the groundwater permits for the amounts requested or needed to maintain the two pecan orchards.

Liable Party

In August of 2013, the Court of Appeals issued its decision, which addressed several important issues. First, while the appellate court found that EAA acted in complete accordance with its state-mandated regulatory scheme, the appellate court held EAA liable for the taking rather than the State of Texas because EAA was the state agency responsible for enforcing the regulatory scheme under the Act. Second, the Court of Appeals addressed whether the claim was timely filed in accordance with the statute of limitations.

Statute of Limitations

The Court of Appeals held that a 10-year statute of limitations applied to a claim for a regulatory taking and the statute of limitations began running in 2004 and 2005 when EAA acted on the permit applications, rather than when the Act was passed in 1993; thus, the claim was timely filed.

Takings Decision

Third, the Court of Appeals affirmed the district court's decision that a regulatory taking had occurred. The Court of Appeals applied the factors of the *Penn Central* takings test, citing to the Texas Supreme Court's decision in *Edwards Aquifer Authority v. Day*, 369 S.W.3d 814 (2012). Based on the application of the factors, the court found that while EAA Act did not deprive the Braggs of all economically viable use of their property, the implementation of the Act by EAA — i.e. the EAA's denial of the applications for the amounts sought — caused the Braggs damage. The court determined that EAA's actions unreasonably impeded on the Braggs' use of their property as a pecan orchard, which caused the Braggs "severe economic impact" and interfered with the Braggs' "investment backed expectations."

Compensation Calculation

Fourth, the Court of Appeals held that the Braggs were entitled compensation. However, the appellate court reversed the lower court's decision regarding the amount of compensation for the regulatory taking and the formula used to calculate the amount. The appellate court ruled that the district court incorrectly determined compensation by calculating the difference between the market value at the time of trial of the permit rights the growers requested in their application and the permitted rights actually received. The Court of Appeals remanded the case and instructed the lower court to calculate the compensation owed on the orchards (which was determined to be the highest and best use of the property). The calculation was ordered to be determined by comparing the value of the property as a commercial-grade pecan orchard with unlimited access to Edwards Aquifer water (immediately before implementation of the Act) to the value of the property as a commercial-grade pecan orchard with no access or limited access to Edwards Aquifer (immediately after implementation of the Act).

Permit Denial = Taking

In September of 2013, EAA filed a Motion for Rehearing on the Court of Appeals' decision. On November 13, 2013, the Court of Appeals denied EAA's Motion for Rehearing and also withdrew its prior opinion issued August of 2013 and replaced it with a revised opinion. While the revised opinion changed some of the wording to describe the parties' arguments, it did not change the substance of the court's decision. Ultimately, this landmark case makes clear that, at least in some circumstances, the denial or limitation of a permit to pump groundwater for irrigation purposes may constitute a regulatory taking.

For additional information concerning this case, *see* Trejo*, TWR* #119.

Interregional Conflict

***Texas Water Development Board v. Ward Timber* —** 411 S.W.3d 554 (Tex. App.-Eastland, May 23, 2013)

In a case of first impression, the Eleventh Court of Appeals in Eastland, Texas was presented with the issue of whether an "interregional conflict" existed between the 2011 water plans of two regions that are now part of the Texas water plan. Every five years, the Texas Water Development Board (TWDB) is required to adopt a comprehensive state water plan which incorporates sixteen regional water plans. Before approval of the regional water plans, TWDB must ensure that all interregional conflicts have been resolved. Region C submitted its 2011 regional water plan proposing the construction of the Marvin Nichols Reservoir in the Sulphur River Basin, which is part of Region D (North East Texas Regional Planning Area). Region D, however, submitted its regional water plan opposing the reservoir and listed detailed reasons as to why the reservoir would damage the "timber, agricultural, environmental, and other natural resources" in the region.

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Conflict Found

TWDB reviewed and ultimately approved each plan, finding no interregional conflicts. Members of Region D sued TWDB and sought judicial review of the approval of Region C's regional water plan. They contended that Texas law prohibited TWDB from approval because there was an existing interregional conflict between Region C's and Region D's regional water plan. In contrast, TWDB argued that "by definition, an interregional conflict exists only when more than one regional water plan relies on the same water source and there is insufficient water to fully implement both plans." In 2011, the district court denied TWDB's plea to the jurisdiction, declared that an interregional conflict existed between the two plans, reversed TWDB's decision to approve the two plans, and remanded the case to TWDB for it to follow its rules and the statute to resolve the conflict. TWDB appealed, and the Court of Appeals affirmed the district court's decision.

Environmental Stewardship v. Texas Water Development Board

No. D-1-GN-12-0022-1 (98th Dist. Ct., Travis Cty., Tex, July 20, 2012)

Groundwater Conditions

On July 20, 2012, Environmental Stewardship, a water conservation group made up of landowners and surface water rights holders in Bastrop County, filed a lawsuit against the Texas Water Development Board (TWDB) in district court. Environmental Stewardship's petition challenged TWDB's approval of the desired future conditions adopted by the groundwater conservation districts in Groundwater Management Area 12 (GMA-12) for the Carrizo-Wilcox Aquifer.

Conjunctive Impacts

In its petition, Environmental Stewardship emphasizes the strong "hydrological connections" between the Carrizo-Wilcox Aquifer and the Colorado and Brazos Rivers, where the plaintiff holds surface water permits. The plaintiff alleged that the desired future conditions approved by TWDB are unreasonable because over-pumping of groundwater under the desired future conditions in GMA-12 could impact surface water flows in the Colorado and Brazos Rivers, requiring curtailment of the surface water use. The petition states that TWDB failed to consider this potential impact even though experts testified to the connection during the administrative approval and petition process. According to the plaintiffs, TWDB only considered impacts on groundwater and failed to consider differing conditions within the Carrizo-Wilcox Aquifer or available hydrologic evidence presented by the plaintiffs, thereby violating TWDB's general constitutional duty to protect and conserve lakes and streams, as well as follow certain statutory directives. In the petition, the plaintiffs asked the court to reverse the approval of the desired future conditions and remand the case back to TWDB to consider surface water impacts during its determination of whether the desired future conditions established for the Carrizo-Wilcox Aquifer are reasonable.

SURFACE WATER RIGHTS, REGULATION, AND PLANNING LITIGATION:

Hearts Bluff Game Ranch Inc. v. State

381 S.W.3d 468 (Tex. 2012), reh'g denied (Nov. 16, 2012), cert. denied 133 S.Ct. 1999 (U.S. 2013)

Wetlands Mitigation Banks

Hearts Bluff Game Ranch Inc. ("Hearts Bluff") filed a petition with the US Supreme Court claiming a regulatory taking after its attempt to use real property to establish a wetlands mitigation bank was rejected. In its petition, Hearts Bluff sought the US Supreme Court's review of an opinion by the Texas Supreme Court that rejected Heart Bluff's claim that it suffered a regulatory taking by the State.

Corps' Denial

Hearts Bluff purchased 4,000 acres of land in Titus County, Texas to create a federal mitigation bank and sell mitigation bank credits. Mitigation banks are blocks of land that a landowner can set aside to offset the environmental impact of more destructive land use. Prior to purchasing the land, Hearts Bluff contacted the United States Army Corps of Engineers (Corps), which governs mitigation banking programs, to seek assurance that the land would be suitable for mitigation banking purposes. The Corps informed Hearts Bluff that it saw no impediments to creating a mitigation bank on the property. However, after public notice was provided regarding the application to create a mitigation bank on the land, the Corps learned that the Marvin Nichols Reservoir, proposed to be built in the same region, was going to be recommended as a project in the 2007 State Water Plan, and denied the application.

No Valid Claim

As a result, Hearts Bluff brought an inverse condemnation claim against the State and the Texas Water Development Board, and sued the Corps for denying the mitigation bank application. The Corps removed the case to federal court; the federal district court separated the claims, transferring the case against the Corps to the US Court of Claims and remanding the case against the State to state court. The US Court of Claims dismissed the case. The Texas Supreme Court held that the landowner failed to establish a valid claim because the State had no authority to grant or deny the federal mitigation banking permits. Hearts Bluff appealed to the US Supreme Court, and on April 22, 2013, the US Supreme Court denied Hearts Bluff's petition for writ of certiorari (i.e., declined to hear the case).

Texas Farm Bureau et al. v. Texas Commission on Environmental Quality

No. D-1-GN-12-3937, (53rd Dist. Ct. Travis Cty., Texas, June 6, 2013)

Water Regulation

In December 2012, the Texas Farm Bureau and two irrigation water rights holders in the Brazos basin filed a declaratory judgment action and request for temporary restraining order and temporary and injunctive relief against TCEQ in the district court. The plaintiffs challenged the administrative rules adopted by TCEQ for the suspension or adoption of water rights.

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Preferences of Rights

During a water shortage in 2012, Dow Chemical Company (Dow) made a "priority call" stating that it was unable to divert water under its 1942 priority water right, and Dow requested that TCEQ suspend water rights to junior users. [Editor's Note: a "priority call" is a request by a senior water user to the regulating authority to shut off junior users of water, so that the senior user receives their water before any junior water right use.] TCEQ approved the request and entered an order suspending diversions under all water rights with a priority date junior to (later than) February 14, 1942. However, TCEQ exempted from the suspension order all municipal users and power generators based on public health and safety concerns. As a result, agricultural users with senior water rights were subjugated to junior municipal users and power generators. The plaintiffs allege that the rules and TCEQ's application of the rules constitute a taking of vested property without just compensation and that TCEQ should require the junior municipalities and generators to compensate the agricultural water rights holders who are unable to divert. The plaintiffs also allege that TCEQ overstepped its authority by effectively modifying the prior appropriation doctrine.

Priority Doctrine Violation

The trail court ruled in favor of the Texas Farm Bureau and plaintiff water rights holders, finding that TCEQ was not authorized to exempt municipalities and power generators with water rights junior to the plaintiffs' from the suspension. The court held that TCEQ's rules violated the priority doctrine set forth in the Texas Water Code and unlawfully authorized the taking of vested property rights without compensation. In June, 2013, TCEQ filed its notice of appeal to the Third Court of Appeals in Austin, Texas, and the Texas Farm Bureau filed its motion to Prevent Suspension of Judgment and Motion to Post Bond. Currently, the Texas Farm Bureau's motion, as well as TCEQ's response and the Texas Farm Bureau's supplemental motion and reply, are pending before the appellate court.

Tarrant Regional Water District v. Herrmann

656 F.3d 1222, cert granted, 2013 WL 49810, 80 USLW 3453 (U.S. Jan 4, 2013) (No. 11-889)

Interstate Compact

On June 13, 2013, the US Supreme Court (Court) issued its unanimous opinion affirming the decision of the Tenth Circuit Court of Appeals in favor of the Oklahoma Water Resources Board (OWRD) in *Tarrant Regional Water District v. Herrmann*. In this six-year dispute regarding control over the water in the Red River watershed in Texas and Oklahoma, Tarrant Regional Water District (Tarrant Regional) challenged Oklahoma's statutes restricting diversion for out of state transport, arguing the statutes were preempted by the Red River Compact and in violation of the dormant Commerce Clause. The Court ultimately upheld Oklahoma's statutes, finding no issue of preemption and no violation of the dormant Commerce Clause.

Out of State Diversion

To meet increasing water demands in north-central Texas, Tarrant Regional, a public water supplier, approached OWRB for permitting to appropriate 310,000 acre-feet per year of surface water to be diverted from Red River tributaries located in Oklahoma. However, Oklahoma statutes relative to interstate transport of surface water effectively inhibit an out of state applicant from obtaining a permit to acquire water in Oklahoma. Thus, after recognizing its permit requests would likely be denied, Tarrant Regional filed a lawsuit in federal court, seeking to enjoin OWRB's enforcement of Oklahoma's statutes under which water exports were barred.

Compact Intent

Tarrant Regional argued that the statutes were preempted by the federal Red River Compact (Compact), an agreement allocating water rights within the Red River to Oklahoma, Texas, Arkansas, and Louisiana. Tarrant Regional argued that the Compact gave Texas the right to 25% of the water in a specified tributary, located within Oklahoma; whereas, OWRB argued that nothing in the Compact allowed Texas to enter into Oklahoma to remove (divert) water. The Supreme Court determined that the Compact was ambiguous on this issue, and therefore looked to other, extrinsic, evidence to decide the intent of the parties to the Compact.

Compact's Silence

First, the Court recognized that sovereign states possess an absolute right to all navigable waters within the state, and, absent some express language, the Court refused to believe that the Compact's silence on the issue could be construed in a way that would require Oklahoma to forfeit its sovereignty. Second, the Court found that other interstate compacts possessed unambiguous language when permitting states to cross each other's borders to carry out the terms and obligations of the compacts. The lack of any such express language in the Compact further signified that the parties did not intend for cross-border rights. Finally, the Court noted that, until now, none of the states to the Compact had attempted a cross-border diversion, and, in the past, Tarrant Regional tried to purchase water from Oklahoma, which implied that the states did not believe that such a right existed. Thus, the Court held that the Compact did not create any cross-border rights and the Compact did not preempt the Oklahoma water statutes.

Commerce Clause

Tarrant Regional also claimed that Oklahoma's water appropriation statutes violated the dormant Commerce Clause. Tarrant Regional argued that the statutes were discriminatory in favor of local interests because they prevent water left unallocated under the Compact from being distributed out of state. However, the Court interpreted the Compact and determined that Tarrant Regional's assumption that some water is left "unallocated" was incorrect. The Court found that Oklahoma's statutes were constitutional because the Compact only allocated "free" water to other states; otherwise, the water is allocated and owned by Oklahoma.

For additional information concerning this case, *see* Water Briefs, *TWR* #108; Moon, *TWR* #113; and Richardson, *TWR* #116.

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Compact Allocation

Texas' Positions

New Mexico's Response

Relief Requested

Texas v. New Mexico

Motion for Leave to File Complaint, pending (U.S. Jan. 8, 2013).

On January 8, 2013, the State of Texas filed a complaint with the US Supreme Court, naming the states of New Mexico and Colorado as defendants. In the complaint, Texas alleges that New Mexico allowed illegal and unauthorized diversions of water from the Rio Grande in violation of the 1938 Rio Grande Compact (Compact) and the Rio Grande Project Act.

The Compact was entered into by the states of Colorado, New Mexico, and Texas to protect the operation of the Rio Grande Reclamation Project (Project). Essentially, the Compact and Project divide the water of the Rio Grande between the three states. The Compact requires New Mexico to deliver specified amounts of Rio Grande water to Elephant Butte Reservoir, a storage facility of the Project, located in New Mexico along the Rio Grande River. The water is then allocated and belongs to the Rio Grande Project beneficiaries in southern New Mexico and across the New Mexico border in Texas. However, for the water to be delivered to the beneficiaries in Texas, it must be released from the Rio Grande Project facilities and allowed to flow through southern New Mexico into Texas.

Texas claims that New Mexico has authorized the interception of Rio Grande Project water below Elephant Butte intended for use in Texas. Texas argues that New Mexico's issuance of groundwater permits in the southern region of the State, between Elephant Butte Reservoir and the Texas state line, has depleted the Rio Grande by causing the surface water to leave the river to recharge interconnected aquifers. While Texas does not dispute that New Mexico is delivering the correct amount of water to Elephant Bluff Reservoir, Texas asserts that New Mexico's actions violate the "purpose and intent" of the Compact, causing grave and irreparable injury to Texas. In response, New Mexico claims that the Compact only requires delivery into Elephant Butte, to which it has complied, and the Compact does not require any specified amount of water to be delivered to the Texas state line. Furthermore, New Mexico claims that the Compact does not address groundwater pumping, which is a matter of state law, and the groundwater wells drilled below Elephant Bluff Reservoir are proper under New Mexico law.

The US Supreme Court (Supreme Court) has original and exclusive jurisdiction over suits involving interstate compacts under Article III, Section 2, Clause 2 of the Constitution of the United States, and 28 U.S.C. § 1251(a). The complaint lists Colorado as a defendant only on the basis that it is a signatory to the Compact, requesting no action by the State. However, Texas, New Mexico, and Colorado have all filed briefs on the case, and in conjunction with New Mexico, Colorado argues that the Court should not hear the case because Texas's claims are not tied to the Compact, and the Compact does not apply to the water located south of Elephant Bluff Reservoir. Nonetheless, Texas requests the Court to hear the case, enjoin New Mexico's diversions and depletions that impact the amount of water received by Texas, order New Mexico to pay for the water it has produced through groundwater pumping and surface diversions, and specify the share of water Texas is entitled to under the Compact.

In April 2013, the Supreme Court requested the US Solicitor General to weigh in on the case before deciding to take action. In December 2013, the US Solicitor General filed its brief with the Court. The Solicitor General's legal brief states that the Court should hear the case (i.e. grant Texas leave to file its complaint), and afford New Mexico the opportunity to file a motion to dismiss the complaint.

For additional information concerning this case, *see* Water Briefs*, TWR* #107, #108, #119, #120 and #122.

Water Financing "SWIFT"

TEXAS LEGISLATIVE UPDATE

Every two years, public and private interests statewide prepare for the lawmaking whirlwind that is the Texas Legislature, during which thousands of bills are shuffled between the Texas House of Representatives and Senate, in hope of survival by finally reaching the Governor's desk for approval. January 2013, the Texas Legislature convened to embark on its 83rd biennial session, and from the start, water was at the forefront of legislative priorities. Lawmakers were determined to address the water challenges facing Texas and sought to devise a plan to fund water projects around the State. As a result, the 83rd Legislature created an opportunity for Texas voters to finalize a solution for water infrastructure financing.

Water Bills Passed

Although the House and Senate disputed the general structure of the proposal and appropriate vehicle to carry it, a consensus was ultimately reached, and a water financing package was passed in the form of three important bills:

- **House Bill 4:** The bill created a new fund called the State Water Implementation Fund for Texas (SWIFT) to provide loans for water projects across the State and to be administered by the Texas

Texas Litigation & Legislation

Water Development Board (TWDB), the state agency that administers state water planning and loan distribution. According to the bill, at least 20% of the funding must be used for conservation, reuse, or recycling projects, and 10% of the funding must be used to support projects for rural political subdivisions or agricultural water conservation. Furthermore, the bill restructured TWDB from five part-time members to three full-time members appointed by the Governor.

- **House Bill 1025:** The bill authorized the transfer of $2 billion from the Economic Stabilization Fund, commonly referred to as the "Rainy Day Fund," into SWIFT to finance certain water-related projects.
- **Senate Joint Resolution 1:** The bill submitted a constitutional proposition to the voters to affirm the creation of SWIFT and the appropriation of $2 billion from the Rainy Day Fund to SWIFT. The amendment was passed by voters in the November 2013 elections, which served as the final decision on the matter.

In addition to the water financing package, other noteworthy water bills that survived the legislative process and consequently became law include the following:

Drought Notice

- **House Bill 252:** Amended Chapter 13 of the Texas Water Code to require retail public utilities and wholesale water and sewer service suppliers to notify TCEQ when the utility or entity is reasonably certain that the water supply will be available for less than 180 days.

Loss Audits

- **House Bill 857, House Bill 1461, and House Bill 3605:** amended the Texas Water Code to require utility companies to conduct annual audits of water lines to account for any water loss, to inform customers of audit results, and to use a portion of state assistance funds towards repairing leaks exposed by the audit process.
- **House Bill 1600:** referred to as the Public Utility Commission (PUC) sunset bill, which among other things, amended Chapters 12 and 13 of the Water Code to transfer TCEQ's water and wastewater rate jurisdiction to the PUC.

Fire Flow Standards

- **House Bill 1973:** amended Chapter 341 of the Texas Health and Safety Code to authorize a municipality by ordinance to adopt fire flow standards established by TCEQ for an investor-owned utility or water supply corporation providing service to residential areas in the municipality or its extraterritorial jurisdiction; the ordinance may not require the utility to build, improve, or retro-fit existing infrastructure at the time of its adoption.

Red River Boundary

- **House Bill 3212:** amended current law related to the Red River Boundary Compact and created the Red River Boundary Commission to oversee the redrawing of the boundary between Texas and Oklahoma within the area of Lake Texoma to allow for the correction resulting from a surveying discrepancy to ensure that water intake facilities in Texas are on the Texas side of the boundary. After this legislation passed, the governors of Texas and Oklahoma in January 2014 entered into a **m**emorandum **o**f **a**greement (MOA) to allow the North Texas Municipal Water District (District) to continue to use a pump station, parts of which straddle the state line between Texas and Oklahoma. Under the MOA, the Governors of Texas and Oklahoma agreed to allow the District to use the pump station, including any pumps located within Oklahoma boundaries or replacement pumps with the same total capacity, as long as the District's production of water from the pumps or replacement pumps continues in accordance with the District's water use permit from TCEQ and in accordance with the State of Texas' apportionment from Lake Texoma.

Interbasin Transfers

- **House Bill 3233:** amended Section 11.085, Texas Water Code, to streamline the interbasin transfer permitting process for surface water rights at TCEQ. The bill specifies the information required in an application for an interbasin transfer, including the contract price, proposed use of water, and a description of the proposed uses and users, the cost of converting, conveying, distributing, and supplying the water. Additionally, the bill sets forth the procedure for challenging an interbasin transfer.

Drought Plans

- **House Bill 3604:** amended Texas Water Code Chapter 16 to require water-suppliers to implement both water conservation and drought contingency plans when a drought disaster is declared in their county. Previously, the entities were able to implement one of the two plans, rather than both plans.

City Enforcement

- **Senate Bill 654:** amended Chapter 54, Local Government Code, to enable municipalities to enforce water ordinances through civil action, rather than solely criminal action.

Invasive Species

- **Senate Bill 1212:** amended Section 66.007, Parks and Wildlife Code, to provide an exception for violation of Texas' state version of the federal Lacey Act for transporting certain invasive species, like zebra mussels, in limited situations where the transportation is through a closed conveyance system approved by the Corps in accordance with an invasive species management plan.

Aquifer Proposal

- **Senate Bill 1282:** amended Chapter 36, Texas Water Code, to extend the deadline to propose for adoption desired future conditions for an aquifer by a groundwater conservation district to May 1, 2016.

Texas Litigation & Legislation

Groundwater Regulation

Ongoing Legislative Issues

Legislation relative to groundwater regulation was a major point of contention during the 83rd Legislative Session. In Texas, local groundwater conservation districts, generally created by the Texas Legislature, govern and regulate the groundwater resources within their boundaries through the implementation and enforcement of local rules in accordance with their statutory powers. As seen in previous sessions, a number of bills were introduced that would have impacted groundwater districts' permitting abilities, management plans, reporting requirements, and process for appealing the adoption of desired future conditions for aquifers in a groundwater management area. Additionally, many well-intentioned bills were filed that sought to address the management of brackish groundwater and brackish surface water resources. While in the end these controversial bills were defeated, much of their subject matter has been discussed during the legislative interim and will likely resurface in the next legislative session.

Upon completion of the 83rd Legislative Regular Session and a subsequent special session called by Governor Rick Perry, lawmakers began interim studies on particular issues of legislative interest in preparation of the 84th Legislative Session. The presiding officers of the House and Senate specify interim charges for House and Senate committees, which generally consist of legislators from one chamber, legislators from both chambers, or even citizen members or public officials appointed by the presiding officer to assist in the study. The committees are required to submit interim reports on their charges before the next session.

Senate Interim Studies

On January 16, 2014, Lieutenant Governor Dewhurst, the presiding officer of the Senate, released the interim charges for the Senate Committee on Natural Resources and announced water-related appointments. Pursuant to the Lt. Governor's instructions, and in anticipation of the 84th Legislative Session, the Senate Committee on Natural Resources will focus on the use of brackish water, including but not limited to aquifer storage and recovery and desalination; the regulation of water supply; environmental permitting delays and impacts on economic developments; and the implementation of legislation, including monitoring implementation of House Bill 4 and SWIFT.

House Interim Studies

On January 31, 2014, Speaker Joe Straus, the presiding officer of the house, released the interim charges for the House Committee on Natural Resource, many of which mirror the charges imparted by the Lieutenant Governor to the Senate Committee on Natural Resources. The Speaker instructed the House Committee on Natural Resources to monitor the implementation of House Bill 4 and Senate Joint Resolution 1, including progress by TWDB, to ensure this legislation is a viable, long-term funding source for the State Water Plan; to explore opportunities to encourage voluntary protection and stewardship of privately owned lands in support of the State's water supply and to protect environmental flow needs in Texas Rivers; to strategize the enhanced use of aquifer storage and recovery projects in the State; and to evaluate the availability, management, and development of groundwater, including the development of brackish groundwater as well as permitting by local groundwater districts in coordination with regional regulatory efforts.

ASR Projects

As part of the interim process, various water stakeholder groups convene regularly in an effort to work through these big water issues and, ultimately, formulate an agreeable legislative framework to present to lawmakers next session. Currently, members of the Texas Water Conservation Association, the State's leading water stakeholder group, and representatives of public and private interests, are working diligently to tackle some of the more notable issues relative to groundwater regulation, such as brackish groundwater and aquifer storage and recovery projects, both of which will certainly be addressed in 2015. In Texas, it is clear that as water demands continue to increase statewide, legislative action is necessary to ensure water availability in the long-term.

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WATER BRIEFS

STREAM ACCESS NM

AG OPINION

On April 1, Attorney General Gary King issued AG Opinion No. 14-04 (Opinion) on the issue of stream access across private land. The Opinion, authored by Assistant Attorney General Stephen R. Farris, concluded that a "private landowner cannot prevent persons from fishing in a public stream that flows across the landowner's property, provided the public stream is accessible without trepass across privately owned adjacent lands." The Opinion was "limited to public streams that flow across private property" and did not address public stream that flow across federal land or lands owned by Indian nations, tribes, or pueblos. The Opinion was in response to a request by Rep. Luciano "Lucky" Varela of the New Mexico state legislature. Opinion at 1. The Opinion also pointed out that it was "intended to clarify the parameters of the right to use public streams flowing through private property for fishing and other recreational purposes." *Id*.

"New Mexico is a prior appropriation state…This is pertinent to the question asked because in accordance with this doctrine, the Territory of New Mexico and later the State of New Mexico declared that all the waters in the state belong to the public." The Opinion cited the Water Code of 1907 and New Mexico's Constitution for language confirming that all the water in the state belongs to the public, subject to appropriation for beneficial use. *Id*. at 2.

Ownership of the stream bed, even if entirely in private hands, also does not limit the public's right of access. "Based on *Red River* and subsequent cases construing New Mexico law, it is clear that even if a landowner claims an ownership interest in a stream bed, that ownership is subject to a preexisting servitude (a superior right) held by the public to beneficially use the water flowing in the stream. The landowner has only the same interest in and right to use the water as the general public. Since fishing is recognized as a public beneficial use, the landowner, even if he owns the bed of the stream, cannot prevent others from fishing in the stream in accordance with state law." *Id*. at 3-4. *Red River* refers to the case *State ex rel. State Game Commission v. Red River Valley Company,* 1945-NMSC-034, 51 N.M. 207.

The discussion then turned to the extent of the "easement" the public has for recreational use. "While it may be well established that all the waters in a stream or watercourse are public and subject to the beneficial use of the public, the scope of the public's easement to use public waters on private land is less clear. An 'easement,' as used here, refers to the public's lawful use of water in a stream that runs across private land and any incidental use of private property, such as the stream bed, that is necessary to use the water." *Id*. at 4.

The Opinion narrowed its focus to the question of "whether walking or wading in a stream that runs across private property is permissible as a necessary incident to the public's right to use public water for fishing." *Id*. at 5. Relying on the Utah Supreme Court decision in *Conaster v. Johnson*, 194 P.3d 897 (Utah 2008) and the *Red River* case, the Opinion concludes that "we believe it likely that a New Mexico court reviewing the issue today would follow the Utah Supreme Court's rationale in *Conaster v. Johnson* and conclude that the public's right to use public waters for fishing includes touching the bed of a stream in ways that are reasonably incidental to the right, including wading, walking and standing in the stream." *Id*. at 6.

"To summarize, the Supreme Court's decision in *Red River*, which has been the controlling law for nearly 70 years, leaves no doubt that the water in New Mexico streams belongs to the public and is subject to public's beneficial use for fishing and recreational activities. The public's right to enjoy the use of public waters is no different when those waters are located on or run through private property. The owner of property upon which a public stream is located 'has no right of recreation or fishery distinct from the right of the general public,' *Red River*…at 228, and cannot exclude others from fishing in the stream." *Id.* at 7.

The Opinion also directly addressed the question of whether a "right to trespass" was being created. "Although, as *Red River* makes clear, a person may not trepass on private property in order to gain access to public waters, a person using public waters to fish, including incidental activities such as walking, wading or standing in a stream bed, is not trespassing." *Id*.

The Opinion's discussion of stream access cites precedence in Oregon, Montana, Utah and Wyoming, along with New Mexico cases. Thus, anyone faced with stream access issues will find the Opinion well worth reading.

For info: Phil Sisneros, AG's Office, 505/ 222-9174; AG Opinion: http://public-records.nmag.gov/opinions >> April 1, 2014

CITY INSTREAM FLOW CO

NON-DIVERSION AGREEMENT

On April 29, Aspen announced that for a second year in a row, it will adjust City water use to benefit a community river. Locals are concerned about the amount of water flowing in the upper Roaring Fork River, which is depleted by large water diversions. Last year, in an effort to explore solutions to benefit the Roaring Fork, the City of Aspen reduced the amount of water it took from the river at the Wheeler Ditch, which is southeast of downtown. This allows more water to flow downstream through Aspen, bolstering low flows. The City Council approved implementing the pilot program that the City developed with the Colorado Water Trust (CWT) in 2013 for a second year in a row. Under the program, the City will decrease the amount of water it takes from the river whenever the local Colorado Water Conservation Board instream flow water right of 32 c.f.s. is not satisfied

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WATERS OF THE US US

COMMENT PERIOD OPEN

On March 25, EPA and US Army Corps of Engineers jointly released a proposed rule to clarify protection under the Clean Water Act for streams and wetlands that form the foundation of the nation's water resources (*see* Brief, *TWR* #122). On April 21, a 91 day public comment period opened on the proposed rule. People can submit comments on the proposed rule online, through email, regular mail or by courier until July 21, 2014. Read the Federal Register for instructions on how to submit a comment.

For info: www.federalregister.gov/articles/2014/04/21/2014-07142/definition-of-waters-of-the-united-states-under-the-clean-water-act#p-5

WATER BRIEFS

HATCHERY V. WILD FISH US

SETTLEMENT CUTS RELEASE

On April 25, a Consent Decree was entered settling the lawsuit filed by the Wild Fish Conservancy (Conservancy) on March 31, 2014 seeking Endangered Species Act (ESA) compliance for the Washington Department of Fish and Wildlife's (WDFW's) "Chambers Creek" hatchery winter steelhead programs. *Wild Fish Conservancy v. Philip Anderson, et al*., Case No. 2:14-CV-00465-JLR, W.D. WASH (April 25, 2014). The Conservancy alleged WDFW had violated Section 9 of the ESA, 16 U.S.C. § 1538, by their implementation of hatchery programs in the Puget Sound region that use a hatchery stock commonly known as Chambers Creek steelhead or early-winter run steelhead. The lawsuit was filed based on the Conservancy's assertion that beginning with the first listing of Puget Sound salmon under the ESA in 1999, almost all of WDFW's hatchery programs in the region have continued to produce and release hatchery salmonids without the evaluation and legal permission required under the ESA. The parties agreed that "resolution of this matter without further litigation is in the best interests of the parties and the public… ." Consent Decree at 2.

The Conservancy maintains that contrary to popular belief, the Chambers Creek hatchery programs, like many hatchery programs, do not aid wild fish recovery. Recent scientific evidence indicates that this hatchery-origin steelhead adversely affects wild steelhead by causing negative genetic, ecological, and demographic effects. In its press release on the settlement, the Conservancy stated that in 2010, scientists from the regional science center of the NOAA Fisheries Service concluded "Chambers Creek steelhead have no role in the recovery of native Puget Sound steelhead."

While acknowledging that certain hatchery practices may pose risks to wild fish productivity and recovery, WDFW officials denied the Conservancy's claim and said WDFW has taken numerous steps based on current science to ensure its hatchery operations protect wild steelhead and other listed fish species. WDFW's Hatchery Genetic Management Plans (HGMPs) are designed to ensure that all steelhead hatcheries support wild fish recovery, but those plans are still under review by the National Marine Fisheries Service (NMFS). When the lawsuit was filed, WDFW officials said the department was vulnerable to litigation because its hatchery steelhead operations had not been approved by NMFS following the ESA listing of Puget Sound steelhead in 2007. The unpermitted Chambers Creek steelhead hatchery programs in Puget Sound were the sole subject of the suit, filed in the US District Court for western Washington in Seattle.

Under the settlement, all litigation against WDFW over its Puget Sound hatchery programs is stopped during the next two and a half years, or until NMFS approves those programs, whichever comes first. WDFW will cease planting Chambers Creek hatchery steelhead in all Puget Sound rivers but one (Skykomish River), until NOAA approves each specific hatchery program. The settlement also establishes a 12-year moratorium of such hatchery plants in the Skagit River system, Puget Sound's largest tributary and most important wild steelhead river; during that time a research program will be conducted in the Skagit River. In cooperation with the Conservancy, WDFW will work with tribes to study and evaluate whether development and implementation of an integrated hatchery program using native steelhead in the Skagit River is warranted or appropriate. WDFW may release hatchery steelhead into other rivers around Puget Sound when NMFS approves the department's HGMPs. This provision does not apply to the Skagit River watershed, however, which will not receive early winter hatchery steelhead releases during the 12-year study period.

In the Skykomish River, WDFW may release up to 180,000 Chambers Creek hatchery steelhead each year in 2014 and 2015. The Consent Decree prevents the planned release of another 720,000 such fish into other Puget Sound rivers. Early winter steelhead from WDFW hatcheries that cannot be released into Puget Sound-area rivers will be released into inland waters that have no connection to Puget Sound; WDFW will give the Conservancy 14 days' advance notice of those releases. WDFW also agreed to pay the Conservancy $45,000 for litigation expenses. The court retained jurisdiction over the case to enable it to be reopened for the purpose of enabling either party to apply to the court "for any further order…necessary to construe, carry out, enforce compliance with, and/or resolved any dispute regarding the terms or conditions of this Consent Decree until the Consent Decree terminates under paragraph 25." *Id*. at 8.

For additional information regarding wild fish versus hatchery issues, *see* Stay, *TWR* #99; and Water Briefs, *TWR* #120.

For info: Jim Scott, WDFW, 360/ 902-2736 or http://wdfw.wa.gov/; Kurt Beardslee, Conservancy, 425/ 788-1167 or http://wildfishconservancy.org; Brian Knutsen, Smith and Lowney, PLLC, Attys. for Conservancy, 971/ 373-8692; Consent Decree at: http://wildfishconservancy.org/copy_of_news/in-the-news/021.1.proposed.consent.decree.pdf

FISH CONSUMPTION ID

SURVEY & WQ CRITERIA REVIEW

The Idaho Department of Environmental Quality (IDEQ) is implementing a statewide survey to estimate fish consumption rates among Idaho residents. The survey is part of an IDEQ rulemaking effort which will evaluate local and regional fish consumption information to determine whether Idaho's statewide water quality criteria are protective of designated uses and, if the current criteria are not protective, to determine appropriate new criteria. Water quality criteria are primary inputs into determining water quality standards used to set effluent discharge limitations in Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permits issued to municipal and industrial dischargers to waters of the United States as well as discharge allocations set for Total Daily Maximum Load purposes.

On May 10, 2012, EPA disapproved the July 7, 2006 IDEQ water quality standard rule submittal. The disapproval affects 167 of Idaho's revised human health criteria for 88 toxic pollutants. DEQ's proposed rule changed the fish consumption basis for determining the toxic standard from 6.5 grams per day (g/day) to 17.5 g/day. EPA disapproved the proposed criteria because EPA believes that the derivation of the criteria does not protect Idaho's designated uses. According to EPA, the information that EPA reviewed suggests

WATER BRIEFS

that fish consumption among some Idaho population groups is greater than 17.5 g/day.

Similar findings of higher fish consumption rates for tribes and other populations have already led to human health water criteria based on fish consumption of 175 g/day in Oregon (see Williams, TWR #32 & Brief, TWR #89) and ongoing efforts in Washington State (*see* Brief, *TWR* #103 and Washington Department of Ecology Director Maia Bellon Interview, *TWR* #114).

For info: Don Essig, IDEQ Water Quality Standards Lead, 208/ 373-0119 or don.essig@deq.idaho.gov IDEQ Fish Consumption Rate Rulemaking website: www.deq.idaho.gov/58-0102-1201

ENFORCEMENT REPORT CA

2013 ACTIONS

The California State Water Resources Control Board (SWRCB) recently released it 2013 Enforcement Report addressing violations of Waste Discharge Requirements (WDRs) for discharges to surface water during 2013. Wastewater facilities discussed in this report are those facilities that are permitted to discharge pollutants to surface waters and include sewage treatment plants, food processors, oil refineries, power plant cooling waters, pulp and paper mills, mining operations, fish hatcheries, etc.

This report meets the requirements in section 13385(o) of the California Water Code to continuously report and update enforcement information. The report includes a compilation of the number of violations of waste discharge requirements in the previous calendar year (including stormwater enforcement violations), a record of the formal and informal compliance and enforcement actions taken for each violation (including stormwater enforcement actions), and an analysis of the effectiveness of current enforcement policies, including mandatory minimum penalties.

One section of the report provides an analysis of the effectiveness of current enforcement policies including Mandatory Minimum Penalties (MMP). Mandatory penalty provisions are required by California Water Code section 13385(h) and (i) for specified violations of NPDES permits. For violations that are subject to mandatory minimum penalties, the Regional Board must either assess an Administrative Civil Liability (ACL) for the mandatory minimum penalty or assess an ACL for a greater amount. California Water Code Section 13885(h) requires that a mandatory minimum penalty of $3,000 be assessed by the Regional Board for each serious violation. A serious violation is any waste discharge that exceeds the effluent limitation for a Group I pollutant by 40 percent or more, or a Group II pollutant by 20 percent or more. California Water Code section 13885.1 also defines a serious violation subject to MMP a failure to submit a compliance self monitoring report for each complete period of 30 days.

A key performance measure for the Water Board's enforcement program is the compliance rate with requirements. Of special significance, because of their threat to water quality, is the compliance rate for NPDES Wastewater Major Facilities. Figure 5, Number of NPDES Wastewater Major Facilities 2000-2012 Compliance Rates, shows that compliance rates among Major NPDES wastewater facilities are improving overtime. Not only has the total number of Major facilities with violations recorded been reduced but the number of facilities with more than 25 violations during the year has seen a significant reduction, going from 31 in the year 2000 to only 13 in 2007 and 18 in 2010.

For info: Rafael Maestu, SWRCB, 916/ 341-5894 or Rmaestu@waterboards.ca.gov. Report at: www.waterboards.ca.gov/publications_forms/publications/2013_13385report/index.shtml

FRACKING VERDICT TX

CIVIL SUIT DAMAGES

A Dallas jury on April 22 awarded a local family $3 million for the illnesses they suffered from exposure to contaminated groundwater, solid toxic waste and airborne chemicals generated by natural gas "fracking" operations surrounding their 40-acre ranch. The verdict against Aruba Petroleum is seen as a landmark decision for opponents of fracking, or hydraulic fracturing, the process of drilling and injecting high-pressure fluid into the ground in order to fracture shale rock to release natural gas. The verdict included $275,000 for the Parr's property loss of market value and $2 million for past physical pain and suffering by Bob and Lisa Parr and their daughter, $250,000 for future physical pain and suffering, and $400,000 for past mental anguish. *Parr et al. v. Aruba Petroleum Inc*., Case No. CC-11-01650-E, County Court at Law No. 5, Dallas County, TX (4/22/14).

Robert and Lisa Parr, along with their young daughter, began experiencing health problems in 2009, after Aruba began drilling the first of 20 wells which the company operates less than two miles from the Parr's ranch near Decatur, Texas, about 45 miles northwest of Fort Worth. In less than three years, the family experienced chronic migraines, rashes, dizziness, nausea and chronic nosebleeds, including an incident when their daughter awoke in the middle of the night covered in blood. Livestock and pets on the family's ranch were also affected with nosebleeds and other illnesses.

Aruba argued that it had complied with air quality and drilling safety guidelines set by the Texas Railroad Commission and Texas Commission on Environmental Quality (TDECQ). Aruba told jurors the Parrs could not prove it was one of Aruba's wells that caused them to get sick because the gas wells it drilled, eight within a mile of the Parr land and 14 within two miles, are all over a landscape which features several dozens of other drilling rig operations.

For info: Complaint at: www.dmlawfirm.com/wp-content/uploads/2014/04/Parr-11th-Amended-Petition.pdf

WATERWAY TOOL US

APP & WEBSITE

EPA released an enhanced version of "How's My Waterway" on April 18, an app and website to help people find information on the condition of thousands of lakes, rivers and streams across the United States from their smart phone, tablet, or desktop computer. How's My Waterway uses GPS technology or a user-entered zip code or city name to provide information about the quality of local water bodies. The new version of the site includes data on local drinking water sources, watersheds, and efforts to protect waterways, as well as a map-oriented version of "How's My Waterway" designed for museum kiosks, displays and touch screens.

For info: Julia Ortiz, EPA, 202/ 564-1931, ortiz.julia@epa.gov or www.epa.gov/mywaterway

WATER BRIEFS

SUPERFUND CLEANUP CA

HUMBOLDT BAY SITE

EPA, in coordination with the US Coast Guard, announced on March 28 the agencies will begin removing millions of gallons of hazardous materials and toxic sludge from the former Samoa Pulp Mill site in Samoa, California as part of a joint cleanup effort. "Removing this massive toxic legacy from the Humboldt Bay shoreline will ensure the safety of residents and protection for the environment and wildlife," said EPA Regional Administrator Jared Blumenfeld. "The livelihood of thousands of Northern Californians relies on the health of this bay, so it is critical we begin this clean up now."

From its investigation, EPA determined that all storage tanks holding the hazardous waste were leaking or failing, and several of the tanks posed an immediate risk to human health and the environment due to potential runoff from the site to Humboldt Bay, which is only 800 feet from the site. Waste from the site will be trucked to a facility in Longview, Washington for treatment and reuse. Following site cleanup, the Harbor District of Humboldt Bay plans to reuse the site for aquaculture purposes, including oyster and caviar farming.

Approximately 20 tanks containing 3 million gallons of highly caustic liquids, 10,000 gallons of various acids, 10,000 tons of corrosive sludge, 3,000 gallons of turpentine, several laboratories with approximately 1,000 containers of a wide range of chemicals, and several thousand containers of various types will be removed as part of the effort. The former Samoa Pulp Mill site is a 70-acre industrial pulp manufacturing facility that had been in operation from 1963 until 2008. After preparations for a potential resumption of mill activities failed in August 2013, the site was sold to the harbor district. Shortly thereafter, EPA was contacted by the district for assistance to assess the site under the agency's emergency cleanup program.

For info: David Yogi, EPA, 415/ 972-3350, yogi.david@epa.gov or www.epaosc.org/site/site_profile.aspx?site_id=8891

WATER CONTRACTS CA

RECLAMATION RENEWALS

On April 16, a unanimous eleven-judge panel of the US Ninth Circuit Court of Appeals (Ninth Circuit) overturned two earlier court rulings that upheld the federal government's renewal of several dozen long-term water supply contracts for diversions from the Bay-Delta ecosystem in 2004 and 2005. The Ninth Circuit sided with plaintiffs Natural Resources Defense Council (NRDC), California Trout, San Francisco Baykeeper, Friends of the River and The Bay Institute. The Ninth Circuit concluded that renewal of these water supply contracts by the Bureau of Reclamation (Reclamation) violated Section 7(a)(2) of the Endangered Species Act, which requires that federal agencies must consult with the US Fish & Wildlife Service or NOAA Fisheries prior to taking any agency action that could affect an endangered or threatened species or its critical habitat. *NRDC, et al. v. Sally Jewell, et al.*, Case No. 09-17661 (Ninth Circuit 2014).

The Ninth Circuit "reaffirm[ed] that Section 7(a)(2) requires such consultation, so long as the agency has 'some discretion' to take action for the benefit of a protected species." *Slip Op*. at 6. The Ninth Circuit held that Reclamation "was required to engage in Section 7(a)(2) consultation because, in renewing the challenged contracts, it retained 'some discretion' to act in a manner that would benefit the delta smelt." The case was remanded to the lower court for further proceedings.

Discussion of the standard regard "some discretion" highlights the Ninth Circuit's rationale. "Whether an agency must consult does not turn on the degree of discretion that the agency exercises regarding the action in question, but on whether the agency has any discretion to act in a manner beneficial to a protected species or its habitat." *Id*. at 17.

Applying the standard regarding "some discretion," the Ninth Circuit pointed out that, "First, nothing in the original Settlement contracts requires the Bureau to renew the Settlement contracts." This was based on use of the permissive "renewals may" language in the contracts. *Id*. at 19. The Ninth Circuit went out to hold that even assuming that the contracts were required to be renewed, "[N]othing in the provision [in the Settlement contracts] deprives the Bureau of the discretion to renegotiate contractual terms that do not directly concern water quantity and allocation. …the Bureau could benefit the delta smelt by renegotiating the Settlement Contracts' terms with regard to…their pricing scheme or the timing of water distributions." *Id*. at 19-20.

Mootness and standing issues were also ruled on by the Ninth Circuit in the opinion.

For info: Decision at: http://docs.nrdc.org/water/files/wat_14041601a.pdf

EPA STRATEGIC PLAN US

CLIMATE CHANGE EMPHASIS

On April 10, EPA issued its fiscal year 2014 to 2018 Strategic Plan, which provides a blueprint for advancing EPA's mission to protect public health and the environment. The plan envisions a new era of partnerships with state and local governments, tribes, federal agencies, businesses, and industry leaders to achieve environmental benefits in a pragmatic, collaborative way. EPA Administrator Gina McCarthy said, "We are heeding President Obama's call for action on climate change, the biggest challenge for our generation and those to come, by building strong partnerships at home and around the world. We are working to mitigate this threat by reducing carbon pollution and other greenhouse-gas emissions and by focusing on efficiency improvements in homes, buildings and appliances."

The five strategic goals in EPA's plan include: addressing climate change and improving air quality; protecting America's waters; cleaning up communities and advancing sustainable development; ensuring the safety of chemicals and preventing pollution; and protecting human health and the environment by enforcing laws and assuring compliance.

For info: Brooke Hanson, EPA, 202-564-0037, ocfoinfo@epa.gov or www2.epa.gov/planandbudget/strategicplan

CALENDAR

May 14-15 CA
Flood Management Tour, Stockton. Presented by Water Education Foundation. For info: www.watereducation.org/toursdoc.asp?id=2979

May 14-16 MN
National Pretreatment & Polution Prevention Workshop, Minneapolis. Deport Renasissance Minneapolis Hotel. Presented by National Ass'n of Clean Water Agencies. For info: www.nacwa.org/index.php?option=com_content&view=article&id=7&Itemid=4

May 15-17 OR
3rd Symposium on Urbanization & Stream Ecology, Portland. Crowne Plaza Hotel. Joint Meeting of Society for Freshwater Science & Ass'n for the Sciences of Limnology & Oceanography. For info: http://urbanstreams.wordpress.com/

May 16 OR
Oregon State Bar Agricultural Law Section Annual "Round-Up" CLE, The Dalles. Columbia River Gorge Discovery Ctr. For info: Helen Nelson, 541/ 917-0100 or helen@eechlaw.com

May 16 CA
Overview of Water Law & Policy in California Course, Sacramento. Sutter Square Galleria, 2901 K Street. For info: UC Davis Extension, http://extension.ucdavis.edu/

May 16 CA
Orange County Water Summit, Anaheim. Disney's Grand Californian Hotel. Presented by Orange County Water District. For info: www.ocwatersummit.com/

May 16 AZ
EnWaP Regional Workshop on the Future of Water for Arizona's Natural Areas, Flagstaff. USGS Bldg., 2255 N. Gemini Drive, 12-4:30pm. Presented by Water Resources Research Center. For info: https://wrrc.arizona.edu/

May 19-20 NV
18th Annual Water Reuse & Desalination Research Conference, Las Vegas. Westin Hotel. Presented by WateReuse Ass'n. For info: www.watereuse.org/foundation/research-conference-18

May 19-20 Germany
Sustainability in the Water-Energy-Food Nexus Conference, Bonn. For info: http://wef-conference.gwsp.org/

May 21-22 ID
2014 Water Reuse Conference, Boise. Riverside Hotel. For info: www.deq.idaho.gov/assistance-resources/conferences-trainings/2014-water-reuse-conference.aspx

May 21-23 Mexico
Water, Energy & Climate Conference 2014 - IWA, Mexico City. Presented by the International Water Ass'n. For info: www.iwahq.org/28b/events/iwa-events/2014/wecmexico2014.html

May 22 CA
Achieving a New Normal in California Landscapes Workshop, Rancho Cucamonga. Etiwanda Gardens 8am-5pm. Presented by California Urban Water Conservation Council. For info: www.eventbee.com/v/landscape-south

May 22 OR
Article III Standing - An Update (Brownbag), Portland. Markowitz Herbold Glad & Mehlhaf, 1211 SW 5th Ave. Presented by OSB Environmental & Natural Resources Section. For info: Anzie Nelson, Anzie.Nelson@oprtofportland.com

May 28-30 TX
Southwest Stream Restoration Conference, San Antonio. Hyatt Regency Riverwalk. For info: http://southweststream.org/

May 29 CA
Achieving a New Normal in California Landscapes Workshop, Citrus Heights. Citrus Heights Community Ctr. Presented by California Urban Water Conservation Council. For info: www.eventbee.com/v/landscape-north

May 30 CO
Plant Identification on the Dolores River: Plants of the Riparian Corridor Workshop, Bedrock. Presented by Tamarisk Coalition. For info: http://tamariskcoalition.wildapricot.org/

June 2-5 OR
Water Without Borders: ASCE Environmental & Water Resources Institute Congress, Portland. For info: www.asce.org/conferences/ewri-congress/

June 3-4 CA
California Bioresources Alliance Symposium, Davis. UC Davis, Buehler Alumni & Visitors Ctr. For info: UC Davis Extension, http://extension.ucdavis.edu/

June 5 CA
Tribal Water Law & Policy Course, Sacramento. Sutter Square Galleria, 2901 K Street. For info: UC Davis Extension, http://extension.ucdavis.edu/

June 5-6 TX
Endangered Species Act Conference, Austin. Omni Hotel at Southpark. For info: CLE Int'l, 800/ 873-7130 or www.cle.com

June 5-6 CO
Water & Air Quality Issues Associated with the Oil & Gas Boom: The Evolving Framework of Regulation & Management - Martz Summer Water Conference, Boulder. Wolf Law Bldg. Presented by Getches-Wilkinson Center. For info: Doug Kenney, Getches-Wilkinson Center, douglas.kenney@colorado.edu or www.colorado.edu/law/research/gwc/events

June 5-6 DC
Climate Change Resilience and Governance Conference, Washington. American Ass'n for the Advancement of Science Hdqts. For info: http://aaaspolicyfellowships.org/event/climate-change-resilience-and-governance

June 8-11 MA
American Water Works Ass'n Annual Conference & Exposition, Boston. Boston Convention & Exhibition Ctr. For info: www.awwa.org/conferences-education/conferences/annual-conference/program.aspx

June 9-11 OH
Field Methods: Groundwater Sampling & Analysis Course, Westerville. Presented by National Ground Water Ass'n. For info: www.ngwa.org/Events-Education/shortcourses/Pages/226jun14.aspx

June 9-12 NV
New MODFLOW Course: Theory & Hands-On Applications, Las Vegas. Presented by National Ground Water Ass'n. For info: www.ngwa.org/Events-Education/shortcourses/Pages/258jun14.aspx

June 9-13 TX
Seventh International Conference on Environmental Science & Technology, Houston. Crowne Plaza. Presented by American Academy of Sciences. For info: www.aasci.org/conference/env/2014/index.html

June 12-13 CA
California Water Law Conference: Recent Cases & Water in the 21st Century, San Diego. The Westin. For info: CLE Int'l, 800/ 873-7130 or www.cle.com

June 12-13 WY
Wyoming Water & Energy Law Conference, Cheyenne. Little America. For info: CLE Int'l, 800/ 873-7130 or www.cle.com

The Water Report
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CALENDAR

(continued from previous page)

June 12-13 CA
Practical Applications for Green Roofs & Rainwater Harvesting Course, Davis. Da Vinci Bldg., 1632 Da Vinci Ct. For info: UC Davis Extension, http://extension.ucdavis.edu/

June 18-20 CA
Bay Delta Tour, Sacramento. Presented by Water Education Foundation. For info: www.watereducation.org/toursdoc.asp?id=2979

June 18-20 MA
Water Systems, Science & Society Under Global Change: UCOWR/NIWR/CUAHSI 2014 Conference, Medford. Tufts University. Presented by Universities Council on Water Resources. For info: http://ucowr.org/conferences/ucowr-niwr-annual-conference-registration

June 19-20 WA
Washington Water Law Seminar, Seattle. Red Lion Hotel, 1415 Fifth Ave. For info: Law Seminars Int'l, 800/ 854-8009, registrar@lawseminars.com or www.lawseminars.com

June 23-25 OH
Principles of Groundwater: Flow, Transport & Remediation Course, Westerville. Presented by National Ground Water Ass'n. For info: www.ngwa.org/Events-Education/shortcourses/Pages/131jun14.aspx

June 25 WA
Stormwater Law & Regulation Seminar, Seattle. City University of Seattle, 521 Wall Street. For info: The Seminar Group, 800/ 574-4852, email: info@theseminargroup.net, or website: www.theseminargroup.net

June 25 WA
Celebrate Water Fundraiser & CLE Workshop, Seattle. Ivar's Salmon House, CLE at 4-5pm; Fundraiser 5:30-7:30pm. Presented by Center for Environmental Law & Policy. For info: www.celp.org/events/celebrate-water/

June 30-July 2 NV
2014 Summer Speciality Conference: Integrated Water Resources Management: From Theory to Application, Reno. Nugget Casino Resort. Presented by American Water Resources Ass'n. For info: www.awra.org

July 13-16 OR
National Ass'n of Clean Water Agencies Summer Conference, Portland. The Nines. For info: www.nacwa.org/index.php?option=com_content&view=article&id=7&Itemid=4

July 16-18 MT
Western States Water Council's 175th (Summer) Council Meeting, Helena. Holiday Inn Conference Ctr. Downtown. For info: www.westernstateswater.org/upcoming-meetings/

July 15-18 South Africa
International Ass'n for Sediment Water Science Conference, Grahamstown. Rhodes University. For info: www.iasws2014.co.za/

July 17-19 CO
Rocky Mt. Mineral Law Foundation 60th Annual Institute, Vail. For info: www.rmmlf.org

July 18 HI
Hawaii's Shoreline & Coastal Law & Regulation Seminar, Honolulu. YMCA. For info: The Seminar Group, 800/ 574-4852, email: info@theseminargroup.net, or website: www.theseminargroup.net