The Water Report™

Water Rights, Water Quality & Water Solutions in the West

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MAIA BELLON, DIRECTOR OF ECOLOGY

INTERVIEW OF MAIA BELLON, DIRECTOR OF THE WASHINGTON STATE DEPARTMENT OF ECOLOGY

Interviewed by Chris Pitre, Golder Associates (Seattle, WA)

Maia Bellon, Director of Ecology

INTRODUCTION

Maia Bellon was appointed the Director of the Washington State Department of Ecology (Ecology) by Washington Governor Jay Inslee in February 2013. This interview presents Ms. Bellon's perspectives on her position, stewardship, priorities, constraints she will deal with, and the legacy she aims to leave.

[*Editors' note: Director Bellon will be the Keynote Speaker at the upcoming annual conference of the American Water Resources Association's Washington Section on Thursday, September 26th in Seattle, Washington. The Water Report is very happy to be helping sponsor this event.*]

Before appointment as Director, Ms. Bellon worked as the deputy program manager for the Water Resources program at Ecology (2010-13) — responsible for sustainable management of water, including the allocation of water and protection of water rights, instream flows, and environmental functions. Prior to joining Ecology, Ms. Bellon served as an assistant attorney general with the Ecology Division of the Washington State Attorney General's Office. In that role she provided both client advice and litigation support for Ecology on a broad array of issues ranging from the State Environmental Policy Act to the Public Records Act.

Ms. Bellon was a member of the Waste Section of the Ecology Division from 1994 to 2000. During that time she served as the lead attorney for the underground storage tank program and was Ecology's lead advisor on mining and voluntary cleanup issues associated with the State's Model Toxics Control Act. She also served for two years as the lead attorney for Ecology's Air Quality Program.

From 2000 to 2001, Ms. Bellon served as the special assistant to the president for Civil Rights and Legal Affairs at The Evergreen State College in Olympia, Washington. She then returned to the Ecology Division of the Attorney General's Office in 2001 and focused on water law for the next nine years. She also served on the Executive Committee of the Environmental and Land Use Law Section of the Washington State Bar Association from 2005-2010.

Ms. Bellon is a graduate of The Evergreen State College and earned her law degree from Arizona State University.

For *The Water Report*, Chris Pitre of Golder Associates — environmental and engineering consultants with offices across the western US and around the world — spoke with Bellon on July 18, 2013.

Chris Pitre, Golder Associates

WA Ecology Director

Budget Issues

General Fund

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Director Bellon is the keynote speaker at the upcoming conference "Future Directions In Water Resource Management" of the Washington Section of the American Water Resources Association, which Mr. Pitre is co-chairing.

BUDGET

Chris Pitre: Thank you for making the time to share your perspectives. With the time we have available, we could pick any one subject to discuss, but we'll do our best to cover as broad a spectrum of your responsibilities as we reasonably can, with a focus on water resources. It's been "right into the fire" from day one of your appointment half a year ago, starting with the Hanford Nuclear Reservation tank leaks, to representing your Department in the epic state budget deliberations that ended just a few weeks ago. How have you fared?

Maia Bellon: The budget process was an intense effort into which I threw myself body and soul — requiring total commitment not only from myself but also from my staff. Part of it was that we were very vigilant and engaged with the Legislature, not only with water resources and water quality but we also had a big year on the Model Toxics Control Act. This effort included all of our program folks engaged and providing information or redrafting bills and writing budget provisos, not only with legislators and their aides, but also with their staff. It has been worth it and Ecology has fared well, considering these economically difficult times. Since the start of the 2007-09 biennium (when the Great Recession started) to the just-enacted 2013-15 biennial budget, Ecology's total budget has dropped from $600 million (M) to $509M. Ecology's budget consists of two principal parts: 1) the operational budget, which is comprised of funds committed to specific programs; and 2) general funds in which Ecology has more discretion in the allocation.

The operational budget has declined by about 2% (from $468M to $458M). The decrease in the operational budget (consisting of funds committed to specific programs) has been softened by an increase of more than $21 million in federal funds (from $86M to $107M). These federal funds are directed into specific programs, such as for the recovery of Puget Sound. There is risk that these federal funds may be ratcheted back as a result of the federal sequester.

The State General Fund, with which Ecology has more discretion on its distribution, has decreased more than 60% (from $132M to $51M). We took a few hard hits, including the litter program and watershed planning. This large reduction in the general fund has been partially offset in the overall budget by increases in dedicated environmental funds supported by the Hazardous Substance Tax (Model Toxics Control Act [MTCA] funds) and by increased federal funding. The Water Resources Program is the most reliant of our programs on the general fund — 98% for permitting work, and 85% overall.

New capital appropriations have increased from $428M (2007-09) to $766M (2013-15). These are primarily for new investments in stormwater projects, flood management projects, and toxic site cleanups. These agency capital budget increases are primarily pass-through dollars to our local partners for a wide range of environmental and public health projects through competitive applications such as the State Revolving Fund.

Pitre: How will Ecology exercise its discretion in allocating funds?

Bellon: That's an interesting question. Ecology obtains funding from 40 dedicated funds, each with its own authorized use in either state law or by federal agreement. The most flexibility the agency has is from non-provisoed [i.e., without attached conditions] State General-Fund dollars but these dollars have been significantly reduced in the agency since the start of the "Great Recession."

Ecology is also required by the State Office of Financial Management (OFM) to budget all of our operating budget dollars by "activity." Currently, Ecology has 60 "activities" that make up our entire operating budget. Any changes the agency wants to make between these "activities" must be reviewed and approved by OFM.

Pitre: How do you see budget issues affecting Ecology's water programs, both the short- and long-term?

Bellon: Since 2009-11, the Water Resources Program (WRP) has reduced its operational staffing by approximately 40 **f**ull-**t**ime **e**mployees (FTEs). Compared to a high of 165 FTEs at the start of the 09-11 biennium, WRP has roughly 126 active FTEs currently. This includes all staff dedicated to the Office of Columbia River (14) and the WRP (112).

WA Ecology Director

Processing Directive

Columbia Basin Staffing

Yakima Basin Plan Funding

The WRP operating budget is 85 percent dependent on General Fund funding. Despite the huge decrease in general funds over the past six years, the WRP will have a small increase in funding for the 2013-15 biennium, a total budget of $36.6M compared to the 2011-13 biennium ($35.8M). The program will likely restore some positions lost in regional offices since 2009-11, which will be put to work in water rights processing, dam safety, watershed technical assistance, and enforcement activities.

The final 2013-15 operating budget included a directive by the Legislature requiring the WRP to issue 500 or more water right decisions during fiscal year 2014 or be subject to a cut of $500,000 at the start of fiscal year 2015. So, adding back some of the staff lost over the past four years is critical to the program being able to meet the water right processing decision targets set by the Legislature.

While the WRP made operating budget reductions during the last four years, the staffing levels of the Office of Columbia River were maintained in order to continue important work on new water supplies in the basin that are funded in the capital budget as well as to provide initial support for the implementation of the Yakima Basin Integrated Plan (see Malloch/Garrity, *TWR* #106).

The Yakima Integrated Water Management Plan, the governor's first executive request legislation, received $32.1M in the 2013-15 budget plus $99.3M for the Teanaway Integrated Plan Purchase (*see* www.ecy.wa.gov/programs/wr/cwp/images/pdf/YBIP_Teanaway-13-032113.pdf). The $99.3M is not managed by Ecology but is a key component of the $32.1M provided to the agency to begin implementing the integrated plan.

WATER QUALITY

Pitre: What do you see as the priority issues facing Ecology's water quality programs and how is the agency addressing those priorities?

WQ Priorities

Bellon: Three priority areas in Ecology's water quality program include: 1) updated human health criteria, related to human fish consumption; 2) agriculture and water quality coordination; and 3) stormwater management.

Fish Consumption Standards

To protect people on the basis of what they eat fish-wise, we are conducting an inclusive, public process to develop updated surface water quality standards for toxic chemicals that can affect human health. The human health criteria are based on a number of factors, including how much fish Washingtonians eat. We are updating two rules. One is the formula for human health criteria. The other is to protect water quality standards by keeping regulated dischargers in compliance with NPDES permits while they work effectively toward meeting permit limits and controlling sources of pollutants. We expect to have draft rules out early next year on fish consumption standards and are involving tribal nations, industries, municipalities, citizens, and others in the process.

On agriculture and water quality coordination, we are working to improve the coordination between state and federal agencies to protect clean water on agricultural lands. We've been engaging with the Washington Conservation Commission, the National Resources Conservation Service, the US Environmental Protection Agency (EPA), and Washington Department of Agriculture to make sure we're getting our best coordination on good agricultural practices and non-point runoff.

Pitre: What about the Yakima Basin's groundwater nitrate problem?

Groundwater & Nitrates

Bellon: It is definitely something that we are working on. EPA is taking the lead on that project. They have undertaken installation of monitoring wells, and establishment of Agreed Orders on agricultural practices. We are now trying to coordinate with EPA and the regulated community to make sure we collectively put our best foot forward to come up with a solution. The Washington Department of Agriculture is taking the lead on a nutrient management program.

No-Point Pollution

There are many good reasons to protect our clean water, but a big reason right now is salmon and steelhead recovery. At the request of EPA and the National Oceanic and Atmospheric Administration (NOAA) and in response to Western Washington Treaty Tribes, we will be developing additional measures to protect and recover our iconic salmon runs. These changes will occur, in part, through significant updates Ecology will develop to Washington's Coastal Nonpoint Pollution Control Program and the State's Nonpoint Pollution Source Program. We also plan to provide funding for projects that protect natural areas along streams to protect key spawning and rearing areas for salmon and steelhead. We know that protecting and increasing stream-side buffers will be a challenge for landowners and we plan to forge as many partnerships as we can — and leverage funding — to get this done.

Stream-side Buffers

WA Ecology Director

Stormwater Initiatives

Stormwater management is a major initiative for us. Ecology is getting $100 million out the door for stormwater improvements under the new Environment Legacy Stewardship Account (ELSA). The Legislature created the fund by a one-time transfer of money from the State and local toxics account. Of that, $18.7M went for provisoed stormwater projects, and $81M is provided as grants to cities and counties under specific allowed uses and conditions. For the first time, up to $15M of the funds can be used by our state's most populated, stormwater-permitted areas for planning and design activities for construction projects. This lets them identify quality construction projects to compete for a share of the remainder of the funding (about $65M) during next year's integrated funding cycle process. And another first, the budget language requires Ecology to develop and implement an ongoing long-term competitive stormwater financial assistance program with stakeholders by July 1, 2015.

Pitre: Last fall, *The Water Report* reported on the beginning of an effort to develop a "Joint Regional Water Quality Trading Agreement" between Washington, Oregon, and Idaho. Can you update us on what progress been made in this regard and if or when such an Agreement might be anticipated?

Water Quality Trading

Bellon: The "Joint Regional Agreement" refers to a US Department of Agriculture grant-funded project being facilitated by the Willamette Partnership, an Oregon non-profit group that has been promoting temperature trading. The purpose of the project is for the states of Washington, Oregon, and Idaho, along with EPA, to discuss our separate water quality trading policies and to see if we can agree on some best practices for trading that would apply to all three states. The outcome of the Agreement is likely to be a set of recommended steps to take and things to consider when designing a trading program for a specific watershed. So far, the states and EPA have met twice to discuss various aspects of a good trading program.

Pitre: What's the motivation to develop a regional system?

Bellon: The motivation is to provide consistency across the region. There is no need to re-invent the wheel multiple times — once for each state and once for the federal government. It facilitates administration, makes it easier for businesses to work across state lines in the same region, and gets all of the regulatory agencies on the same page. We also share common boundary waters such as the Columbia River.

PUGET SOUND

Pitre: In 2007, the Puget Sound Partnership was created by the Washington Legislature with the mission of overseeing an effort to restore Puget Sound's environmental health by 2020. Yet, the health of Puget Sound continues to decline. How is Ecology going to respond? Is restoration by 2020 on schedule?

Bellon: Saving Puget Sound is one of Ecology's top priorities. However, Puget Sound recovery is a larger undertaking than any one entity or any one agency can accomplish. Ecology is bringing to bear our best science and research to understand the challenges facing Puget Sound and help find workable solutions. Ecology has a critical role supporting the Action Agenda of the Puget Sound Partnership in preventing pollution from urban stormwater runoff and protecting and restoring habitat. There are a number of priority areas where Ecology is specifically responding to the action agenda of the Puget Sound Partnership.

Puget Sound Action Agenda

Ecology participated in a multi-year, multi-agency effort to understand how toxic chemicals get to the Puget Sound region.

The assessment has led to important actions including:

Ecology Actions

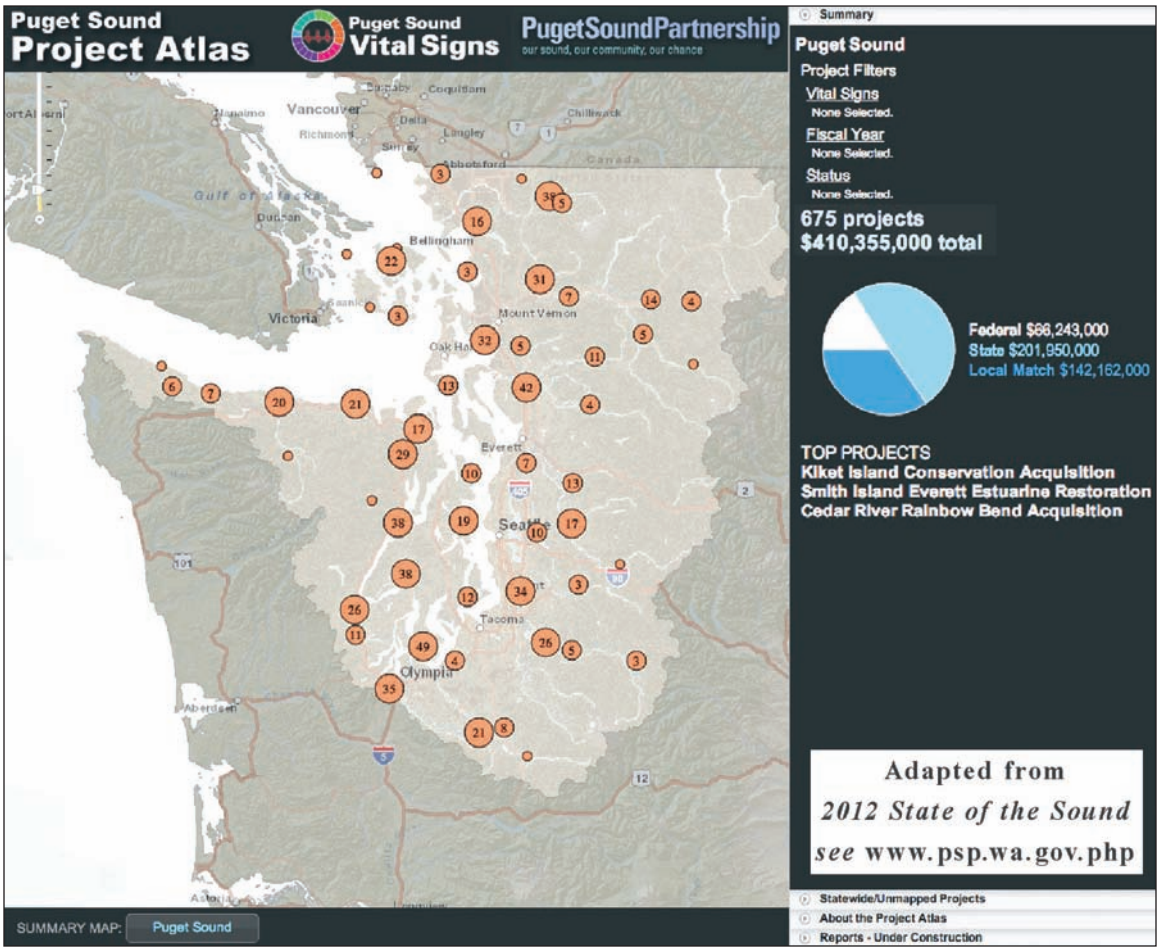
- Funding creosote-coated marine piling removal by the State's Department of Natural Resources and local governments;
- Collaborating with Seattle Public Utilities to conduct 100 hands-on workshops to help people detect, repair, and clean up oil and other fluid leaks from their vehicles;
- Partnering with the Washington State Department of Agriculture (WSDA) to conduct surveys of typical urban pesticide use that will help drive future education and outreach efforts; and
- Leading a Roofing Materials Task Force to engage roofing manufactures and installers to help determine which roofing materials might be key sources of arsenic, cadmium, copper, zinc, and phthalates.

Legislation

A second area Ecology has been helping the Puget Sound Partnership advance their agenda is by supporting State legislation and implementing State laws that phase out copper in brake pads and boat paint, ban lead wheel weights, and, ban or reduce allowable uses of PBDEs (polybrominated diphenyl ethers) in flame retardants.

WA Ecology Director

Puget Sound Projects



New Stormwater Permits (LID)

We have used the issuance of new and innovative stormwater permits that: reduce copper, lead, and zinc in runoff from boatyards and industrial sites; prevent sediment and other pollutants from leaving construction sites one acre or larger in size; and require municipalities to use **l**ow **i**mpact **d**evelopment (LID), where feasible. (See Payne, *TWR* #100).

Habitat Restoration

Ecology is leading the preservation and protection of coastal habitat by helping clean up, enhance, and restore Puget Sound habitat including securing about $40M in federal grants to acquire and protect more than 7,000 acres of coastal wetlands in Puget Sound. We are also launching the Governor's Shellfish Initiative to protect tribal, commercial, and recreational shellfish beaches including providing $4.5M in federal funds to local governments to fix residential septic systems and address runoff from livestock and pet manure as well as boat holding tanks.

Estuary Programs

Ecology very much wants to bolster the work of our partners in the Sound. We have awarded about $25M in EPA National Estuary Program funds to tribal, city, county, and other government entities to prevent, reduce, and control toxics and nutrients from entering Puget Sound. Additional funds have been awarded to local governments for beach monitoring and pollution source identification to keep our beaches free from fecal bacteria that come from failing septic systems, pets, and surface water runoff.

Pitre: What is the relationship between Ecology and the Puget Sound Partnership, Ecology being a department, and the Partnership being an agency?

Puget Sound Partnership

Bellon: The Puget Sound Partnership is the leader in directing the restoration of Puget Sound. They are the catalyst to identify where and how various entities can provide constructive contributions. For instance, in response to identified needs from the Puget Sound Partnership, Ecology banned: lead wheel weights; copper in brake pads and boat paint; and PBDE flame retardants — all to improve the quality of stormwater runoff and reduce the loadings of pollutants to Puget Sound.

WATER RESOURCES

WA Ecology Director

Pitre: Having served until recently as Ecology's Water Resources Program manager, what do you see as the biggest challenges facing the management of water resources in Washington?

Water Resources Tasks & Costs

Bellon: I will be providing more detailed information when I present as keynote speaker to the [Washington Section of the] American Water Resources Association conference coming up this September 26th in Seattle (see Calendar, this *TWR*), but here is some information just to pique curiosity. The Water Resource Program does not have a stable funding source and, in fact, funding has decreased over the past several years. The citizens and Legislature have expectations that we allocate water and develop and manage functioning water markets. However, once water is allocated there are permit development costs, metering, mitigation requirement costs, and other associated compliance work costs to the state. In an era of declining budgets we are not keeping up with the follow-up work after the decisions are made. This holds for other work we do as well — new instream flow rules have lifecycle costs associated with them, as do new wells, and new adjudications.

Rural Water Supplies

Many of the urbanized areas of the State have water supplies to support growth for years to come, or if not, they have the financial means to develop future supplies. This is not the case for many rural areas in the State where existing uses and future growth depends on new exempt wells. In some cases this is complicated by the demand for additional water for agricultural use and tribally-reserved water rights that have not been quantified. We are having good outcomes improving water supplies through the Office of Columbia River projects — but this is not the case in many other parts of the State.

Exempt Wells

One of my immediate priorities is to engage with local governments who have the ultimate authority to make land use decisions to find a path forward with respect to exempt wells — which are used to sustain development in rural areas without water system service — and appropriate water supply. This may involve a better weaving of the understanding of the scope and availability of water to better inform consistent land use decisions. We want to work on mitigation frameworks to allow continued exempt well installations while protecting environmental values such as instream flows and aquatic habitat.

Pitre: How is Ecology addressing these Water Resources priority issues?

"Lean" Ecology Improvements

Bellon: We continue to improve efficiencies in how we do our work through implementing "Lean" efficiency improvements so that we can accomplish as much as we can with the resources we have. [*See* Ecology's "Lean at Ecology" website: www.ecy.wa.gov/about/lean/index.html]. In addition, we are tracking our work more effectively and improving access to our data so we can explain the value of our work more easily to interested parties.

Columbia Basin Treaty

We are approaching water supply in rural areas on a watershed-by-watershed basis to resolve water supply and stream flow issues. In some cases the Legislature has supplied us with watershed specific funding for capital investments in watersheds to help with flow improvements and water supply.

Pitre: The Columbia Basin Treaty is coming up for its first renegotiation since its formation half a century ago, and may hugely affect Washington (see Miller, *TWR* #101 and Banks/Cosens, *TWR* #105). With everyone angling for something, how might Washington benefit? [The Washington Section of the American Water Resources Association convened a conference concerning the Treaty in October 2012, presentations of which can be viewed online at: http://waawra.org/Events/Conference2012/Presentations].

Bellon: The Canadian Columbia River Treaty has served the Northwest well for 50 years; however, modernization of the treaty could result in a number of potential benefits for the State of Washington.

The current treaty focuses on flood control and hydropower generation. Unless the treaty is amended, flood control operations in Canada will change to "called upon storage" which means we will need to rely more heavily on US reservoirs — for example, Grand Coulee, Hungry Horse, Libby, Albeni Falls, and Dworshak — to manage floods. This would, to some degree, reduce flexibility in managing US reservoirs for other objectives such as fish needs and water supply. A modified treaty that retains some assured flood storage in Canada may be beneficial in restoring that flexibility.

WA Ecology Director

New Treaty Issues

Payments to Canada for the Canadian Entitlement under the current treaty (that is, hydroelectric power transferred from the US to Canada in exchange for power revenues that accrue to US generators from releases of water into the US) are believed to be out of proportion to benefits actually received on the US side of the border. There is interest in determining whether an arrangement that would be more equitable to US power generators can be developed.

Additionally, the current treaty was established prior to passage of the Northwest Power Act, the Endangered Species Act, and the National Environmental Policy Act (NEPA). There is considerable interest in modifying current Columbia River operations to include ecosystem function as a major operational driver to facilitate recovery of salmon, steelhead, and other fish species in the Columbia River system. These other fish species include resident fish such as lamprey, sturgeon, and eulachon.

While these changes to the treaty are negotiated, it will be important that uses of the Columbia River for other purposes, such as navigation, recreation, and water supply, are protected and, where possible, enhanced. Derek Sandison, director of our Office of Columbia River, is a key individual in Ecology's public outreach and communication on this subject.

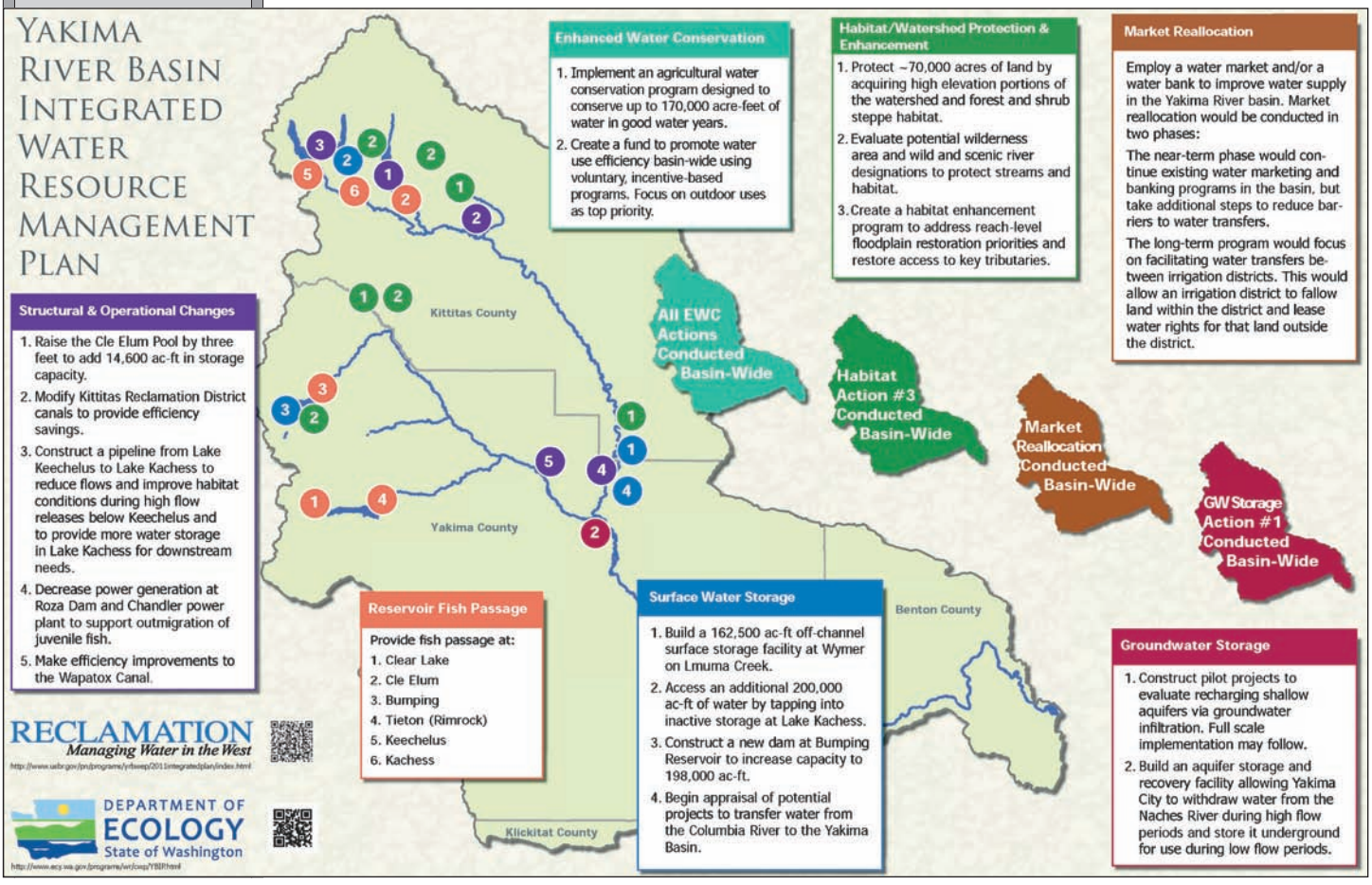
Pitre: Governor Jay Inslee's first request bill was the Yakima River Basin legislation. What is Ecology's role in implementing this Plan?

Yakima Basin Plan

Bellon: The Department of Ecology and the US Bureau of Reclamation (Reclamation) are joint sponsors of the Yakima River Basin Integrated Plan. This has involved years of concerted efforts by the two agencies to define the water supply and aquatic resource problems of the Basin. Now that the Legislature has passed the authorizing legislation for plan implementation and budgeted funds for its implementation, Ecology, in collaboration with Basin stakeholders, is mobilizing to realize several major projects. One of the bigger ones is collaboration with the Washington Department of Natural Resources and Washington Department of Fish and Wildlife to develop a community-based management plan for the 50,000 acre Teanaway Acquisition — an almost $100M investment.

Teanaway Acquisition

Another habitat related project is with Reclamation to complete final design work on the Cle Elum Dam fish passage facilities in order to ensure that the project construction is ready by the end of 2015. This project complements the return of sockeye salmon to the Upper Yakima Basin in 2012 for the first time in a century.



WA Ecology Director

Storage Projects

There are several major surface water storage engineering projects in the works with Reclamation involving feasibility studies and State Environmental Policy Act (SEPA)/NEPA environmental review for: the Cle Elum Pool Raise; Lake Kachess Inactive Storage; and Keechelus-to-Kachess Conveyance projects — to advance all those projects to shovel-ready status by the end of 2015.

Ecology is fully engaged with all of the other partners in the Yakima Basin Integrated Plan, including federal, tribal, environmental, agricultural, local government, and other entities. We will continue working collectively with stakeholders to get Congressional authorization and funding for the Integrated Plan.

Pitre: The effort of those involved in developing the Yakima River Basin Integrated Plan was validated last year when the Yakima River Basin Water Enhancement Project (YRBWEP) Workgroup received the inaugural Integrated Water Resources Management award from the national American Water Resources Association — which was received by Derek Sandison on behalf of Ecology. Congratulations on that! With the end of the Yakima Basin Surface Water Adjudication (known as "*Acquavella*") in sight, and the US Geological Survey (USGS) groundwater study complete, should Basin groundwater users anticipate increased scrutiny and/or regulation?

Closed Basin

Bellon: Already the Basin has experienced a great learning curve, with the closure of new unmitigated water withdrawals in the upper Kittitas Basin — the source of the Yakima River. And the State Supreme Court has further determined that counties must take into consideration both the legal and physical availability of water before making land-use decisions. The USGS study confirms we can no longer tap into underground aquifers as an alternative to surface water supplies. It will only exacerbate things. We're already short of water.

Conjunctive Management

The loophole of relying on wells exempt from obtaining a permit is no longer a safe bet in the Yakima Valley. Our cost benefit analysis has shown that well users that are backed by an existing water right not only protect themselves from being shut off during a dry year, they add value to their property. The culmination of the surface water right adjudication only solidifies the need to manage groundwater and surface water as one resource.

Water Banks Mitigation

On the basis of the USGS report, Ecology will largely require applicants for new water to seek water through a water transfer or water bank to see their projects move forward. The watershed and its residents will need to embrace a long-term strategy for water groundwater management — be it modeled after the Integrated Plan — and/or by formal rule. Otherwise, the adjudication sets us all up for a "call" on junior water right holders which means we all end up in court. [Editor's Note: a "call" is made when a senior water right owner calls for junior users to be regulated off, so that the senior can receive all of their water right in times of shortage].

Junior Groundwater Regulation

Pitre: Is Ecology preparing for a legal challenge for the curtailment of "junior" groundwater users on the basis of *Acquavella* in the Yakima Basin and the USGS groundwater study?

Bellon: The *Rettkowski* decision provides some direction in this example (see *Rettkowski v. Dept of Ecology*, 122 Wn.2d 219, 858 P.2d 232 (1993) — available online at: www.ecy.wa.gov/programs/wr/caselaw/images/pdf/sinkcrk.pdf). We understand the scope of senior water right holders, instream flow regulations, and we have the information from the USGS study, but what we're really trying to do is find solutions so that there is not a call to interrupt use, through mitigation, particularly for those who rely on such water for drinking use in their homes. We will respond accordingly on the merits of the case.

From: *Rettkowski v. Dept of Ecology*

CONCLUSION: I believe Ecology has the statutory authority to issue the cease and desist orders, and additionally that Ecology has the duty under the public trust doctrine to protect such public interests as exist in the waters of Sinking Creek. The majority's decision lacks a sound legal basis, will seriously and improperly interfere with Ecology's ability to regulate water rights, and ignores the interest of the people of this state in the essential natural resource of water. The decision is bad law and bad policy. To those who cry out that the majority's unsettling opinion constitutes the end of civilization as we know it, or that the sky is truly falling, do not despair. The Legislature must now address itself to a comprehensive water policy defining duties, assigning responsibility to perform those duties, and providing funding necessary to carry out those duties. The Legislature must consider whether western water law meets today's societal needs, given the understanding that water is not an infinite resource. The Legislature must now examine the water resources of this state and determine, for example (1) who controls those resources; (2) the extent of all government allocations of those water resources; (3) the present water usage from all sources, allocated and unallocated; (4) what water resources will be available in the future; (5) what future water needs will be; (6) how water allocations should be made; (7) what public interest is involved in water allocations and use; and, (8) if water allocations are to be changed as to existing users, whether under existing law that constitutes a taking for which compensation must be paid. The majority's opinion provides a legislative opportunity to address the difficult and politically sensitive issues involving allocation of water resources. Given the imperative that resources must be properly managed for all users — public, agricultural, industrial, hydroelectric, fish and wildlife, recreational — the majority's opinion may lead to comprehensive, well-considered water resource management that is workable and understandable.

WA Ecology Director

Climate & Snowpack Decline

Climate Change Response Strategy

Instream Flow Impacts

Pitre: Climate change is predicted to increase droughts and reduce snowpack storage. What will Ecology do to soften impacts?

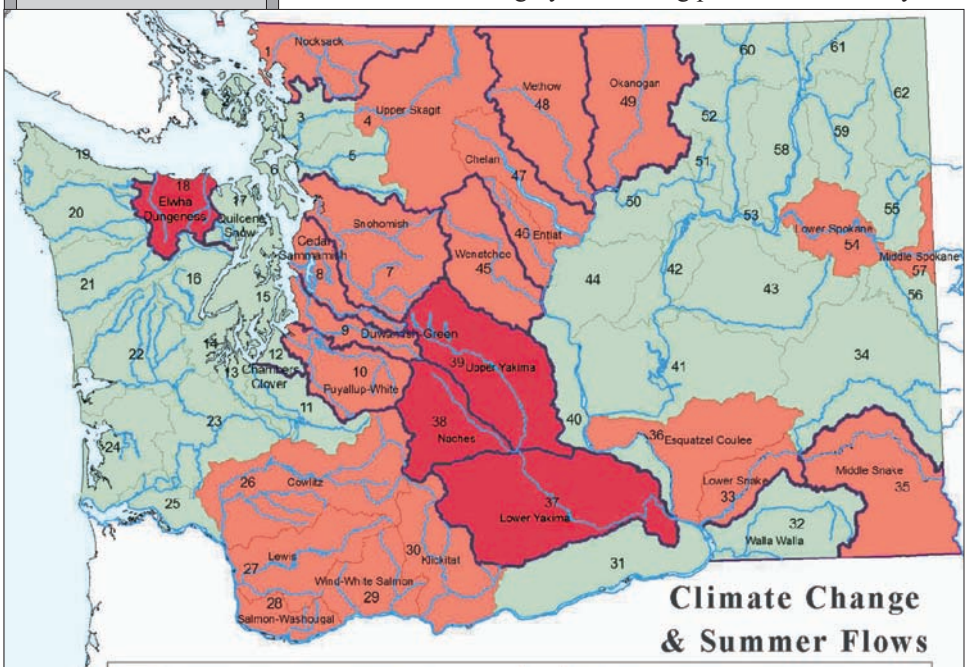
Bellon: Much of Washington's water supply is stored in snowpack and glaciers that flow into rivers. In Washington's Cascades, average snowpack declined about 25 percent between 1950 and 2006. Compared to the 1916-2006 historical average, spring snowpack across Washington State is projected to decline 28 percent by the 2020s, 40 percent by the 2040s, and 59 percent by the 2080s. This is not a pretty story.

Increasing temperature, declining snowpack, and earlier snowmelt increases the risk of summer water shortages and increases demand for water, resulting in hurt across the board: declines in irrigated agriculture production; reduced hydropower output; loss of freshwater salmon habitat; reduced drinking water supplies; and, all around higher water demand.

Facing these conditions, Ecology took the lead in developing Washington State's Climate Response Strategy [*see* www.ecy.wa.gov/climatechange/ipa_responsestrategy.htm]. It lays out a roadmap for State and local policymakers and planners to manage water resources and prepare for the unprecedented threats climate change poses to our economy and way of life. It includes the use of integrated water resource management approaches to improve water supply and water quality in vulnerable basins. Water conservation and efficiency programs have already significantly reduced the amount of water needed for irrigation, municipal, and industrial users, and we think a further profitable yield can be realized. We want to support the ability of State and local governments, tribes, watershed groups, water managers, and communities to identify risks and reduce vulnerability to climate impacts. The Yakima bill that was passed this year is responsive to climate change. This is a big, big, piece of legislation that will have an enormous impact in terms of providing a future management strategy for responding to climate change, understanding how to honor existing water supplies, and also enhance habitat and fisheries at the same time.

Pitre: There are a number of possible approaches to instream flow rulemaking. Hydrographs are expected to shift as a result of climate change. Is setting numeric flow targets realistic in the face of climate change?

Bellon: Climate change will present challenges in our state as snowpack diminishes and runoff occurs earlier in the year. Instream flow setting is a vital tool for protecting streamflows, especially in a climate change world. Numeric flows provide the legal and regulatory baseline necessary to protect senior rights and instream fish habitat. There may be performance-based approaches that could achieve equal or greater benefits with less lengthy rulemaking processes and costly rule implementation. Ecology intends to explore some of these alternatives if there are places in the State where it makes sense.



2040 Projected climate change impact on summer flows by watershed. Climate change will intensify current water needs of people, fish, and farms in at least 45 percent of the state.
Source: Washington Department of Ecology

Pitre: Ecology has recently used the Overriding Consideration of Public Interest (OCPI) tool in a number of contexts — from instream flow setting to making permitting decisions. What are the benefits and limitations of using this tool? Is it a high-maintenance means of governance?

Bellon: It is a case-by-case application, by law, and so requires that level of attention. OCPI is a mechanism in the State Water Code that allows Ecology to provide water for out-of-stream use that might result in diminishment of flows that are necessary for preserving instream resources. But Ecology applies this tool narrowly and in the context of a proposal that provides overall greater benefits to the instream resources. And, as did the prior Director of Ecology, I require that any such decisions come to me before they are made. We expect to get some guidance soon from the Washington Supreme Court on the Skagit River instream flow rule.

WA Ecology Director

Pitre: Ecology has developed several tools to provide better response to water resources (allocation) management, including: water conservancy boards; a cost re-imbursement program; water banking; and water rights examiner certification. Do you see a role for privatization in water resources management, and if so, in what form?

Water Supply & Reallocation

Bellon: The Legislature required that the State investigate each request for a new use and find whether water was available without impairment to existing rights. In more than a few basins across the State, those initial allocations have fully obligated the water that's reliably available to meet the needs of future uses. We're now faced with a different challenge: how can we efficiently and effectively manage reallocation of existing water rights to meet new uses that require reliable water supplies? We think Ecology's water rights trust program can provide answers.

In the Walla Walla, Yakima, and Dungeness Basins, Ecology is using the Trust Water Right Program to hold water rights that are relied on as mitigation for future water uses.

Water Banking

Each basin is a bit different, but generally:

- An existing senior water right is placed into the trust water right program — the water banking entity purchases a senior water right or has a senior water right and negotiates an agreement with Ecology for its management as an instream flow water right.
- The water banking entity and Ecology reports the consumptive impact of the new water use to be offset and debits that amount against the consumptive use credit associated with the senior trust water right.

Mitigation Certificates

- The banking entity can be a public agency, a nonprofit, or a private entity. Currently eight "open" water banks serve purchases of mitigation certificates in the Yakima Basin. There are also several water banks used by developers.

The Yakima water banks give some insight into the consequences of privatization of the water reallocation process:

- The process isn't completely privatized: the State still manages the trust water right, provides transparency and accounting, and provides the final trade approval through a water budget neutral determination.
- The price of a mitigation certificate isn't regulated by the State or a public entity; it's based on buyer-seller negotiations.

Pitre: Global warming is creating huge problems. How will Ecology provide leadership in this area?

Climate Change Impacts

Bellon: Govenor Jay Inslee recognizes Washington State's particular vulnerability to a warming climate — our snow-fed water supplies provide our drinking water, irrigation for agriculture, and nearly three-fourths of the electrical power we produce. Close to 40 communities along our 2,300 miles of shoreline are threatened by rising sea levels. Ocean acidification, which is created when carbon dioxide reacts with seawater and reduces the water's pH, threatens our abundant shellfish.

Ecology has been the lead State agency in developing a climate response strategy for all of Washington and will be closely tied to the workgroup formed by the 2013 Legislature to make recommendations for ways that Washington can meet the greenhouse gas emission standards it has already established. This "5 Corners" group, made up of the Governor, a Republican and Democratic state senator, and a representative of each party from the State House was established in SB 5802.

Pitre: You have now had a few months at the helm of Washington State's primary environmental regulatory agency. At this point, what do you envision will be your most important areas of effort and accomplishment during your tenure as Ecology's Director?

Governor's Goals

Bellon: I'll highlight a few things.

The Governor right now is finalizing his vision and mission and goals for the state of Washington, including a prosperous economy, world-class education, sustainable energy, and clean environment — so we're right there at the forefront in terms of our work of being a priority of Governor Inslee and his administration. These are very exciting times for the State of Washington — and for Ecology and our employees to have a direct connection to supporting those goals.

Water Availability & Land Use

With that rubric, healthy air, clean cool water, and healthy lands are our big piece and contribution in terms of the variety of work we do. I think that during my tenure, areas that will take a lot of effort and/or accomplishments I want to make are, again, in the areas of water resources. This includes the rural water supply issue and partnering with local government to ensure we are marrying up water availability with land use decision making — because it's only fair to Washingtonians that we get that right and not put people at risk of being a junior water right holder facing curtailment or being in a problematic situation in a water-short basin.

WA Ecology Director

Director's Priorities

Toxics Control

The other area that I want to be closely related to or involved in is implementing the Yakima Basin bill that was just passed and supporting the work of the Office of Columbia River, which has made incredible strides in terms of providing water supply solutions in eastern Washington. Stormwater management is also something I'm going to be working alot on. Human health criteria update will take a large effort that I'll be engaged in.

I'm also setting a large effort on Hanford cleanup issues and strengthening our relationship with US Department of Energy so we can make good, sustainable, cleanup decisions. This includes getting the waste treatment plant up and running to start processing waste at the Hanford facility — turning 50 million gallons of waste into glass logs and having it properly disposed of and stored. That will be a big piece of my work. That work started my very first week of my job when we got news that the first single shell tank was leaking on February 15th of this year.

Toxics reductions — another area I'm going to be focused on: whether children's products; baby products; or, toys in our environment. And then the Model Toxics Control Act (MTCA) work that we will be doing to ensure that the MTCA bill is implemented and that we do a better job in terms of reducing the amount of time it takes for us to do a cleanup. We did a Lean process improvement event on our cleanup work and we're trying to get a goal of reducing cleanups from 15 years and 12 years down to 5-to-6 years. This will be an incredible benefit to our state because it's turning "brownfields" (generally, disused industrial lands) into workable lands that turn around and provide benefits to our economy and jobs to Washingtonians.

Pitre: Maia, thank you very much for the time that you've shared with me. It is very much appreciated.

Bellon: You're welcome. I'm sure there is much more we could have delved into if we had more time, and we'll have that opportunity at the (WA) AWRA conference on September 26th.

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Chris Pitre is an Associate with Golder Associates working out of their Redmond (Seattle), Washington office. He has over 30 years of experience in natural resources, with the last 20 years focused on water resources management in Washington State. Chris practices a broad spectrum of water resource applications. Focus practice areas include hydrogeology, geochemistry, water supply, water rights, reclaimed water, and Aquifer Storage and Recovery/ Managed Aquifer Storage (ASR/MAR). Chris participated extensively in the watershed planning effort of the 2000s and enjoys the multidisciplinary aspects of integrated water resources management. Some of the projects in which he is currently involved include the Yakima Basin Integrated Plan, ASR projects across the Pacific Northwest, and environmental applications of wastewater. Chris provides: client guidance; project conception, development and management; cost control and logistical coordination; and the integration of technical and policy considerations. He has facilitated multi-stakeholder groups through water resource management processes by effectively communicating technical processes to technical and layperson audiences. Golder Associates is an employee-owned organization providing independent consulting, design, and construction services in their specialist areas of earth, environment, and energy.

Montana Compact

CSKT WATER RIGHTS COMPACT UNRATIFIED

MONTANA LEGISLATURE REFUSES TO RATIFY CONFEDERATED SALISH AND KOOTENAI TRIBES COMPACT

by Jay Weiner, Montana Assistant Attorney General
&
Mark Stermitz, Partner, Crowley Fleck PLLP (Missoula, MT)

INTRODUCTION

Compact Commission Successes

During its 2013 session, the Montana Legislature ratified water rights settlements between the State of Montana and the US Fish and Wildlife Service for the C.M. Russell Wildlife Refuge and the US Bureau of Land Management for the Upper Missouri Breaks National Monument. These are the 16th and 17th successful settlements negotiated by the Montana Reserved Water Rights Compact Commission (RWRCC), a State agency created specifically to negotiate quantification agreements — known as compacts — with those Indian tribes and federal agencies claiming federal reserved water rights in Montana.

CSKT Compact Bills Killed

However, two bills that would have advanced the settlement negotiated by the RWRCC with the Confederated Salish and Kootenai Tribes (CSKT) were killed in committee. This marked the first time in the 34-year history of the RWRCC that the legislature declined to ratify a reserved water rights settlement presented to it.

Under Montana law (Mont. Code Ann. § 85-2-702(3)), the CSKT now have until June 30, 2015, to file their water rights claims in the Montana general stream Adjudication. Though other opportunities may exist to secure a negotiated settlement before the courthouse doors are flung open, this is uncharted territory for Montana.

RESERVED WATER RIGHTS DOCTRINE AND THE RWRCC

"Winters" Rights

A federal reserved water right is created under federal law and is a right to use water implied from an act of Congress, a treaty, or an executive order establishing a tribal or federal reservation. These so-called "Winters rights" (from the 1908 US Supreme Court case *Winters v. U.S.* (207 U.S. 564) that first recognized them) are entitled to a priority date of the date the land was reserved — which in the case of Indian reservations make them some of the earliest water rights in Montana. Unlike water rights that arise under state law, moreover, these rights are measured not by the amount of water actually used but by reference to how much water is necessary to satisfy the purpose or purposes of the reservation. This amorphous standard can cause difficulty as tribes begin to assert these rights against junior yet long established non-tribal users.

Negotiated Compacts

In contrast to states that resorted to litigation to achieve definitive quantification of these federal reserved water rights, Montana created the RWRCC in 1979 specifically to negotiate "compacts for the equitable division and apportionment of waters" between the State and those tribes and federal agencies claiming federal reserved water rights (Mont. Code Ann. §§ 85-2-701, *et seq.*). The legislature intentionally structured the RWRCC as a bipartisan body. It has nine members, four selected by the Governor, one by the Attorney General (who is independently elected in Montana), and four appointed by the legislative leadership (a member of the majority and minority party from each chamber) (Mont. Code Ann. § 2-15-212). By statute, the RWRCC negotiates on behalf of the Governor, but as the water rights compacts it negotiates are both political and legal agreements, they must be enacted into state law and approved by the appropriate tribal and federal processes to be effective, and then the rights being recognized must be finally decreed by the Montana Water Court (Mont. Code Ann. § 85-2-702(2) and (3)). This approach has been very successful, allowing Montana to resolve outstanding reserved water rights claims for six Indian reservations and 11 federal enclaves (*see* Mont. Code Ann. §§ 85-20-201 to -1601; the two most recently approved settlements have not yet been codified) — thus avoiding expensive, divisive, and time consuming litigation.

Approval Process

Statutory Incentive

A statutory incentive encourages tribes and the United States to negotiate with the RWRCC, in that so long as negotiations are ongoing, the obligation to file reserved water rights claims in the Montana General Stream Adjudication is stayed (Mont. Code Ann. § 85-2-217). The Montana legislature, however, did not want compact negotiations to delay the conclusion of the Adjudication, so it included an expiration date on the suspension. Originally due to expire in 1983, the suspension deadline has been extended by the legislature several times, most recently in 2009. By that point, the RWRCC had only the CSKT and two comparatively small federal settlements left to conclude, and the prospect of allowing the suspension to lapse and pushing those claims toward litigation was meaningfully contemplated for the first time. Ultimately, however, the 2009 biennial session of the Montana legislature extended the suspension until June 30, 2013, and at the request of the CSKT and the United States also extended the post-suspension

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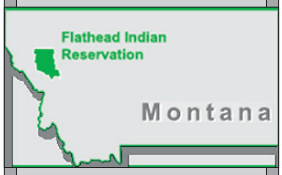

Non-Indian Water Users

Fee Land Irrigators

Instream Flow Requirements

Management Entity

Off-Reservation Rights

Right to Fish

"Time Immemorial" Priority

claims filing period from six months to two years. The legislative debate over the extension bill indicated that additional requests for extensions would probably not be well received. The parties were therefore focused on reaching a CSKT settlement (if at all) in time for the 2013 session of the Montana legislature.

CSKT CHALLENGES

In many ways, the CSKT water rights negotiations posed the most complicated set of challenges the RWRCC ever faced due to factors unique to the CSKT. The Flathead Indian Reservation (Reservation), home to the CSKT, is the lone Indian reservation in Montana situated west of the Continental Divide, in the more heavily populated part of Montana. As a consequence of the Flathead Allotment Act of 1904 (33 Stat. 302), and the 1908 amendments to that Act that opened the Reservation to homesteading (35 Stat. 444), the majority of the population is non-Indian, as is a sizeable majority of water users served by the Flathead Indian Irrigation Project (FIIP), the Bureau of Indian Affairs (BIA) project that accounts for the bulk of the consumptive water use on the Reservation. In part because of this demographic, there has been a long history of non-Indian resistance to tribal efforts to assert jurisdiction or control over natural resources on fee lands within the Reservation. *See, e.g., Confederated Salish and Kootenai Tribes v. Namen*, 665 F.2d 951 (9th Cir.), *cert. denied sub nom; City of Polson v. Confederated Salish and Kootenai Tribes*, 429 U.S. 929 (1982); *Joint Bd. of Control v. United States*, 832 F.2d 1127 (9th Cir. 1987); and *Montana v. United States EPA*, 137 F.3d 1135 (9th Cir. 1998). Nevertheless, the Montana Supreme Court has recognized that the CSKT's on-Reservation water rights under their treaty with the United States (the Hellgate Treaty of 1855), are "likely pervasive," in *In re Beneficial Water Use Permit*, 278 Mont. 50, 59 (1996)(*Ciotti I*).

This conflict between the CSKT and non-Indian water users has been particularly manifested by longstanding tension between the CSKT and the Flathead Joint Board of Control (FJBC), a local governmental entity made up of the Jocko, Mission, and Flathead Irrigation Districts, which has represented the interests of the fee land irrigators within the FIIP. Roughly 117,000 of the approximately 130,000 acres served by the FIIP are fee lands. One of the lawsuits in the early 1980s, for example, occurred when the CSKT attempted to assert rights to fishery flows on streams whose water was used by the FIIP, leading to a Ninth Circuit Court of Appeals decision that the CSKT's instream flow rights, though still unquantified, were senior to any claim to water the FIIP might have, and that the BIA had no obligation to apportion water equitably between the CSKT's instream flow rights and the FIIP's needs. *Joint Bd. of Control v. United States*, 832 F.2d 1127. That decision led to a temporary compromise implementing "interim" instream flow requirements on certain FIIP streams while negotiations over a final quantification of the CSKT's water rights proceeded. Nevertheless, relations between the CSKT and the FJBC remained rocky for many years. *See, e.g., Flathead Joint Bd. of Control v. United States DOI*, 309 F. Supp. 2d 1217 (D. Mont. 2004). These relations improved dramatically during the second half of the first decade of this century, as the CSKT, the FJBC, and the United States negotiated an agreement to transfer management of the FIIP from the BIA to FIIP water users. That process led to the creation of a body known as the "Cooperative Management Entity" which was made up of an equal number of CSKT and FJBC appointees and became responsible for the day-to-day management of the FIIP (whose facilities still remained under BIA ownership). Tthe dynamics between the CSKT and the FJBC, however, remained a delicate factor in the RWRCC's negotiations.

In addition to the complicated social situation on the Reservation, the CSKT are the only tribes in Montana whose treaty with the United States contains language giving them colorable claims to off-reservation water rights. Like many treaties with other tribes in the Pacific Northwest, the 1855 Hellgate Treaty was negotiated for the United States by then-Washington territorial governor Isaac Stevens. These so-called Stevens treaties share a common article that reserves for the signatory tribes the right to "tak[e] fish at all usual and accustomed places, in common with the citizens of the Territory[.]" (Hellgate Treaty Art. III.) Courts have interpreted this language to give tribes continuing interests in tribal fishing grounds whether located on or off a tribe's reservation. *See, e.g., Washington v. WA. State Commercial Passenger Fishing Vessel*, 443 U.S. 658 (1978). While the specific parameters of the relationship between this treaty language and off-reservation water rights claims have not been fully delineated by the courts, there is clearly a legal basis to assert that this language can give rise to a water right stemming from the need to preserve the treaty-based right to fish. *See, e.g., United States v. Adair*, 723 F.2d 1394 (9th Cir.1983); and Oregon Water Resources Department Final Order in the Klamath River Basin Adjudication (www.oregon.gov/owrd/pages/adj/index.aspx). These sorts of rights are entitled to a priority date of "time immemorial" (*see State ex rel. Greely v. Confederated Salish and Kootenai Tribes*, 219 Mont. 76 (1985)), making them the most senior rights possible. Thus for the first time, the CSKT negotiations required the RWRCC to reach agreement on off-reservation water rights claims to settle all of the CSKT's federal law-based water rights claims in Montana.

In order to avoid follow-on litigation over administration of the water rights quantified in a compact (as has occurred in other states), Montana's water rights settlements have all also established the mechanisms for their administration. In the six Indian compacts the Montana legislature has ratified, administration

Montana Compact

Unitary Administration (Water Code)

has been split, with the State retaining primary jurisdiction over state law-based water rights on a given reservation and the tribe having primary jurisdiction over uses of the tribe's rights. (As part of those settlements, the State has also agreed to stop issuing new on-reservation water rights permits under state law.) The CSKT, however, objected to this dual administration approach, asserting that land ownership patterns and the nature of water use on the Reservation were too complicated for a dual system to work. Instead, they proposed a unitary administration system covering all federal or state water rights on the Reservation to be administered by a single body composed of State and CSKT representatives (*See* Mecham, *The Water Report* #83, January 2011). After careful and lengthy consideration, the RWRCC agreed to negotiate over a unitary system. In doing so, the RWRCC took into account a series of Montana Supreme Court decisions divesting the State of regulatory jurisdiction to permit new water uses or changes to existing uses on the Reservation while the CSKT's rights remained unquantified. *See Ciotti I*, 278 Mont. 50 (1996); *Confederated Salish and Kootenai Tribes v. Clinch*, 297 Mont. 448 (1999); *Confederated Salish and Kootenai Tribes v. Stults*, 312 Mont. 420 (2002); and *Confederated Salish and Kootenai Tribes v. Clinch*, 336 Mont. 302 (2007). Consequently, State jurisdiction over state law-based water rights was not the default position on the Reservation in the way it had been on the other reservations whose rights the RWRCC had compacted.

THE PROPOSED SETTLEMENT

Over the course of five years of active negotiations between 2007 and 2012, which included monthly public meetings (mainly on the Reservation) among the principal negotiators, and extensive legal and technical work among the staffs of the three negotiating parties, the parameters of a settlement were reached.

Settlement Documents

Three primary documents comprise the proposed settlement:

1) the **Compact**, which is the legal quantification of the CSKT's water rights and defines the conditions on their exercise
2) the **Unitary Management Ordinance**, a 127-page water code covering the entire Reservation
3) the **FIIP Water Use Agreement**, a separate agreement among the CSKT, the FJBC, and the United States appended to the Compact that governs both the CSKT's instream flow rights and the FIIP water rights

The following summaries of these documents are necessary oversimplifications of what was a protracted and at times highly contentious negotiating and drafting process.

The Compact

The proposed CSKT Compact is available at:
http://dnrc.mt.gov/rwrcc/Compacts/CSKT/2013/2013-2-13ProposedCompactfinallinks.pdf.

The proposed CSKT Compact follows the relatively consistent format of other RWRCC compacts. Initial articles lay out the basis for the parties' negotiating authority, the purpose of the Compact and definition of terms. That is followed by the article that formally quantifies the water rights (Article III) both on and off the Reservation. On the Reservation, these include water rights for instream flows, FIIP uses, wetlands and high mountain lakes, two tribally-owned hydroelectric projects, Flathead Lake (the southern half of which lies within the boundaries of the Reservation, the beds and banks of which are owned by the United States in trust for the CSKT), as well as allottee rights and religious and cultural uses. Article III also recognizes a 228,000 acre-foot right from the mainstem of the Flathead River, backstopped by releases of up to 90,000 acre-feet from the Bureau of Reclamation's Hungry Horse Dam and Reservoir. The recognition of this right is consistent with all of Montana's other Indian settlements, where the protection of existing users (a critical State goal) is obtained in part by augmenting the reservation's water budget with water from off-reservation storage facilities. The priority dates for these rights are time immemorial for the instream, wetlands, and high mountain lakes rights, and July 16, 1855 (the date the CSKT signed the Hellgate Treaty) for the rest.

Rights Quantified

Augmentation Protection

The Compact recognizes several different types of off-Reservation rights in western Montana.

Recognized off-Reservation rights in western Montana include:

Instream Flow Rights

- Time immemorial instream flow rights on the mainstems of the Kootenai, Lower Clark Fork, and Swan Rivers, as well as on Placid Creek (which is located in the Mission Mountains, immediately east of the Reservation), and four tributaries of the Kootenai River wholly located within National Forest boundaries

Storage Rights

- Co-ownership by the CSKT of various instream flow and recreation water rights currently owned exclusively by the Montana Department of Fish, Wildlife and Parks (MFWP), including the right associated with the former Milltown Dam, which has the ability to provide for meaningful instream flows in the Upper Clark Fork and Blackfoot Rivers
- Beneficial interests in two MFWP contract storage rights in the Bitterroot River basin

As part of the settlement, the CSKT would give up their right to assert any other off-Reservation water

Montana Compact

Existing Rights Protection

rights claims in western Montana and anywhere east of the continental divide.

Article III also contains important protections for existing state law-based water rights from the exercise of the CSKT's senior water rights. After extensive negotiations, the CSKT agreed to completely relinquish their right to exercise their water rights to make a call against any existing junior water users whose water rights are not for the purpose of irrigation, such as stock, domestic, commercial, municipal, and industrial uses. Important protections were also built into the settlement for the protection of irrigators. For irrigators outside the FIIP on the Reservation, these protections were achieved by the imposition of specific conditions on how the CSKT may exercise their instream flow rights. For irrigators off the Reservation, these protections are achieved largely through the recognition of CSKT rights at flow rates that are satisfied by existing hydrologic conditions without the need for water rights regulation. Protections for FIIP irrigators would be achieved primarily through the FIIP Water Use Agreement, discussed below.

Implementation Provisions

Article IV of the Compact deals with implementation. It recognizes certain federal law-based attributes of the CSKT's water rights (such as, that they are trust assets and cannot be lost for non-use). Article IV also includes:

- A registration process to document and administer existing tribal uses of water
- Creation of the five-member Water Management Board (two members appointed by the Governor, two by the CSKT and the fifth selected by the other four) as the joint CSKT-State entity responsible for administration of all water rights on the Reservation
- Rules for leasing portions of the CSKT's water rights to water users either on or off the Reservation

State Cost Share

Other Compact articles set forth various disclaimers and retentions of rights, identify the process for finalizing the settlement and defending it from attack once finalized, and address contributions to settlement. Non-federal cost share is an important consideration for the United States in its approval of Indian water rights settlements. (*See* Mecham, *The Water Report* #111, May 2013). Montana has a demonstrated track record of making such contributions, which are generally established by reference to the value of the benefits the settlement provides to state law-based water users. In anticipation of legislative approval, the Governor put $55 million in his budget toward the CSKT settlement, which would have been the largest contribution to an Indian settlement in Montana.

The Unitary Management Ordinance

The proposed Unitary Management Ordinance is available at: http://dnrc.mt.gov/rwrcc/Compacts/CSKT/2013/2013-2-13ProposedAdministrativeOrdinancefinal.pdf.

As we previously noted, unitary administration was a very important principle for the CSKT, facilitating negotiations on compromises for other issues (especially regarding the protection of existing users) important to the State. From the State's perspective, the impact of the Montana Supreme Court's decisions, the unique demographics on the Flathead Reservation, and the projections for continued growth and development in that more populated area of Montana, were addressed by the Unitary Ordinance's retention of some State authority over future and not just existing water use.

Water Management Issues

The implications of unitary administration triggered the need to address many thorny details. Among other things, these included: full protection of individual due process rights; equal treatment of Indians and non-Indians; funding and staffing issues; and administrative processes for obtaining new water rights, changing existing ones, and enforcement. Also, the relationship between this new regulatory authority and the FIIP had to be clearly delineated and any conflicts avoided, as the FIIP is subject to its own set of rules and regulations pertaining to the distribution and administration of water among FIIP users. Furthermore, the parties had to answer the important question of which body of law the unitary regulatory authority would apply. Previous Indian compacts avoided this issue, because the usual dual administration approach allowed the State and the particular tribe to apply their own laws to their respective water users.

Management Ordinance

To develop the necessary single body of law, the parties, in close consultation with the Montana Department of Natural Resources and Conservation (DNRC), ultimately drafted the Unitary Management Ordinance (UMO). The UMO is modeled heavily on the Montana Water Use Act, but modifies it in certain parts to account for the particular circumstances of the Reservation as well as based on the experience the DNRC has gained through applying the Water Use Act off the Reservation. The settlement framework called for the 126-page UMO to be enacted in parallel into both State and CSKT law, and provided that no amendments to the UMO could be effective unless such amendments were also enacted by both sovereigns.

The FIIP Water Use Agreement

The proposed FIIP Water Use Agreement (FWUA) is available at: http://flatheadjointboard.com/wp-content/uploads/2013/01/2013-1-17-Proposed-FIIP-Water-Use-Agreement.pdf

Negotiation Process

Unlike other states, where individual water users are responsible for representing their own interests in proceedings to quantify Indian water rights, Montana's process is specifically designed to have the RWRCC represent the State and its citizens. As relations between the FJBC and the CSKT improved during the mid 2000s, however, the FJBC indicated a desire to play a more hands-on role in the negotiations. Eventually, the FJBC and CSKT asked the RWRCC to allow them, along with the United States as the FIIP's owner,

Montana Compact

Irrigators' Role

to negotiate directly for the protection of FIIP water use from the exercise of the CSKT's senior instream flow rights, rather than to have the RWRCC negotiate the particulars of that issue. The RWRCC, aware that the clearest path to legislative approval of a settlement would be through an agreement that had the most local support, acceded to this approach. The RWRCC monitored the FJBC/CSKT/US negotiations with great interest and remained in regular communication with all of those entities, as whatever agreement they reached would need to be folded into the broader settlement in some fashion. Despite the CSKT's and FJBC's desire to work together, the negotiations that led to the proposed FIIP Water Use Agreement were contentious, with the CSKT believing that their instream flow rights had long been sacrificed to FIIP needs, and the FJBC fearing for its irrigators' continued viability if the CSKT's instream rights were significantly increased. Indeed, on several occasions talks nearly broke down.

Three Tier Split

The FJBC and CSKT reached preliminary agreement on a draft FWUA in May of 2012. The draft FWUA attempted to balance the CSKT's instream flow rights and the irrigators' need for irrigation water by essentially splitting available water into three tiers: 1) **m**inimum **e**nforceable **f**lows (MEFs); 2) **f**arm **t**urnout **a**llowances (FTAs); and 3) **t**arget **i**nstream **f**lows (TIFs). The MEFs are baseline instream flow levels that are to be satisfied first in priority. FTAs are quantities of water that each FIIP irrigator could be assured of receiving each year. (Technical work conducted by the CSKT and reviewed independently by the RWRCC, FJBC, and United States, indicated that with certain operational and infrastructure improvements to the FIIP, the MEFs, and FTAs could both be fully satisfied under virtually all flow conditions.) TIFs are enhanced instream flow levels that the CSKT would be entitled to protect after the satisfaction of both the MEFs and FTAs, as additional water was freed up through contemplated FIIP improvements. The draft FWUA also contained a deferral period during which no changes would occur to the FIIP's status quo until funding arrived for the necessary operational and infrastructure improvements. The draft also dealt with other significant CSKT-FJBC issues, including providing for continued FIIP access to a low-cost block of power provided by a tribally-owned utility to the FIIP for pumping purposes.

Power Block

RUN-UP TO THE 2013 LEGISLATIVE SESSION

Draft's Release

The RWRCC had intended to release a completed draft of the Compact for public review and comment in relative proximity to the release of the draft FWUA, but was unable to get a draft out coinciding with the May 2012 FJBC release of a proposed FWUA. As it turned out, the draft Compact was not ready for release until October 2012 — a gap that proved problematic.

"Extra Duty" Lands

A very vocal and negative public response to the draft FWUA ensued. Some of the reaction revolved around so-called "extra duty" lands, which are FIIP lands that have been receiving an increased quota of water due to particular climatic or soil conditions, or other historical factors. Substantively, it appeared that the FWUA negotiators had misjudged the importance of that issue, because the draft FWUA did not provide for extra duty lands. While the technical work underpinning the draft FWUA suggested that net crop requirements on even these lands could be satisfied by the proposed FTA, this was an issue of particular emotional resonance, and its exclusion from the draft FWUA caused significant consternation and suspicion about the balance between CSKT and irrigator water use struck in the draft FWUA. Non-irrigators also took issue with other aspects of the draft FWUA that were exacerbated by the absence of a public draft compact, which when completed and released could possibly have assuaged some of the concerns.

Opposition Formed

During the summer of 2012, two significant blocks of opposition to the CSKT water rights settlement took shape. A group of irrigators formed an entity called the Western Montana Water Users Association (WMWUA), and retained legal counsel to advance its criticisms of the draft FWUA. Another group calling itself "Concerned Citizens for Western Montana" — organized by a local conservative activist — began making charges that the entire compact process was a thinly-veiled power grab by the United States using the guise of tribal water rights to assert control over private property, which this group charged that the RWRCC was facilitating — particularly by being willing to negotiate over unitary administration and off-reservation water rights. This group was very active and began holding meetings throughout western Montana to spread its message and rally opposition to the negotiations. The RWRCC and CSKT took steps to counter these allegations, but their primary focus remained on working through the remaining issues that had to be hammered out before a complete draft of the settlement documents could be finalized. The FJBC and the CSKT also began discussing modifications to the draft FWUA based on both public comment and input from the RWRCC.

Short Timing

Although an almost-finished draft Compact was released to the public in October, a full draft Compact was only completed in early November, barely two months before the start of the 2013 legislative session. At that time, the RWRCC embarked on an extensive road show to explain the proposed settlement to water users throughout western Montana, and to solicit public comment prior to taking formal action on whether to approve the settlement and recommend its submission to the Legislature for ratification. Members of the organized opposition attended each of these meetings to air their objections to the settlement. By this point, it was clear that the RWRCC and the organized opposition were speaking different languages. The RWRCC was focused on trying to achieve a pragmatic resolution of a complicated water allocation

Montana Compact

problem. Opponents were raising philosophical and ideological objections not susceptible to negotiated settlement, and were distorting both the proposed Compact and the current state of the law in an effort to advance their position.

Lawsuit Filed

In mid-December, the WMWUA filed suit in state district court seeking to prevent the FJBC and its constituent Irrigation Districts from approving the FWUA. On an ex parte basis, Judge C.B. McNeil issued a writ of mandate ordering the FJBC to put the proposed FWUA to a vote of its irrigators and to secure approval of the FWUA by the local state district court prior to the FJBC taking any action to approve the agreement. The court gave the FJBC 30 days to respond to the suit if it believed the writ should not have been granted. The WMWUA also hired a lobbyist specifically to work against the proposed CSKT water rights settlement at the legislature, which convened for its biennial 90-day session on January 7, 2013.

THE 2013 LEGISLATIVE SESSION

"Extra Duty" Allowance

At the start of the session in January 2013 the parties were still devoting time to finalizing the settlement and could not focus exclusively on securing legislative approval. In mid-January, the FJBC and CSKT released a revised FWUA that included a process for an irrigator to obtain a Measured Water Use Allowance. This allowance, a quantum of water above the FTA, was intended to allow those extra duty irrigators who could demonstrate a bona fide need for additional water to obtain it. The FJBC and CSKT then held a series of public meetings to explain the revised agreement. The FJBC also resolved to put the agreement to a vote of the irrigators, even as it defended itself against the WMWUA suit, making it uncertain whether the agreement could be approved before the legislature adjourned. Meanwhile, the RWRCC continued to work with the CSKT to adjust the Compact based on comments received from the public. In particular, local governmental officials and key legislators from the northwest corner of Montana had objected to the inclusion of rights on two Kootenai River tributaries on the list of off-Reservation rights to be co-owned between the CSKT and MFWP. Ultimately, those rights were dropped from the settlement in favor of the recognition of time immemorial rights for the CSKT exclusively on four Kootenai River tributaries located within the Kootenai National Forest on which there were no state law-based water rights. With this issue resolved, final settlement documents were released to the public on February 13, and the RWRCC scheduled a meeting for February 26 to vote on whether to formally approve the settlement and send it forward for legislative ratification.

Instream Adjustments

"Takings" Appeal

On February 15, however, Judge McNeil issued a superseding writ accepting the arguments of the WMWUA that the proposed FWUA effected a taking of individual irrigator water rights and otherwise violated Montana law. The FJBC took an expedited appeal to the Montana Supreme Court, which reversed Judge McNeil on April 9 (*Western Montana Water Users Association, et al. v. Mission Irrigation District, et al.*, Cause No. DA 13-0154). But Judge McNeil's ruling on the Compact's prospects had already caused a major impact in the legislature. It gave credence to some of the opponents' legal theories about the infirmity of the Compact, and raised doubts about whether the Compact was truly ready to be considered for approval. It also buoyed efforts by anti-Compact legislators to advance a bill (Senate Bill 265) to extend the suspension statute (Mont. Code Ann. § 85-2-217) to allow more time for negotiations before the clock would start ticking on the CSKT's obligation to file claims in the Adjudication. The CSKT and Governor Bullock both opposed this bill on the ground that the settlement was ready and there was no need for further negotiations. (It was ultimately passed by the legislature on an almost pure party-line vote and vetoed by the Governor).

Extension Bill Vetoed

Commission Approval

At its February 26 meeting, the RWRCC voted 8-1 to approve the CSKT settlement. The "no" vote marked the first dissenting vote cast by an RWRCC member in the body's history, reflecting how contentious and increasingly partisan the settlement had become. While each prior negotiated settlement had passed the legislature by large bipartisan majorities, the CSKT Compact was shaping up to be an issue that divided along party lines. With Republicans in control of both chambers of the legislature, that made the odds of approval even longer.

Party-Line Tabling

After a significant behind the scenes struggle, a bill to ratify the Compact was introduced in the House on March 23. It was referred to the Judiciary Committee, a much more partisan place than the House Natural Resources Committee, to which compact bills (including the two other compacts considered by the legislature this session) have typically gone. The bill was heard by the committee on March 27. Proponents representing thousands of irrigated acres across western Montana testified in favor of the bill, but over a hundred people came out to testify against it. On April 3, the Judiciary Committee voted along party lines to table the bill. A procedural motion to move the bill to the House floor for consideration by the full body also failed, effectively killing the bill. A contingency bill introduced by the RWRCC's Republican House member — that anticipated legislative approval of the settlement in 2015 and would have provided for a study of the Compact by an interim legislative committee and for some seed funding to facilitate settlement implementation — was killed by the House Appropriations Committee on the same day.

Montana Compact Continuing Drama

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POST-SESSION DEVELOPMENTS

The end of the legislative session did not mark the end of the drama surrounding the negotiations. In early May, the WMWUA's founder was elected as an FJBC commissioner, defeating the FJBC's long-time chairman who had been an FWUA and Compact supporter. In the race for an open FJBC seat, a second WMWUA member outpolled a FWUA/Compact supporter. The election marked a sea change for FJBC, from a 7-5 majority in favor of the Compact to a 7-5 majority against it. That in turn resulted in a June 14 vote to secede from the FJBC by the Jocko and Mission Irrigation Districts, largely because of their continued support for the FWUA and Compact. On July 12, the WMWUA filed an amended petition in its suit against FJBC and its constituent Irrigation Districts, adding claims against the Jocko and Mission Irrigation Districts and the individual commissioners who voted in favor of the motion to secede from the FJBC. The same day, the FJBC itself sued two of the commissioners who voted in favor of the secession motions, claiming violations of the rights of the Jocko and Mission District commissioners who voted against secession, by — among other things — allegedly disseminating an audio recording of various FJBC members making derogatory comments about the CSKT and Indians.

In addition, the BIA issued a letter on May 22 informing the CSKT, FJBC, and State of Montana that as part of discharging its trust responsibility to the CSKT, it was embarking on an administrative process to review and possibly increase the on-Reservation interim instream flows prior to the 2014 irrigation season. Two days later, the reconstituted FJBC passed a resolution expressing a desire to negotiate a different water use agreement in an effort to achieve a negotiated settlement of the CSKT's water rights, but on the condition that no actions are taken to affect the rights of irrigators to receive water from the FIIP. On June 7, the CSKT responded to the BIA's letter encouraging the BIA to take a more aggressive look at the interim instream flows than contemplated by its May 22 letter.

In his veto message regarding Senate Bill 265, Governor Bullock reiterated his support for the settlement as it was presented to the legislature, and directed the RWRCC to prepare a report on the settlement for consideration by the legislature's Water Policy Interim Committee in advance of the legislature's next session in 2015. The goal of this exercise is to allow the RWRCC a forum to address the questions and concerns that were raised about the settlement during the 2013 session so that if the settlement is presented to the 2015 session for ratification, the legislature and the public will have a "full and accurate understanding" of its contents.

FUTURE POSSIBILITIES

Whether the proposed settlement comes before the legislature in 2015, and in what form, depends on many things, including whether the CSKT determine that their interests are better served through litigation rather than negotiation. Some legislators continue to express the desire to bring the Compact back to the Legislature in the next session, and the RWRCC and Governor Bullock remain on record in support of the settlement. But the opponents who succeeded in defeating the bill to ratify the Compact show no sign of scaling back their campaign to block it. The CSKT have between now and June 30, 2015, to file their claims in the Adjudication, which gives them the option of waiting to see what unfolds during the 2015 legislative session before filing. But there is nothing to stop them from filing sooner, or from attempting to secure a federal rather than state court forum to vindicate their rights. (Though an effort to obtain a federal forum would be complicated by the United States Supreme Court's ruling in *Arizona v. San Carlos Apache Tribe*, 463 U.S. 454 (1983) which held that the McCarran Amendment waived tribal as well as federal sovereign immunity to water rights adjudications in adequate state proceedings, and the Montana Supreme Court's decision in *State ex rel. Greely v. Confederated Salish and Kootenai Tribes*, 219 Mont. 76. (1985), which held that the general stream adjudication conducted by the Montana Water Court is facially such an adequate proceeding).

It is also possible that the CSKT could explore further negotiations with the FJBC and/or the RWRCC to adapt aspects of the proposed settlement to address at least some of the concerns that were identified before the legislature. The CSKT were resolute during the 2013 session, however, that they had no intention of doing so, and to date have not indicated any change in that position.

CONCLUSION

Many years of work and difficult negotiations went into the Compact, and in the wake of the legislature's unprecedented decision not to ratify it, all of the negotiating parties are evaluating their options and possible next steps. It would be a tragedy if the Flathead Reservation became the center of another Klamath-style conflict, though the seeds have certainly been sown over the past year or so for such an outcome. The authors hope that a path forward can be found to allow a successful negotiated settlement to be achieved. Whether and how that outcome can be brought about, however, is presently very unclear.

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New Mexico Wells & Water Rights

NEW MEXICO EXEMPT WELLS DECISION

PROTECTION FOR SENIOR WATER USERS

by David Moon, Editor

Exempt Wells Permitting

INTRODUCTION

On July 25th, the New Mexico Supreme Court (Court) released its long-anticipated decision in the *Bounds* case involving exempt wells and the protection of senior water rights. In a unanimous decision, the Court found that New Mexico's permitting statute for exempt wells — which requires the State Engineer to issue permits for a domestic well without determining the availability of unappropriated water — did not violate the doctrine of prior appropriation in New Mexico's Constitution or the guarantees of due process of law. The Court, however, clarified that when it comes to "how that water right is *used* and *administered*" the priority system does apply to exempt well rights. The Court stated that the language "priority of appropriation shall give the better right" in Article XVI, Section 2 of the New Mexico Constitution "is meant to dictate how conflicts between water users can be resolved — by priority administration — in which junior users are diminished or cut off when necessary in favor of senior users." *Bounds v. State of New Mexico, et al*., Docket No. 32-713 (July 25, 2013), p. 11 (emphasis in original).

Placeholder Permit

Regulation to Curtail

PERMITTING VERSUS REGULATION

The Court thoroughly explained the distinction between permitting procedure as opposed to regulation of water rights in times of shortage and explained how the State Engineer of New Mexico could utilize the procedure as a "placeholder." The Court noted at p. 11-12: "Theoretically, the State Engineer could issue a domestic well permit and immediately administer priority to curtail diversion under that permit. While this might seem absurd at first glance, further examination suggests otherwise. In such an instance, a permit — even if temporarily inoperative — would give the applicant a priority date. Should conditions in the particular basin change, curtailment by priority administration could be lifted, and the permit holder could then divert water under that permit with a priority date set at the original date when the permit issued. In this regard, the permit would serve as a placeholder should more water become available in the future. The State Engineer has essentially done this in the Gila basin, issuing permits that do not allow for an actual diversion. Depending on the circumstances, the State Engineer could apply a similar procedure elsewhere to meet a growing shortage of water and imminent threat to senior water users."

The Court's rationale was based on the usufructary nature of water rights and underlying principles concerning water availability. "They [water rights] do not create an absolute right to take water. They are conditioned on the *availability* of water to satisfy that right. Water may not be available for a number of reasons, including drought or the lack of priority due to unsatisfied demand of senior water rights." *Id*. at 12 (emphasis in original).

Priority System Applies

City & County Limits

PROTECTION FOR SENIOR WATER USERS

Other means of protecting senior water users are also discussed in the opinion. The Court noted "regulations currently in place with the State Engineer…can be administered in such a way as to protect senior water users." *Id.* Specifically, the Court cited the potential to create "Domestic Well Management Areas," which allow the State Engineer greater power to protect senior water users under 19.27.5.14 NMAC (*Id*.) and that "according to the very permits that authorize them, domestic wells are 'subject to curtailment by priority administration as implemented by the state engineer or a court.' 19.27.5.13(B)(11) NMAC." *Id*. at 13. Finally, the Court cited another New Mexico statute that provides additional avenues for senior water users' protection: "In addition to curtailment by priority administration, '[t]he drilling of the well and amount and uses of water permitted are subject to such limitations as may be imposed by the courts or by lawful municipal and county ordinances which are more restrictive than the conditions of this permit and applicable state engineer regulations.' 19.27.5.13(B)(6) NMAC." *Id*. at 13-14.

The Court summarized its decision concerning the constitutionality of the statute, at page 14: "Instead of creating an exception to prior appropriation, we view the DWS [Domestic Well Statute] as merely creating a different, more expeditious permitting procedure for domestic wells. The Legislature codified this simpler permitting process as a policy choice, something that the New Mexico Constitution generally empowers our Legislature to do." *Id*. at 14.

New Subdivisions

Of particular interest to water users in other states was the Court's discussion regarding the use of exempt wells for new subdivisions. In dicta (i.e., without establishing a precedent), the Court pointed to ways its Legislature has addressed domestic wells in regard to water rights in new subdivisions that "were passed and signed into law to combat at least some of the potential harmful effects of domestic wells." One of the new statutes (NMSA 1978, Section 3-20-9.1) "requires either State Engineer approval of sufficient water or proof of water rights acquired by means *other than a domestic well permit*, before a subdivision plat may be approved if water rights have been severed from the land upon which the subdivision will

New Mexico Wells & Water Rights

"Double Dipping" & Clusters

sit. Presumably, the statute is directed at the practice of 'double dipping,' whereby a developer buys a farm with water rights, subdivides the farm, then severs and sells the water rights to a third party, while having the new homeowners drill individual domestic wells for each subdivided lot." *Id* at 14 (emphasis in original). "The other new statute, an amendment to NMSA 1978, Section 47-6-11.2 (2013), requires proof of service from a water provider and approval from the State Engineer, or a right to use water other than by a domestic well, for any subdivision of 'ten or more parcels, any one of which is two acres or less,' before the subdivision can be approved. This appears to preclude dense clusters of domestic wells, and their possible cumulative effect on senior water rights. Based on these new statutes, we observe that the Legislature appears to be aware of potential problems caused by domestic wells and has taken at least some remedial action short of an outright repeal of the DWS to mitigate its effects." *Id*. at 15.

CONSTITUTIONAL REQUIREMENTS AND PROTECTION OPTIONS

Priority Administration

The Court concisely summed up its reasoning: "Thus, we cannot conclude that the DWS, a permitting statute, conflicts irreconcilably with Article XVI, Section 2 of the New Mexico Constitution. The Constitution does not require identical permitting procedures for all appropriations. What is required is priority administration for the protection of senior users, a condition to which domestic well permits have been subject for some time. The DWS only deals with how domestic wells are permitted, not how they are administered. Thus, the DWS, at least on its face, does not conflict with Article XVI, Section 2 and survives Petitioners' facial challenge." *Id.*

Seniors' Recourse

The Court further clarified senior water users' options to protect their rights. "Though Petitioners' facial challenge proves unpersuasive, we emphasize that senior water users do have other recourse under the law. A water user who is able to show actual or impending impairment can make a priority call against junior users and, if that fails, the water user could then file an as-applied challenge against the DWS. The same protections for senior users apply against domestic wells as against any other junior water right. We understand that showing such an impairment can be a difficult task, but without more than the mere speculation of impairment in the present case, we cannot take the drastic step of declaring a statute unconstitutional that has served this state for sixty years." *Id*. [Note: A "facial challenge" means a party is challenging the statute on its face as opposed to how the statute is actually applied in a particular situation].

Priority Doctrine Support

The Court was very clear in noting its disagreement with a statement made by the Court of Appeals' (lower court) that "the Constitution's priority doctrine establishes a broad priority principle, nothing more." First, the Court said that the Court of Appeals' statement "simply goes too far." Then, the Court went on to emphasize the importance of water rights and the priority system, as follows: "One could read [the Court of Appeals'] statement to mean that priority water rights are nothing more than an aspiration, subject to legislative whim and administrative discretion. Such a reading would be wrong, and it would be a mistake for future litigants to cite the Court of Appeals opinion for any such proposition." *Id*. at 15-16.

DUE PROCESS

ACTUAL IMPAIRMENT OR IMMINENT FUTURE IMPAIRMENT

No Impairment

The Court also refused to find any violation of the Petitioners' due process rights based on its finding that there was no deprivation of liberty or property — the "threshold question in evaluating a due process challenge… ." *Id*. at 16. "Bounds was unable to show any actual impairment of his water rights before the district court, as he received his full allotment of water. The only potential impairment to Bounds was based on his assertion — with little evidentiary support — that any new appropriations must necessarily cause impairment in a closed and fully appropriated basin."

Closed Basin (Surface Water)

"Bounds did provide an expert who reasoned that because this is a fully appropriated basin, then water for new appropriations, domestic wells included, must come from senior users. This assertion was not based on the expert's own scientific study of the basin but rather the State Engineer's determination that the basin was closed to further *surface* appropriations. The expert did not make any calculations or present any models to quantify the effect of domestic wells on Bounds' water rights. We reject this kind of conclusory statement as a substitute for scientific analysis." (Note the Court's emphasis on the fact that the basin was closed to further *surface* appropriations).

No Deprivation of Property

"Without any demonstration of actual impairment or imminent future impairment to Bounds' water rights, or at least something more than a speculative inference from the fact of a closed and fully appropriated basin, the remaining due process analysis is straightforward. Without a proven threat to water rights, there has been no deprivation of property. Without a deprivation of property, there can be no due process violation. Petitioners have not been deprived of anything — at least not on this record — that is subject to either the procedural or substantive protections of the due process clause." *Id* at 17. Nevertheless, the Court's opinion didn't rule out a later "as applied" challenge, where a senior water user could produce evidence of impairment of their rights.

New Mexico Wells & Water Rights

Government Responsibilities

State Engineer Regulation

Not Exempt From Regulation

CONCLUSION

PRIOR APPROPRIATION DOCTRINE AND REGULATION SUPPORTED

In additional dicta, the Court expanded upon its support for the Prior Appropriation Doctrine, touching on the responsibilities of the other branches of government where water rights are concerned. "We urge our Legislature to be diligent in the exercise of its constitutional authority over — and responsibility for — the appropriation process. We equally urge the State Engineer to fulfill its superintending responsibility by applying priority administration for the protection of senior water users. Our courts remain available, based upon sufficient evidence, to intervene in appropriate cases to ensure that 'priority of appropriation shall give the better right.'" *Id.* at 15.

This last statement was obviously aimed at Petitioner Bounds' (Bounds') arguments that "for practical and political reasons the State Engineer will never really curtail domestic wells." Bounds relied on the deposition of former State Engineer John D'Antonio, where he stated that he would not curtail indoor use of a domestic well. The Court, however, did not find this statement persuasive, especially in light of the fact that the case involved a "facial challenge" versus an "as applied" challenge. "We understand the concern. This Court has previously noted the practical challenges facing the state in curtailing the use of domestic wells. *See Herrington v. State of N.M. ex rel. Office of State Eng'r*, 2006-NMSC-014, ¶ 50, 139 N.M. 368, 133 P.3d 258. But such speculation about what the State Engineer may or may not do in the future cannot form the basis of a facial challenge in the present. As of 2012, Mr. D'Antonio is no longer the State Engineer, and as such his policy is subject to change at the discretion of his successor. Without specific facts supporting an as-applied challenge, we must assume that domestic wells will be administered as the permits themselves are written: 'subject to curtailment by priority administration.' 19.27.5.13(B)(11) NMAC. In the absence of a record to the contrary, we must assume that the State Engineer will fulfill the responsibility and exercise the authority bestowed on that office by law." *Id.* at 13.

Although the Court refused to find the Domestic Water Statute unconstitutional in this case, its explanation of the distinction between permitting versus regulation of water rights — as well as its statements supporting the protection of senior water rights — demonstrate that exempt wells cannot be seen as a subterfuge behind which new rights can be utilized without regard to the priority system of the Prior Appropriation Doctrine. While regulation of such rights remains difficult, the Court pointed out the protections that do exist and also admonished Legislators and the State Engineer of New Mexico to protect senior users against exempt well use where senior rights are not being met. "Exempt" wells are exempt as to permitting issues regarding water availability, but they are not exempt from priority regulation when shortages occur.

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Case available at: www.nmcompcomm.us/nmcases/nmsc/slips/SC32,713.pdf

Water Rates

WATER PRICING

WATER RATES AND THE "NEW NORMAL"

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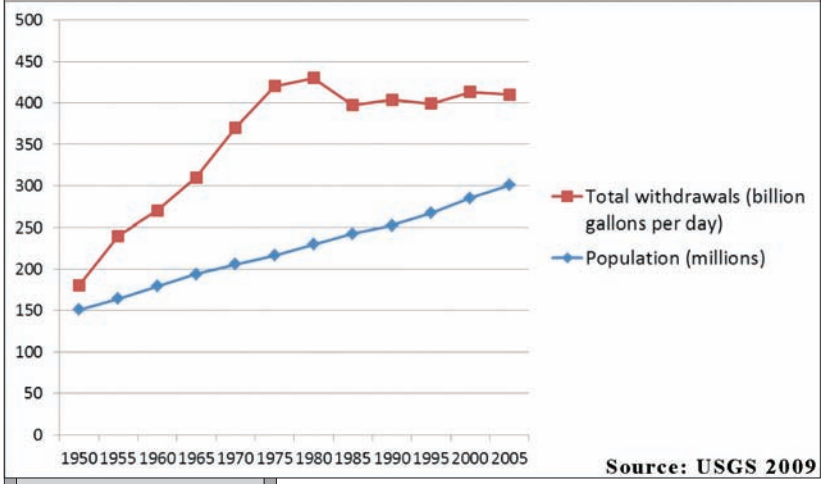
Cost Factors

"New Normal"

THE NEW NORMAL

The long-term sustainability of water resources in the United States is dependent on management strategies that can adapt to changing conditions — and current methods will not. To plan for the future, current management strategies assume prior conditions can predict the future, something that is no longer true. Unreliable future conditions have a particularly pronounced impact on a water system's financial planning strategies. Water costs are already increasing in many areas of the country, and an increasingly unreliable supply will continue this trend upwards. Deteriorating infrastructure, stricter regulations, and climate change are also factors that are contributing to increasing water costs. At the same time, total water use has plateaued in many areas of the country and per capita water use in some areas is even falling (see Figure 1, next page). This is a result of a variety of factors — from the recession that slowed economic and housing development significantly in some areas, to new and increasingly stringent codes and standards for water appliances. Together, the twin pressures of increasing water costs and decreasing water demand is often described as the "new normal."

Figure 1: Trends in Estimated Water Use, 1950-2005



Water Rates

Infrastructure Needs

The new normal is altering ideas about how water should be managed. In particular, water system financing needs a new approach to ensure fiscal solvency. This article is the first in a series that will address some of the key challenges that water service providers face in setting water rates and will offer recommendations and lessons from other sectors. Within the context of the new normal, this paper provides an overview of the basics of water rate design, trends in water rates, and advantages and disadvantages of different rate structures.

Increasing Costs

Across the US, after decades in which prices stagnated and important infrastructure lagged behind schedule, the cost of providing water is on the rise. Maintaining adequate revenue is a challenge for many water service providers. In a 2012 national survey of water service providers by Black & Veatch, respondents' top concern was aging water and sewer infrastructure, followed by concerns about costs and financing, including managing capital costs, funding or availability of capital, and energy costs (Figure 2). The same survey found that fewer than 27% of survey respondents believed that funding would be inadequate to support future operating needs.

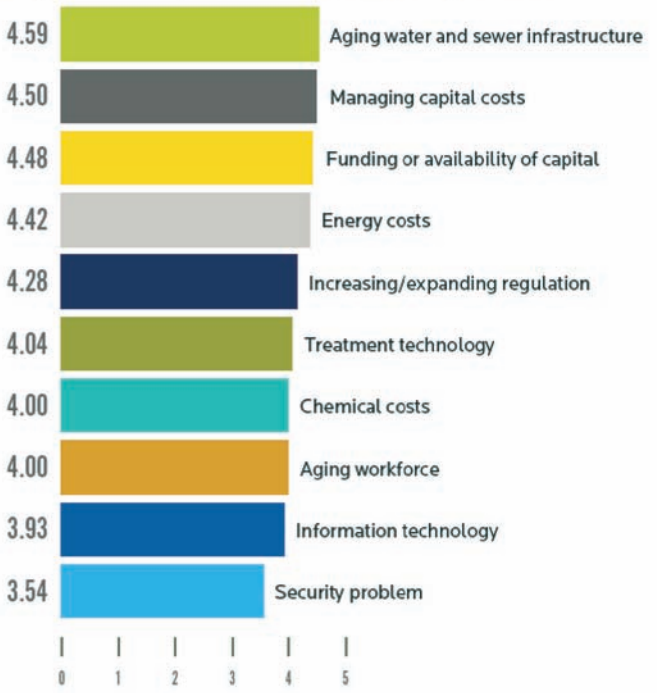
As water infrastructure deteriorates, the pressure to keep rates low has meant that there is little money to finance necessary upgrades. As these investments are continuously delayed, costs increase. The American Society of Civil Engineers reports that there are an estimated 240,000 water main breaks per year in the United States (ASCE 2013). According to the American Water Works Association, over the next 25 years, the US will need to invest more than $1 trillion to upgrade buried drinking water infrastructure.

Part of the increased cost for financing new infrastructure projects is a result of constrained access to capital. In the wake of the financial crisis, the state and federal governments decreased much of the grant and loan money that used to help pay for costly infrastructure (Emerson 2011). Historically, municipal bonds were a relatively inexpensive way to finance new infrastructure; today, credit rating agencies are increasingly downgrading municipal water systems. According to a 2012 report by Ceres, the most common cause for these downgrades was that water rate increases have not keep pace with spending on system maintenance or debt service coverage (Leurig 2012).

One factor contributing to the urgency of water infrastructure upgrades stems from government regulatory requirements. Over time, as new issues emerge and technologies advance, the laws governing water quality become stricter. There are two primary federal laws that govern water quality: the Clean Water Act and the Safe Drinking Water Act. Together, they regulate water quality, including both the amount of pollution entering waterways as well as the maximum levels of pollutants in drinking water. Both laws are continually updated to ensure public safety and environmental health. Over the years, stricter treatment standards have been passed to deal with new chemicals, emerging contaminants, and their combined impacts. For example, certain disinfection by-products that were shown to be harmful to human health resulted in new disinfection requirements. As new challenges arise, regulations and their associated costs will also change.

Climate change is also contributing to increasing water costs. Climate change is altering the timing, volume, and distribution of water supply through changes to precipitation and runoff, while rising temperatures are increasing overall demand. Moreover, increasing frequency and severity of droughts, floods, and other extreme weather events mean new, resilient infrastructure must be built or existing infrastructure retrofitted to accommodate increased uncertainty.

Figure 2: Importance of Industry Issues



Survey participants were asked to rate the importance of each of the above referenced issues to the water industry based on a scale of 1 to 5, where 1 indicates "very unimportant" and 5 indicates "very important." The results above show the average response for each issue.

Water Rates

Conservation Impacts

Decreasing Demand

As mentioned previously, demand across the US has been stagnant and is even decreasing in some areas. The recent economic recession impacted all sectors of the economy, and ultimately decreased the amount of revenue generated by water sales. Income from new connection fees, in particular, decreased as new residential growth slowed during the foreclosure crisis; in some cases, this resulted in downgraded credit ratings (Leurig 2012). New state and federal legislation seeks to advance sustainable water management through water conservation and efficiency. Many states have passed water conservation and efficiency goals and targets. The federal government has implemented robust building codes and appliance standards for water efficiency. These continue to be updated and strengthened, and some states have implemented standards that are more stringent than the federal standards.

Balancing Costs Revenues

What this Means for Water Rates

Water rates are set to balance total costs with collected revenues. However, matching the price of using water with the cost of providing water can be difficult because costs and expected revenue are merely estimates; the price is set before the water is used, and so any change in water demand or system operation can create an unexpected revenue loss or gain. For example, revenue losses can occur if more expensive water is needed to meet high demand during a drought, or when temporary drought conservation programs reduce demand below what was forecasted. Increasing water costs alongside decreasing water demand lead to an ever-widening revenue gap, necessitating an increase in water rates.

RATE DESIGN BASICS

As a result of these changing conditions, there is a need for a greater understanding of how water service providers price water and structure water rates. To illustrate a common confusion when it comes to water rates, ask yourself two questions:

- How much does it cost to provide water services?
- How much do I pay for water?

These might seem repetitive, but they are actually very different questions with very different answers. The first question asks how much it costs to build, operate, and maintain a system that provides high-quality water to your tap, while the second question asks how much of that total system cost is passed on to you through your water bill.

Cost Allocation

There are a variety of ways water service providers allocate total cost to customers. The amount of revenue collected from customers is dictated by the rate structure, which can be designed in various ways to achieve specific goals. For example, water rate structures may divide costs equally amongst all customers, regardless of how much water a customer uses. Water rate structures can charge customers that use a large amount of water a higher rate than customers that only use a small amount of water. Water rate structures can even develop a target water use (or water budget) for a particular type of customer and charge the customer more if they exceed the target usage. This section describes three common water rate structures — flat rates, uniform volumetric rates, and block rates — what they can accomplish, and the advantages and disadvantages of each (see Table 1).

Flat Rate or Flat Fee

One simple way to charge customers for water is through a flat fee, where each customer or type of customer pays the same price. Although the charge may vary according to specific factors (such as meter size), this rate structure is characterized by a price that is ultimately independent of the amount of water used (see Figure 3). For example, a single-family residential home with a flat rate of $90 per month would be charged $90 per month regardless of how much water the household used.

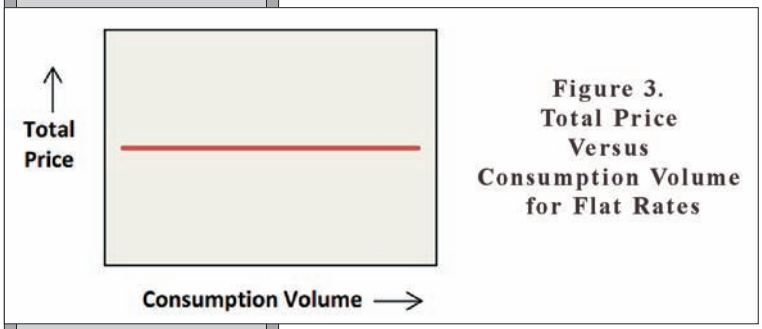


Figure 3. Total Price Versus Consumption Volume for Flat Rates

This method of rate setting is easy to implement and understand. It provides a great deal of financial stability, as revenue is dependent on factors that are easy to predict and less variable than future water demand. However, flat rates are usually best used in conjunction with rates that vary based on the volume of water used in order to ensure customer charges more closely align with the actual cost to provide service.

Volumetric Rate

Uniform Volumetric Rate

Uniform volumetric rates are the simplest way to price water based on a customer's level of use, by charging customers according to a fixed amount per unit of water consumed (Figure 4, next page). While the *unit price* for water does not change according to use, the *total price* of water increases as a customer

Water Rates

uses additional units of water (Figure 5). For example, the same single-family residential customer charged a fixed rate of $90 per month regardless of use, under a uniform volumetric rate of $0.01 per gallon would need to keep their household's use at 300 gallons per day in order to continue paying the same amount. If the household only used 200 gallons of water per day they could save $30/month. And, conversely, if they used 400 gallons per day, they would see their bill rise by $30/month.

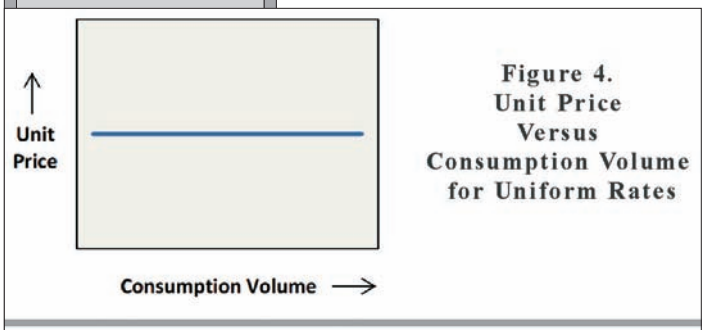


Figure 4. Unit Price Versus Consumption Volume for Uniform Rates

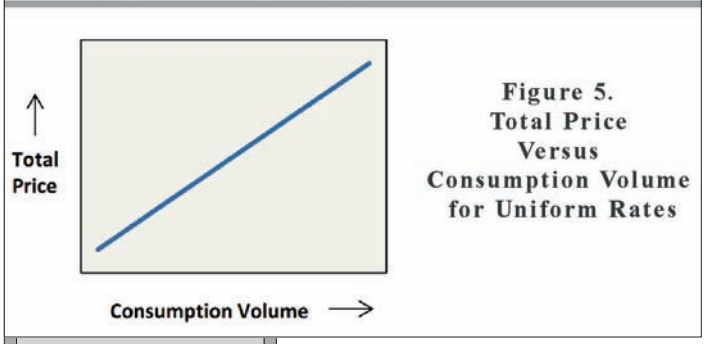


Figure 5. Total Price Versus Consumption Volume for Uniform Rates

Uniform volumetric rates can be structured so that the unit price for water is low (sending a weak conservation signal) or high (sending a strong conservation signal but potentially risking affordability concerns for some customers). The unit price for water can also change throughout the year; "seasonal rates" reflect the annual variation in water costs by applying a higher price per unit for water used during certain times, usually the summer months.

Block or Tiered Rate

Block rates are designed so that the unit price of water changes according to the level of use. A decreasing block rate charges customers less as their water use increases. This structure has historically been used in areas with undifferentiated customer classes; however, it is falling into disuse as it does not encourage conservation. Increasing block rates, on the other hand, charge higher prices as a customer's water use increases. Customers who use low or moderate volumes of water are charged a lower unit price and are thereby rewarded for conservation; those using significantly higher volumes pay higher unit prices.

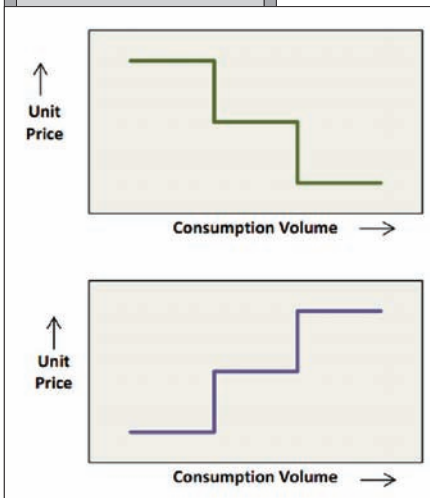


Figure 6. Unit Price Versus Consumption Volume for Decreasing Blocks and Increasing Blocks

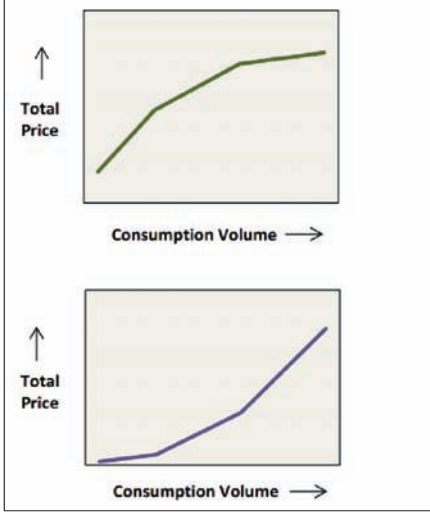


Figure 7. Total Price Versus Consumption Volume for Decreasing Blocks and Increasing Blocks

For block rates, the size of the blocks, as well as the price per unit, are important to send a conservation signal. One relatively new way to set the size of the block is using water budget rates. Budget-based rates use inclining block rates where the sizes of the blocks are unique to the individual customer. Each block is set according to a customer's expected needs, with larger, more expensive blocks set to encourage conservation. For example, the first block can be set to represent average indoor usage, and can be modified according to the number of people living in the household or the size of the house. The second block can then represent outdoor irrigation, and can be based on regional climatic conditions and the size of the property's landscaped area. Any additional blocks would then signal inefficient or "wasteful" uses, and are usually set according to a percent increase above the other blocks. Once the blocks are established, customers can usually apply for variances so that a household with unique water needs — such as a swimming pool or specific medical needs — is not charged rates intended for inefficient use. As long as the customer is efficient in their use and communicates effectively with the utility, they will not be penalized for having needs beyond that of other customers.

RATE DESIGN OPTIONS

EVALUATING ADVANTAGES AND DISADVANTAGES

The choice to implement a new and more complicated rate structure must be considered against the effectiveness of the structure at achieving its intended goals. There is no single rate structure that is appropriate for all utilities, and choosing between them begins with an understanding of the advantages and disadvantages of each.

A utility must, of course, have the institutional and financial capacity to implement the structure. For example, any volumetric rate structure requires water metering as well as the ability to periodically read the meters and bill

Water Rates

Conservation Signal

Essential Use v. Discretionary

Equity Factor

accordingly. Analyses must be done to appropriately set unit prices as well as the size of the blocks, and these analyses are increasingly complicated and expensive the more complex the rate structure becomes. It is also important that staff have the time and resources needed to clearly explain the changes to both customers and decision-makers, especially when the new rate structure isn't immediately intuitive.

Conservation-oriented water rates provide a price signal to customers to use water efficiently, and can be achieved through a variety of volumetric rate structures, including uniform volumetric rates and increasing block rates. In the water scarce region of the western US, particularly, it is important that the rate structure send a signal to customers to conserve, but not every rate structure will necessarily send a strong signal. Although block rates can be an effective way to encourage water conservation, the price per unit as well as the size of the blocks can impact the strength of the price signal. For example, if a uniform rate structure has a higher unit price for water than the last block in an increasing block rate structure (hypothetically set to only encompass excessive water uses) then the conservation signal will actually be much greater with the uniform rate than the block rate.

One important consideration for volumetric pricing is ensuring affordability. One way to manage this is by designing the rate structure to reflect certain customer behavior use patterns. There is often a distinction made between "essential" water use (generally considered to be indoor water use) and "discretionary" water use (outdoor water use or inefficient use). Block rate structures can be crafted to establish essential and discretionary levels of water use so that meeting basic human water needs is affordable for all customers. Water budgets take this idea to the next level, by more closely aligning the size of the blocks to other customer use patterns. However, critics argue that this structure discourages conservation beyond the established budget, by allowing variances for large or nonessential water uses but this is a matter of policy that can be altered in practice.

Rate structures should also consider equity — there is an important distinction between equality and equity. Although flat rates charge all customers *equally*, the charge is not equitable, as large users are responsible for a greater proportion of total system costs. In addition, customers with a higher than average peak water use will have a higher cost of service than customers whose water use is uniform, as peak use requires operation of more expensive system facilities and, in some cases, more expensive water sources. Equitably charging for water requires that customers pay in proportion to the costs that their use incurs.

Table 1. Comparison of Rate Structures

Rate Type	Sends Conservation Signal?	Clear to Customers?	Easy to Implement?	Addresses Equity Concerns?	Provides Reliable Revenue?
Flat Rate	No	Yes	Yes — does not require water metering.	No — water bill does not reflect the cost of.	Yes — water revenue is independent of water use.
Uniform Volumetric Rate	Possibly, depending on the price per	Yes	Yes — though it does require water metering.	Possibly — water bill is directly related to water use.	No — revenue depends on water use.
Decreasing Block Rate	No	Somewhat	Somewhat — requires analysis regarding number and size of blocks and price per unit for each block. Requires water metering and forecasting customer usage.	Possibly — water bill is directly related to water use.	No — revenue depends on water use.
Increasing Block Rate	Likely, though it depends on the block thresholds and the price per unit.	Somewhat	Somewhat — requires analysis regarding number and size of the blocks and price per unit for each block. Requires water metering and forecasting customer usage.	Possibly — water bill is directly related to water use.	No — revenue depends on water use.
Budget-Based Block Rate	Likely, though it depends on the block thresholds and the price per unit.	Somewhat	No — significant cost, time, and customer interaction needed implement and maintain.	Possibly — water bill is directly related to water use. However, equity issues can arise when neighbors pay different amounts for the same quantity of water. Variances can also subsidize discretionary water uses.	No — revenue depends on water use.

Water Rates

Revenue Uncertainty

Kristina Donnelly is a research associate with the Pacific Institute Water Program. Prior to joining the institute, Ms. Donnelly was the 2008/09 Sea Grant Fellow with the Great Lakes Commission in Ann Arbor, Michigan and then worked on transboundary water research and educational opportunities for Israelis, Jordanians, Palestinians, and other nationalities at the Arava Institute for Environmental Studies in southern Israel. Ms. Donnelly received a B.S. in Mathematics from American University and an M.S. in Natural Resources and Environment from the University of Michigan.

Dr. Juliet Christian-Smith is a senior research associate at the Pacific Institute. She is currently an Editor of *Sustainability Science* and a Steering Committee Member of the California Roundtable on Water and Food Supply. Prior to coming to the Institute, she was on a Fulbright Fellowship studying the implementation of the European Union Water Framework Directive. Dr. Christian-Smith holds a Ph.D. in Environmental Science, Policy and Management from the University of California at Berkeley and a B.A. in Biology from Smith College.

Doing so requires an understanding of how much a particular customer class contributes to overall system costs and can be ascertained through a "cost of service" study.

Any rate structure that charges by volume introduces some level of revenue uncertainty since forecasted sales are used to set rates and no forecast will perfectly match reality. Flat rates provide by far the most revenue stability as revenue does not reflect changes in water use. However, flat rates are rarely used for residential water as other priorities, such as conservation and equity, have proven to be more important. Indeed, choosing the appropriate rate structure will always entail tradeoffs and, therefore, there is no "one-size-fits-all" rate structure. Rather, each community must determine which structure is most appropriate based on customer water usage patterns, the need for long-term water supply reliability, and the ability of the structure to achieve the social and economic goals established by the community. Several strategies exist that can address the increased revenue uncertainty associated with volumetric rate structures. These include accurate demand forecasting, robust reserve funds, established financial policies, and ongoing customer education and communication.

CONCLUSION

The US is facing new challenges to sustainable water management, particularly when it comes to financing. Climate change, increasing costs, and an uncertain economy mean that water service providers can no longer rely on past levels of water supply, consumption, or revenue to predict future conditions. Different rate structures can be used to accommodate the "new normal" so that a utility is able to meet costs and ensure resiliency in an uncertain future. However, there is no "one-size-fits-all" rate structure: the structure must be able to meet the goals of the community, and the water service provider must have adequate human, financial, and institutional capacity to implement it. Conservation-oriented rates can send an important price signal to customers to conserve, although water service providers must be conscientious about the potential for these rates to impact revenue generation. Although the new normal will no doubt impact water utilities, accurate analyses, thoughtful planning, and effective communication can foster resiliency in the face of changing conditions.

For Additional Information:
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Additional Water Rates Analysis

Editors' Note: The information presented in the preceding article was largely taken from another, more comprehensive, white paper by your authors: *An Overview of the "New Normal" and Water Rate Basics* — itself part of a new series of very informative white papers that the Pacific Institute began releasing in June in partnership with the Alliance for Water Efficiency and the Community Water Center. This "Need To Know: Water Rates" series of papers also provides California case studies that highlight some of the challenges associated with adopting new rate structures, including Carmichael Water District's change from a flat fee to a volumetric rate structure; the Moulton Niguel Water District's move to a water budget-based rate structure; and the City of Pasadena's move to a three-tiered water rate structure. The series also covers other critical issues for water service providers as they deal with the "new normal," including: water affordability; water financing mechanisms; and lessons from the energy sector.

Available for free download from: www.pacinst.org/publication/water-rates-series/

WATER BRIEFS

ERRATA

Lawrence MacDonnell, author of article *The "Fill Mead First" Proposal* in *The Water Report* #112 (June 2013) will be an Adjunct Professor (as opposed to Professor) at the University of Colorado, Boulder, in fall 2013.

DRAFT ECON REPORT CA

BAY DELTA CONSERVATION PLAN

On August 5, Governor Jerry Brown released a new draft economic analysis of the costs and benefits of his administration's plan to revitalize the Sacramento-San Joaquin Delta ecosystem and stabilize water deliveries, showing a net benefit to California residents of $4.8 billion to $5.4 billion. Key findings of the analysis of the Bay Delta Conservation Plan (BDCP) include: creation of 177,000 construction- and habitat restoration-related jobs in the Delta, resulting in $11 billion in compensation; avoidance of water shortages that could cost over 1 million jobs in counties that depend upon Delta water; a net increase in statewide economic activity of $84 billion over 50 years (factoring in the effects of paying for the BDCP); increased recreation in the Delta; and reduced emissions of greenhouse gases. These benefits are anticipated over the 50-year duration of the BDCP.

One of 22 conservation measures in the BDCP involves building three new intakes along the Sacramento River and two 35-mile-long tunnels to carry water to the existing State Water Project (SWP) and Central Valley Project (CVP) pumping plants in the south Delta. The new northern intakes would be screened to protect juvenile salmon and other passing fish species. Use of the new intakes would allow water project operators to reduce pumping in the south Delta, where reverse flows in nearby channels can directly entrain and disorient fish.

The plan includes 145,000 acres of habitat restoration and protection in the Delta. The plan seeks to achieve the dual goals defined by the Delta Reform Act of 2009: provide a more reliable water supply for California and protect, restore, and enhance the Delta ecosystem. The BDCP is an application to federal and state wildlife agencies to permit the continued operation of the Delta-based CVP and SWP under the Endangered Species Act and the California Natural Community Conservation Planning Act. Those water projects supply two-thirds of California's population with at least some of their water supply and provide water to irrigate 3 million acres of farmland in the Central Valley.

The economic study concludes that implementation of the $25 billion conservation plan is a worthy investment for the water districts in the Santa Clara Valley, Bay Area, San Joaquin Valley, and Southern California that would pay 68 percent of the costs. It finds both positive and negative impacts in the Delta, but far larger statewide benefits from implementing the plan.

Impacts to the largely agricultural Delta region are significant in terms of temporary, construction-related air pollution and traffic delays and the loss of farm jobs as land is converted to tidal wetlands and other habitat. An estimated 37,000 farm jobs could be lost as habitat restoration is implemented, according to the analysis. The cost of traffic disruption is estimated at $53 million to $79 million over a nine-year construction period. The study also predicts that the total costs of changes in regional air quality will range up to $16 million. Overall changes in salinity in Delta waterways due to implementation of the BDCP is expected to cost $1.86 million per year in farm revenues — a decline of less than one-half of one percent of total annual farm revenues in the Delta.

The biggest economic stimulus of the plan would be centered in the Delta. The Delta would have an estimated 110,600 construction jobs (over 7.5 years), 11,300 operations and maintenance jobs (over 40 years), and 55,800 jobs related to restoration (over 50 years). Measures to protect, restore, and enhance wildlife habitat are expected to provide a net increase to various recreational activities, with net economic benefits estimated at $222 million to $370 million over a 50-year period.

The new water delivery system proposed would also help safeguard water deliveries in the event Delta levees were breached by flood, earthquake, or other forces. "Because the ultimate economic benefits of the BDCP depend on factors that cannot be known with certainty (e.g., demand growth, future hydrology, future regulations, climate change), an exact quantification of the direct benefits of the BDCP is elusive," states the economic analysis. "Nonetheless, given the available evidence, two conclusions seem certain. First, the BDCP will result in substantial net benefits to the water contractors that rely on the Delta for at least a portion of their water supplies. Second, implementing the BDCP will reduce a range of risks that are of great consequence to the public. These risks include the vulnerability to floods or earthquakes in the Delta region that may disrupt water exports for an unknown period of time; gradual, long-term sea level rise that could progressively restrict Delta water exports unless mitigating action is taken; and an increasingly strict regulatory environment under the state and federal Endangered Species Acts that could further restrict exports from the Delta."

For info: Economic Study at: http://baydeltaconservationplan.com; BDCP website: www.baydeltaconservationplan.com

STREAM HEALTH US

USGS REPORT RELEASED

The USGS released a new report on July 12, *Ecological Health in the Nation's Streams, 1993-2005*, which describes how streams in the US are being degraded by streamflow modifications and elevated levels of nutrients and pesticides. The report summarizes a national assessment of the ecological health of streams done by USGS's National Water-Quality Assessment Program (NAWQA).

The USGS report is unprecented in its scope. In addition to examining measures of the chemical or physical properties of water, USGS also assessed "resident biological communities" to provide a "more comprehensive perspective" of stream health. "Biological communities provide additional crucial information because they live within streams for weeks to years and therefore integrate through

WATER BRIEFS

time the effects of changes to their chemical or physical environment. In addition, biological communities are a direct measure of stream health—an indicator of the ability of a stream to support aquatic life." *Introduction* at 1.
For info: Study at: http://pubs.usgs.gov/circ/1391/

FRACKING STUDY CA

BLM ANALYSES

On August 2, the US Bureau of Land Management (BLM) announced it would conduct two new analyses of fracking risks to California public lands. BLM plans to begin developing a new "environmental impact statement" for fracking in Central California, along with a statewide independent scientific assessment of the oil extraction process. BLM is taking the action as part of a cooperative effort with California and in response to litigation.

The Center for Biological Diversity (CBD) and the Sierra Club successfully challenged BLM's decision to auction off about 2,500 acres of land in Monterey County to oil companies. A federal judge ruled in April that BLM violated the law by not considering fracking risks or preparing an impact statement for its lease-sale decision. In mid-April the conservation groups filed a second case, challenging a similarly flawed lease sale that covered almost 18,000 acres. A court hearing originally scheduled in August was continued to allow the parties to discuss settlement of the two cases.

A planning review of oil and gas development on public lands managed by the Hollister Field Office in California will begin with a scoping period to solicit public input. Following publication of a Notice of Intent in the Federal Register on August 5, 2013, interested parties will have 60 days to submit comments. Public scoping meetings are tentatively scheduled for fall 2013 (*see* www.blm.gov/ca/eis-og).

The statewide science review will be undertaken as part of a third party independent assessment of industry practices and the geology of oil and gas basins in the state. Led by the California Council on Science and Technology (CCST), the assessment report will consider geology, well completion techniques, and the environmental impacts of those techniques. The report, anticipated in early 2014, will be peer-reviewed and published through CCST.
For info: David Christy, BLM, 916-941-3146; Brendan Cummings, CBD, 760/ 366-2232 or bcummings@biologicaldiversity.org; Mark Westlund, Sierra Club, /415/ 977-5719 or mark.westlund@sierraclub.org

DRINKING WATER FINE CO

INJECTION WELL VIOLATIONS

EPA announced August 5 that Maralex Disposal, LLC (Maralex) has been found liable for violations of the Safe Drinking Water Act at its commercial brine disposal injection well in La Plata County, Colorado on the Southern Ute Reservation. Maralex was assessed a penalty of $89,000.

The decision was issued by an administrative judge following a hearing in October 2012. It upheld EPA's finding of violations of Underground Injection Control (UIC) permit requirements at Maralex's large-capacity disposal well that injects brine and production wastes to an injection zone approximately 8,000 feet below the surface. The violations, which include failure to maintain mechanical integrity of the well, failure to monitor as required, and inaccurate reporting, were discovered through EPA inspections and reports received from the company.

On May 5, 2010, EPA inspected the Maralex injection well and observed excess annulus pressure, indicating a problem with the well's mechanical integrity and the likelihood of a leak in the system. A follow up inspection on May 26 again indicated excess pressure. EPA issued a Notice of Violation (NOV) and instructed Maralex to submit a work plan to fix the violations. Although a July 8, 2010 letter from the company described the potential for a leak and steps the company would take to repair the well, an EPA inspection in April 2011 discovered that the disposal well (still in operation) had not been repaired as described. EPA issued a second NOV and ordered the company to shut down the well until repairs were complete. Maralex completed the repairs and conducted a successful mechanical integrity test on May 24, 2011, at which time EPA authorized the company to resume injection.

"Companies that dispose of production wastes into the subsurface are responsible for taking steps to ensure injection wells are not leaking," said Mike Gaydosh, director of EPA's enforcement program in Denver. "Compliance with these monitoring and mechanical integrity requirements minimizes the risk of waste fluids moving into aquifers and prevents the contamination of drinking water sources." The EPA-issued UIC permit authorizes Maralex to inject produced water into its well, which disposes over 60,000 barrels of waste fluids monthly to a designated injection zone. The fluids contain high concentrations of saline produced water, benzene, toluene, ethylbenzene, and xylene.
For info: Sarah Roberts, EPA, 303/312-7056; EPA's Underground Injection Control program at: http://water.epa.gov/type/groundwater/uic/

WATER PURCHASE WA

STATE AGENCY ACQUISITION

The Department of Ecology (Ecology) is acquiring water rights from the Big Lake Water Association (Big Lake), a public water system near Mount Vernon to provide water for new homes in a water-short subbasin of the Skagit River watershed. Ecology has approved the transfer of 33.56 acre-feet of water to the state's Trust Water Program as part of the water rights acquisition from Big Lake. This water supply will provide mitigation water for as many as 77 new homes and protect stream flows in the Nookachamps Creek subbasin.

The Big Lake purchase is the first water rights acquisition using $2.25 million authorized by the 2012 Legislature to provide a new water supply for new homes in Skagit subbasins that have depleted or nearly depleted water reserves. The Big Lake Water Association, a water system that serves 118 people, will receive $138,598 from Ecology for three water rights.
For info: Jacque Klug, Ecology, 425/649-7270, jklu461@ecy.wa.gov or www.ecy.wa.gov/programs/wr/nwro/skagit-nookachamps.html

WATER BRIEFS

WATER PRICE INDEX WEST

On July 26, WestWater Research released its 2013 Water Right Price Index (WRPIx), a measure of western US water prices. The report indicated that after two consecutive years of decline, level prices suggest that markets may be turning around. The Index tracked prices from 14 major and secondary water rights markets in the western US. In these regions, water rights can be traded separately from land, with an estimated total of $116 million changing hands in 2012. The total value traded and number of transfers both increased from 2011 levels by 26.1% and 47.7%, respectively.

A few regional bright spots helped stabilize the market, supporting the belief that prices may soon rebound. In Northern Colorado, owners of Colorado-Big Thompson Project units enjoyed positive price growth following a downslide that lasted nearly a decade. In addition, year-over-year price increases in California were driven by dry conditions statewide and more increases in imported water costs in Southern California. Index gains were offset by declining prices in Nevada's Truckee Basin, New Mexico's Middle Rio Grande Basin, and Colorado's South Platte Basin. In New Mexico and Nevada, water right prices are linked to land development and a sluggish market caused trading activity and prices to continue to slip in 2012. Meanwhile, water right values in Washington, Utah, Texas, and Arizona have remained stable.

For info: Clay Landry, WestWater Research, 208/ 433-0255, Landry@waterexchange.com or www.waterexchange.com/blog/

EPA FUNDING US

SMALL WATER & WASTEWATER SYSTEMS

EPA recently announced it will award up to $12.7 million for projects to provide training and technical assistance to small public water systems, small publicly-owned wastewater systems, and communities served by onsite or decentralized wastewater systems, and private well owners. More than 97 percent of the nation's 157,000 public water systems serve fewer than 100,000 people and more than 80 percent of these systems serve fewer than 500 people. Many small systems face unique challenges in providing reliable drinking water and wastewater services that meet federal and state regulations. These challenges include a lack of financial resources, aging infrastructure, management limitations and high staff turnover. EPA's funding will help provide water system staff with training and tools to enhance system operations and management practices, achieve and maintain compliance with the Safe Drinking Water Act, and support EPA's efforts to protect public health and promote sustainability in small communities.

For info: http://water.epa.gov/grants_funding/sdwa/smallsystemsrfa.cfm

TEMP CRITERIA REJECTED OR

EPA DISAPPROVAL OF STANDARDS

On August 8, EPA disapproved a key provision of Oregon's temperature standard, the "Natural Conditions Criteria for Temperature" (NCC), and similarly disapproved the Statewide Narrative "Natural Conditions" Criteria (SNC), OAR 340-041-0028(8) and 340-041-0007(2) respectively. EPA's action was based on an order by the federal district court on April 10, 2013, that vacated EPA's previous approvals of the criterion and remanded the matter to EPA for action on the NCC and SNC under CWA Section 303(c). The court order was based on the court's earlier ruling (February 28, 2012) which held that EPA's approval of NCC was "arbitrary and capricious." *See NWEA v. U.S. EPA, et al*., Civil No. 3:05-cv-1976-AC. The April 10th order was stipulated to by Northwest Environmental Advocates (NWEA) and EPA.

Oregon's Department of Environmental Quality (DEQ) can no longer use the natural conditions criteria to account for warmer temperatures in Oregon's rivers, lakes, and streams. Oregon's temperature standard still exists; only the natural conditions method of calculating acceptable temperature levels has been revoked. DEQ must now use the remainder of the temperature standard, which includes numeric criteria, the human use allowance, and the cold water protection criteria, for issuing permits and developing water quality management plans (TMDLs). The remaining EPA-approved portions of Oregon's Water Quality Standards (WQS) regulations, including the Biologically Based Numeric Criteria at OAR 340-41-0028(4)(a-f), are not subject to EPA's action and remain in effect for Clean Water Act purposes. Existing permits are not immediately affected by this decision and remain valid, according to DEQ.

EPA's letter of August 8, informing DEQ of its disapproval decisions, included a discussion of the litigation background and EPA's basis for disapproval. That letter also discusses Oregon's "available options" to remedy EPA's disapproval of the NCC and SNC. Although the court did not expressly address the SNC in its February 28th Opinion and Order, EPA went ahead and disapproved the SNC based on its conclusion that "it is likely that the court would have applied to the SNC one or more of the rationales that the court discussed in connection with holding that the EPA's approval of the NCC was arbitrary and capricious." EPA Letter, page 3.

On August 9, DEQ issued a document that describes the current status of Oregon's water quality standards for temperature and natural conditions and DEQ's plan for implementing the water quality protection program following EPA's action. This topic will be discussed with the Oregon Environmental Quality Commission on August 21.

For info: EPA August 8 Letter and DEQ's August 9 Q& A Sheet available upon request from *TWR*

BASIN OF ORIGIN CA

9TH CIRCUIT REJECTS CLAIM

The Ninth Circuit Court of Appeals (9th Circuit) on July 1 issued its decision rejecting the claim of the Tehama-Colusa Canal Authority (Tehama-Colusa) that it was exempt from drought-related cutbacks by the US Bureau of Reclamation (Reclamation) based on protections for the area of origin (or "basin or origin") under California law. *Tehama-Colusa Canal Auth. v. U.S. Dep't of Interior*, *et al*., No. 11-17199 (July 1, 2013). Tehama-Colusa asserted that

WATER BRIEFS

a California state "area of origin" priority statute compelled Reclamation to provide 100% of Tehama-Colusa's allocated CVP contractual water supply before any water could be exported to other CVP water users south of the Sacramento-San Joaquin Delta (i.e. outside of the "basin of origin"). The case was on appeal from Judge Wanger's decision in federal district court, which also rejected Tehama-Colusa's claims for relief. *See* Water Briefs, *TWR* #91.

The 9th Circuit (Court) concluded that the statute (CWC § 11460) "does not bestow priority water rights upon Canal Authority and its members." The Court's decision was based on its findings that the "renewal contracts entered into by the Canal Authority and its members included terms and provisions outlining the procedures to be followed in allocating water resources during shortage periods. The Canal Authority and its members assented to these terms and provisions in the renewal contracts, and brought actions in state court to validate the renewal contracts pursuant to California law." Referring to the applicable legal standard, the Court found that "[T]he Bureau's exercise of discretion when apportioning water during shortage years in accordance with these renewal contracts was not 'arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law.' 5 U.S.C. § 706(2)(A); see also *San Luis & Delta-Mendota Water Auth*., 672 F.3d at 715 (upholding Bureau's discretionary decision against a similar challenge)." *Slip Op.* at 23-24.

For info: Case at: http://cdn.ca9.uscourts.gov/datastore/opinions/2013/07/01/11-17199.pdf

RECLAMATION POLICY US RECLAMATION DIRECTIVES & STANDARDS

The US Bureau of Reclamation (Reclamation) has recently finalized four water-related Reclamation Manual Policies and Directives and Standards. These new policies accomplish the following goals: (1) better aligns the definitions of irrigation water use and municipal and industrial water use with relevant law; (2) provides improved parameters for contract price negotiations associated with future water transfers; and (3) fills policy gaps, and clarifies existing policy as it relates to the cost of Reclamation–supplied water. The general purpose of these revised policies is to direct Reclamation staff in duties relating to the development, negotiation, execution and administration of water-related contracts.

The four Reclamation Manual releases are as follows: Policy PEC P05: Water-Related Contracts-General Principles and Requirements; Policy PEC P09: Transfers and Conversions of Project Water;
Directive and Standard PEC 05-01: Water Rates and Pricing; and Directive and Standard PEC 09-01: Conversions of Project Water from Irrigation Use to Municipal and Industrial Use.

For info: Peter Soeth, Reclamation, 303/ 445-3615 or www.usbr.gov/recman

CITIZEN SUIT BARS US "DILIGENT PROSECUTION" BARS CLARIFIED

On July 22, the Ninth Circuit Court of Appeals (Court) reversed the federal district court and clarified what is required for judicial or administrative proceedings to bar citizen suits from being brought under the Clean Water Act (CWA). *Sportfishing Protection Alliance v. Chico Scrap Metal, Inc*., Case No. 11-16959, (July 22, 2013). "We hold that § 1365(b)(1)(B) does not apply because the state has commenced no action in court 'to require compliance' with the storm water permit and that § 1319(g)(6)(A)(ii) does not apply because the state has commenced no administrative penalty action comparable to one under the Act." *Slip Op.* at 3. The case involved a citizen suit brought to enforce California's stormwater general permit.

The Court's opinion discusses the defendants' action, California's enforcement proceedings, and provides detail as to why the citizen suit bar provisions ("diligent prosecution" bars) were not applicable in the case. "Our prior decisions clarify two points with respect to the interpretation of § 1365(b)(1)(B). First, we have held that only an action that is 'in a court' triggers the statutory bar; administrative proceedings do not. *Sierra Club v. Chevron U.S.A., Inc*., 834 F.2d 1517, 1525 (9th Cir. 1987). Second, we have construed the phrase 'has commenced and is diligently prosecuting,' as it appears in § 1319(g)(6)(A)(ii), though not as it appears in § 1365(b)(1)(B). In the former context, we have held that the phrase requires an inquiry as to whether the government was diligently prosecuting its action at the time when the citizen filed his or her complaint. *Knee Deep Cattle Co. v. Bindana Inv. Co*., 94 F.3d 514, 516 (9th Cir. 1996)… We now extend that construction to the identical statutory phrase, as it appears in § 1365(b)(1)(B)." *Id*. at 9.

The Court then addressed the second statutory bar at issue, § 1319(g)(6)(A)(ii), concerning an administrative penalty action "comparable" to one under the CWA. "As previously noted, whether a state's enforcement action meets the statute's requirements is assessed as of the time the citizen-suit complaint is filed. *Knee Deep*, 94 F.3d at 516." *Id*. at 16-17. The Court's holding clarified that "the comparable state law must contain penalty provisions and a penalty must actually have been assessed under the state law." *Knee Deep*, 94 F.3d at 516." The crucial fact in this regard was that California "did not actually assess any penalties in the orders themselves." *Id*. at 18.

For info: Case at: http://cdn.ca9.uscourts.gov/datastore/opinions/2013/07/22/11-16959.pdf

STORMWATER ESTIMATES US EPA SOFTWARE

On July 24, EPA released the National Stormwater Calculator. This computer desktop application estimates the annual amount of stormwater runoff from a specific site, based on local soil conditions, slope, land cover, and historical rainfall records. Users can enter any US location and select different scenarios to learn how specific green infrastructure changes, including inexpensive changes like rain barrels and rain gardens, can prevent pollution. This information helps users determine how adding green infrastructure can be one of the most cost-effective ways to reduce stormwater runoff.

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

CALENDAR

August 15-16 CO
Clyde Martz Summer Conference: Arizona v. California at 50: The Legacy and Future of Governance, Reserved Rights, and Water Transfers, Boulder. University of Colorado School of Law. Sponsored by the Getches-Wilkinson Center. For info: www.colorado.edu/law/research/gwc/events

August 16 OR
Joint Regional Agreement on Best Practices for Water Quality Trading (Open House), Portland. ODEQ Headquarters, 811 SW 6th Avenue, 10am-Noon. For info: Bobby Cochran, Willamette Partnership, 503/ 946-8350 or cochran@willamettepartnership.org; Ranei Nomura, ODEQ, 541/ 686-7799 or nomura.ranei@deq.state.or.us

August 18-21 MN
2013 International Low Impact Development (LID) Symposium, St. Paul. St. Paul RiverCentre. For info: Nicole Freese, University of Minnesota, 612/624-3708, cceconf5@umn.edu or www.cce.umn.edu/2013-International-Low-Impact-Development-Symposium/index.html

August 18-22 SC
StormCon: Stormwater Pollution Prevention Conference, Myrtle Beach. Sheraton Convention Ctr. Hotel. For info: www.stormcon.com/

August 20 WEB
Identification & Monitoring of Harmful Algal Blooms Webcast, WEB. 10-11:30am Pacific. Sponsored by EPA. For info: http://water.epa.gov/learn/training/wacademy/webcasts_index.cfm

August 20-22 SC
SPCC & Stormwater Compliance Workshop, Hillton Head Island. The Beach House. Presented by EPA Allicance. For info: www.epaalliance.com/spcc&stormwateraug13.html

August 22 ID
Joint Regional Agreement on Best Practices for Water Quality Trading (Open House), Boise. Idaho DEQ, 1410 North Hilton Street, 4-6pm. For info: Bobby Cochran, Willamette Partnership, 503/ 946-8350 or cochran@willamettepartnership.org; Marti Bridges, IDEQ, 208/ 373-0382 or Marti.Bridges@deq.idaho.gov

August 22-23 NM
Tribal Natural Resources Law Conf, Santa Fe. La Posada Resort. For info: CLE Int'l, 800/ 873-7130 or www.cle.com

August 22-23 NV
Nevada Water Law Conference, Reno. Peppermill Resort Spa Casino. For info: CLE Int'l, 800/ 873-7130 or www.cle.com

August 29 CA
Wetlands Regulation & Mitigation Course, Sacramento. Sutter Square Galleria, 2901 K Street. For info: UC Davis Extension, http://extension.ucdavis.edu/

September 1-6 Sweden
World Water Week, Stockholm. Organized by Stockholm Int'l Water Institute. For info: www.worldwaterweek.org/

September 4-5 CA
Nitrate Treatment Technology Workshop, Sacramento. Cal/EPA Building, 1001 I Street, 2nd Floor. Presented by State Water Resources Control Board & Dept. of Public Health. For info: http://drinc.ca.gov/dnn/Home.aspx

September 5 CA
Effectively Integrating CEQA Streamlining to Create Sustainable Communities Course, Sacramento. Sutter Square Galleria, 2901 K Street. For info: UC Davis Extension, http://extension.ucdavis.edu/

September 10-11 CA
20th Annual Water Conference, Irwindale. SoCal Edison's Energy Education Ctr. Sponsored by SoCal Edison. For info: www.socalwater.org/images/20th_Annual_Water_Conference_FINAL_v2.pdf

September 10-11 WA
Hydrology for the World of Work Workshop: Introduction to the Science of Applied Hydrology, Seattle. For info: www.nwetc.org

September 11-12 OR
Oregon BEST Fest: Northwest's Premier Cleantech Innovation Conference, Portland. Leftbank Annex, 101 N. Weidler Street. For info: http://oregonbest.org/bestfest/registration

September 12 CA
Energy & Water Nexus Summit 2, San Francisco. Aquarium of the Bay (Pier 39). Sponsored by the Bay Planning Coalition. For info: www.acwa.com/events/energy-and-water-nexus-summit-2

September 13 OR
ENR Section Portland Harbor Luncheon Cruise, Portland. The Harbor. Presented by Environmental & Natural Resources Section of the Oregon BAR. For info: Lawson Fite, LawsonFite@MHGM.com

September 15-18 CO
28th Annual WateReuse Symposium, Denver. Marriott City Ctr. Presented by WateReuse Ass'n. For info: www.watereuse.org/symposium28

September 15-18 Turkey
IWA's 4th Cities of the Future Conference, Istanbul. Hilton Hotel. Presented by International Water Ass'n. For info: www.iwahq.org/1zt/events/iwa-events/2013/cof2013.html

September 16-18 China
Water for Mega Cities: Challenges & Solutions - International Specialty Conference, Beijing. Yulong International Hotel. Sponsored by American Water Resources Ass'n & Beijing Hydraulic Engineering Society. For info: www.awra.org/meetings/Beijing2013/

September 17-18 MT
13th Annual Montana Water Law Seminar, Helena. Great Northern Hotel. For info: The Seminar Group, 800/ 574-4852, email: info@theseminargroup.net, or website: www.theseminargroup.net

September 17-19 MT
Monitoring & Assessment of Wetland & Riparian Restoration Sites Course, Bozeman. MSU. Presented by Montana Water Center & Montana DEQ. For info: http://watercenter.montana.edu/training/wetlands/

September 18-19 TX
The UST & AST Management Workshop, San Antonio. Saint Anthony Wyndham. For info: EPA Alliance Training Group, www.epaalliance.com

September 18-19 CA
California Bioresources Alliance Symposium: A Call to Action, Sacramento. California EPA, 1001 I Street. For info: UC Davis Extension, http://extension.ucdavis.edu/

September 19 WA
4th Fisheries & Hatcheries: Legal & Regulatory Frameworks Seminar, Seattle. Washington State Convention Ctr. For info: The Seminar Group, 800/ 574-4852, email: info@theseminargroup.net, or website: www.theseminargroup.net

September 19-20 CA
GIS for Watershed Analysis: Beginning (Course), Davis. 1137 Lab, Plant & Environmental Sciences, UC Davis. For info: UC Davis Extension, http://extension.ucdavis.edu/

September 20 WA
Model Toxics Control Act Seminar, Seattle. For info: Law Seminars Int'l, 800/ 854-8009, registrar@lawseminars.com or www.lawseminars.com

September 20 OR
Source Control Conference: CERCLA & the Clean Water Act, Portland. World Trade Ctr. Two, 25 S.W. Salmon. For info: Holly Duncan, 503/ 282-5220 or www.elecenter.com

September 20 WA
Floodplains Seminar, Seattle. For info: The Seminar Group, 800/ 574-4852, email: info@theseminargroup.net, or website: www.theseminargroup.net

September 22-25 MO
Ground Water Protection Council Annual Forum, St. Louis. Chase Park Plaza Hotel. For info: www.gwpc.org/events

September 23-24 ID
Water in Real Estate Transactions Seminar, Boise. Red Lion Hotel Downtowner. For info: Law Seminars Int'l, 800/ 854-8009, registrar@lawseminars.com or www.lawseminars.com

September 23-24 NM
New Mexico Water Law Conference, Santa Fe. La Fonda Santa Fe. For info: CLE Int'l, 800/ 873-7130 or www.cle.com

September 24-26 TN
2013 Water Education Summit, Chattanooga. Sheraton Read House Hotel, 827 Broad Street. For info: www.h2osummit.org/

September 25 CA
CEQA: A Step by Step Approach (Course), Sacramento. Sutter Square Galleria, 2901 K Street. For info: UC Davis Extension, http://extension.ucdavis.edu/

September 25-26 TX
Water & Energy 2013: Looking Beyond the Shales Conference, Houston. The Houstonian Hotel. Presented by Westwater Research & Global Water Intelligence. For info: www.waterenergystrategy.com/

September 26 CA
Statewide Water Resources Management Workshop, Los Angeles. Sanitation Districts of Los Angeles. Presented by Southern California Water Committee. For info: www.SoCalWater.org

September 26 WA
Future Directions in Water Resource Management - AWRA Washington State Conference, Seattle. Mountaineers Seattle Program Ctr. Presented by American Water Resources Ass'n (WA Section). For info: www.waawra.org

September 26 WA
Northwest Toxics Conference, Seattle. Washington State Convention Ctr. For info: Holly Duncan, 503/ 282-5220 or www.elecenter.com

September 27 CA
Understanding the Sacramento-San Joaquin Delta: An Overview of Delta Governance & Regulation Course, Sacramento. Sutter Square Galleria, 2901 K Street. For info: UC Davis Extension, http://extension.ucdavis.edu/

September 30-Oct. 3 CA
2013 Annual CA-NV AWWA Fall Conference, Sacramento. Convention Ctr. Presented by CA-NV Section of the American Water Works Ass'n. For info: http://ca-nv-awwa.org/canv/web/

October 1-4 NV
WaterSmart Innvovations 2013 Conference & Esposition, Las Vegas. South Point Hotel & Conference Ctr. Presented by Southern Nevada Water Authority & Others. For info: www.watersmartinnovations.com/index.php

October 2 MT
Oil & Gas Development in Montana Seminar, Billings. Hilton Garden Inn. For info: The Seminar Group, 800/ 574-4852, email: info@theseminargroup.net, or website: www.theseminargroup.net

October 2 WA
Wetlands in Washington Seminar, Seattle. TENTATIVE. For info: Law Seminars Int'l, 800/ 854-8009, registrar@lawseminars.com or www.lawseminars.com

October 2-4 SD
Western States Water Council Fall (173th) Council Meeting, Deadwood. The Lodge at Deadwood. For info: www.westernstateswater.org/upcoming-meetings/

October 2-4 NV
6th Annual WaterSmart Innovations Conference & Exposition, Las Vegas. South Point Hotel & Conference Ctr. Presented by Southern Nevada Water Authority & Others. For info: www.watersmartinnovations.com/index.php

October 2-4 MT
Water & Energy: Montana Section AWRA Annual Conference, Bozeman. GranTree Inn. . For info: http://state.awra.org/montana/

The Water Report
Water Rights, Water Quality & Water Solutions in the West
260 N. Polk Street • Eugene, OR 97402

CALENDAR

(continued from previous page)

October 3-4 TX
TCEQ 2013 Water Quality/Stormwater Annual Seminar, Austin. DoubleTree Hotel. Sponsored by TCEQ. For info: www.tceq.texas.gov/p2/events/stormwater.html

October 5-9 IL
Water Environment Federation Technical Exhibition & Conference, Chicago. For info: Water Environment Federation, 800/ 666-0206 or WEFTEC website: www.weftec.org

October 7 CO
Valuing Colorado's Agriculture Workshop, Colorado Springs. Cheyenne Mt. Resort. Presented by Colorado Agricultural Water Alliance & Colorado Water Institute. For info: http://coagwater.colostate.edu/

October 7-8 TX
Texas Water Law Conference, Austin. Omni Hotel at Southpark. For info: CLE Int'l, 800/ 873-7130 or www.cle.com

October 8-9 CA
29th Biennial Groundwater Conference & GRA 22nd Annual Meeting, Sacramento. For info: Water Education Foundation, www.watereducation.org

October 9-10 WA
6th Annual Water Rights Transfers Seminar, Seattle. City University Downtown. For info: The Seminar Group, 800/ 574-4852, email: info@theseminargroup.net, or website: www.theseminargroup.net

October 10-11 UT
Utah Water Law Conference, Salt Lake City. Marriott. For info: CLE Int'l, 800/ 873-7130 or www.cle.com

October 10-11 TX
NGWA Conference on Groundwater & Food Production, Dallas. DoubleTree. Presented by National Ground Water Ass'n. For info: www.ngwa.org/Events-Education/conferences/Pages/5022oct13.aspx

October 11 OR
Environmental Law: Year in Review, Portland. McMenamins Edgefield Manor. Presented by OSB Environmental & Natural Resources Section. For info: Dustin Till, 503/ 241-2641 or dtill@martenlaw.com

October 11 NM
Hydraulic Fracturing Conference, Santa Fe. La Posada de Santa Fe Resort. For info: CLE Int'l, 800/ 873-7130 or www.cle.com

October 12-19 CO
Interdisciplinary Climate Change Research Symposium, Colorado Springs. La Foret Conference & Retreat Ctr. For info: http://disccrs.org/disccrsposter.pdf

October 14-18 NC
2013 Water & Health Conference: Where Science Meets Policy, Chapel Hill. William & Ida Friday Ctr. Sponsored by The Water Institute (UNC). For info: http://whconference.unc.edu/program/

October 15 NE
Changes: Climate, Water & Life on the Great Plains Conference, Lincoln. Cornhusker Hotel. For info: Lorrie Benson, NE Water Center, 402/ 472-7372, lbenson2@unl.edu or http://watercenter.unl.edu/WaterLawConf2013/index.asp

October 15-17 CO
Interstate Council on Water Policy Annual Meeting, Denver. Renaissance Hotel. For info: Peter Evans, Executive Director, phe@riverswork.com or icwp.org