



# River REPORT

Summer 2012

*A project of the Water Education Foundation*

## Maintaining a Fragile Alliance: Colorado River Water Users and the QSA

*By Gary Pitzer*

Nearly a decade after being signed, the Quantification Settlement Agreement (QSA) that inaugurated one of the nation's largest water transfers is bruised but not beaten. Written to settle California's chronic overuse of the Colorado River, the QSA was nearly toppled in court, and the fight for its continued implementation is not over.

Thus far, the QSA has survived the legal challenges fairly intact. In December, a state appellate court upheld the validity of the QSA, rejuvenating those concerned that a lower court ruling threatened to completely unravel the complex set of agreements. The state Supreme Court in March upheld the appellate court ruling, and denied all

petitions to hear the case – sending it back to the superior court to decide on the adequacy of the QSA's environmental review.

Despite the victory, much remains to be worked through, including the fate of the Salton Sea.

Long a conundrum, the ecosystem around the Salton Sea will change as the Sea continues to shrink and grow saltier because of many reasons including climate change and flow declines from the New and Alamo rivers. A smaller sea exposes shoreline and dust problems as well as the question of who's responsible for mitigation and which agency would have to do dust control.

"I think it remains a confounding aspect of the QSA and as long as it remains an open question there is not going to be a whole lot of confidence in the state's ability to perform," said Kevin Kelley, general manager of the Imperial Irrigation District (IID).

IID, the San Diego County Water Authority (SDCWA) and Coachella Valley Water District (CVWD) pay for water transfer-related environmental mitigation measures but the obligation does not extend to the Sea's pre-existing and long-term environmental conditions. The mitigation aims to maintain the elevation of the Sea and limit its salinity

*Continued on page 3*



*Lining of the All-American Canal was completed in 2010.*

## Dear Readers

*It's been almost 10 years since the California agencies that share the Colorado River adopted the Quantification Settlement Agreement. The landmark agreement's principal component is a water conservation/transfer agreement between Imperial Irrigation District and the San Diego County Water Authority. But the QSA also was significant because it quantified Coachella Valley Water District's share of the Colorado River and helped resolve an Indian water rights settlement with the San Luis Rey tribe.*

*In many ways the QSA was a stepping stone to the "Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead" – commonly referred to as the Seven States Agreement. The signing ceremony for this 2007 agreement sparked a standing ovation at the annual Colorado River Water Users Association conference.*

*Both agreements required countless meetings and endless hours of negotiations among parties who are often in conflict. And while the efforts paid off, the real work was yet to come: implementation. In this issue of River Report, Gary Pitzer explores challenges related to the QSA implementation – including lawsuits over some of its provisions.*

*Neither the QSA or Seven States Agreement is perfect and many issues remain to be decided, but as panelists at our September 2011 Colorado River Symposium noted, the most important thing now is to move forward and work together to implement the agreements. You can learn more about these remarks in the written proceedings of the Symposium, now available from the Foundation for \$50. Like the other books we've published after our biennial Colorado River Symposia, I find this one to be insightful and inspiring as all of us in the Colorado River Basin look forward to resolving water issues.*

*Rita Schmidt Sudman*

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The mission of the Water Education Foundation, an impartial, nonprofit organization, is to create a better understanding of water resources and foster public understanding and resolution of water resource issues through facilitation, education and outreach.

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## FEATURE

*Continued from front page*

increases, but officials are concerned the state's inability to come up with a viable and affordable restoration plan could undermine the basis of the QSA.

"The failure of the state to meet its restoration obligations leaves the QSA mitigation measures in jeopardy," said Maureen Stapleton, general manager of the SDCWA. "The QSA agencies call upon the state to fulfill its responsibility for developing a feasible and financially sound Salton Sea restoration plan."

The QSA has been challenged on different legal fronts, including the claim that it will impact air quality because of the dust blowing from the exposed Salton Sea lakebed. The course has wound from a trial court to the state Supreme Court and back again, with the crux of the IID to SDCWA water transfer, the joint powers authority, intact.

The QSA was ruled invalid by a superior court judge in 2010 on the basis that it required an open-ended financial commitment by the state to pay for mitigation costs at the Salton Sea. That decision was overturned on appeal and the state Supreme Court in March denied all petitions to hear the case, sending the case back to the superior court to decide on the adequacy of the QSA's environmental review.

The QSA's withstanding of legal challenges thus far is significant, observers say.

"The big message is the state courts have refused to intervene and have let the QSA go forward," said Robert Glennon, professor of law and public policy at the University of Arizona and author of *Unquenchable: America's Water Crisis and What To Do About It*.

Whatever the case, the QSA is not popular in the Imperial Valley, where proprietary feelings about water have always run strong and there is a belief that the QSA was foisted upon the Valley with less-than-favorable results. The IID board approved the QSA in 2003 on a narrow 3-2 vote that has divided people in the Valley ever since, even though



*In 2009, alfalfa comprised 139,763 acres in Imperial Irrigation District.*

the district has been paid hundreds of millions of dollars for its water.

"If it were placed as a referendum it would be rejected," said Kelley. "I think it's just a sort of lingering sentiment that any transfer of water, especially through fallowing of farmland, is going to be controversial and mistrusted."

That perception reflects the conflicting views about the QSA and how it was handled by the district's staff and board of directors. Issues of finances and water rights are a constant hot topic of discussion.

"There are many competing theories about what should be done in the Imperial Valley," said Michael Cohen, senior research associate with the Pacific Institute. "Some people don't want to see any water leave the Valley."

The central issue to the QSA is the IID-SDCWA transfer that is made possible by conservation measures such as IID system-wide and on-farm conservation.

Uncertainty about the future of the QSA and the ability of the district

to meet its obligations prompted IID to commission a "Plan B" report that recommends options for the best ways forward. The draft report, *A Critical Path Forward: A Plan B for Protecting Water Rights, the Environment and the People of Imperial Valley*, notes that "California's problem of over use of the Colorado River is not IID's problem, but if you are

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This 144-page book can be ordered on-line at [www.watereducation.org](http://www.watereducation.org) under the Products tab.

the senior user on an over-appropriated river, it soon becomes your problem,” and that “it is simply the law of supply and demand and the political penchant for governments to seek to redefine rights in resources so that it can wield them politically to the most powerful constituents that have put IID in the political crosshairs.”

Originally designed as a backup in case the appellate court decision invalidated the QSA, Plan B “demonstrates that IID as a water provider and the board as an elected body want to keep its options open and to consider all the future implications of the implementation process we are in right now, chief among them is resolution of this Salton Sea question,” Kelley said.

New Mexico attorney Chuck DuMars, who authored the Plan B report, said IID needs a way forward if “theoretical” on-farm water conservation targets turn out to be infeasible. “If it’s not obtainable then you can’t conserve it and can’t transfer it,” he said. “You can’t simply presume that because an economist calculates what could be done that it’s actually doable.”

Since the QSA was adopted, IID has been mitigating impacts of the water transfer by releasing water to the Salton Sea, a requirement to stay in effect until 2017. SDCWA and IID now want to end that obligation early because it was premised on the state developing and implementing and financing a restoration plan for the Salton Sea. The two agencies have filed a petition with California’s State Water Resources Control Board (State Water Board) to that effect.

“Without a credible plan, the water agencies need to build beneficial and durable mitigation habitat projects to reflect this new reality,” Stapleton said.

Kelley said “there is a real disconnect in the public mind about mitigation of the transfer’s impacts and this larger issue of restoration,” and that “the first and most important thing the state ought to do is to make clear what it believes restoration would look like.”

In protesting the petition, CVWD said it “recognizes that modifications to the mitigation measures ... may sometime be appropriate, but unless and until an alternative mitigation plan and complete environmental analysis of such

a plan is available ... it would be entirely inappropriate and premature for the State Water Board or [IID and SDCWA] to commit to or approve any changes, including but not limited to elimination of the mitigation water obligation.”

This issue of *River Report* discusses the state of the QSA, including the efforts to find a long-standing resolution to mitigating the transfer impacts on the Salton Sea that threaten the integrity of the agreement.

## **A Matter of Economics and Hydrology**

The broad outlines of the QSA are fairly well-known. Signed in October 2003, the QSA, through more than a dozen agreements, describes the rights of four water districts to a portion of California’s overall 4.4 million acre-feet annual entitlement to Colorado River water for a period of up to 75 years. It provides for a 35-year water transfer of up to 200,000 acre-feet per year from IID to SDCWA, with possible extensions to 75 years.

The QSA was prompted by the understanding that Colorado River water rights holders in California, who had consistently used more than their 4.4

*San Diego*

million acre-feet normal year entitlement every year since 1984, needed to reduce their consumption to accommodate the growing needs in the other six Colorado River basin states. IID's use has been under scrutiny since its use of water was declared unreasonable by the State Water Board in 1984. In 1988, IID entered into an agreement to transfer 100,000 acre-feet of water annually to the Metropolitan Water District of Southern California (MWD).

The IID-SDCWA transfer is done for the first 15 years by fallowing farmland in Imperial County. After 2017, the transition to efficiency-based transfers (such as on-farm tailwater pump-back systems and system canal lining projects) is supposed to be complete. Kelley said "we are working with our water users to develop a menu of realistic options that will produce the water and allow the district to meet its obligations."

"One of the reasons for the complexity [of the QSA] is that in traditional water rights transfers the agricultural use of water is terminated to allow urban users to make use of the water right," the Plan B report says. "The purchaser pays not only for the water but also the lost opportunity of the agricultural user to continue farming."

There is no question the water is needed in San Diego, where supplies are

*"The state said they are the lead on Salton Sea restoration [but] they really have done nothing in 10 years."*

— Steve Robbins,  
Coachella Valley Water District

tightening and water rates climbing. IID transferred 63,000 acre-feet of water to San Diego in 2011 and 410,000 acre-feet in total have been transferred since 2003 at a price of \$143 million.

The fate of the Salton Sea is a major challenge that has eluded resolution thus far. Local officials are less than pleased with the state's performance on the matter thus far.

"The state said they are the lead on Salton Sea restoration [but] they really have done nothing in 10 years," said CVWD General Manager Steve Robbins at the March 28, 2012 Executive Briefing sponsored by the Water Education Foundation. "Time is running very short for anything to happen [and] the fact they are not keeping up on their obligation is causing these agencies a lot of trouble."

On-farm conservation efforts will increase in importance as land fallowing is gradually cut back. DuMars noted that "a restructured agreement must ensure

that the proposed conservation measures work in fact both as a matter of economics and hydrology," and that "if the proposed conservation is not economically or technically feasible, there can be no cost to IID and no non-conserved water transferred to urban users."

The fields being fallowed are not high-value fruits, nuts or vegetables but alfalfa, said Glennon, adding "that makes sense because farmers are savvy business people."

Overall, the Imperial Valley "has adjusted rather smoothly to becoming more efficient, to fallowing lands and installing irrigation efficiency improvements as a way of freeing up water for San Diego," said Glennon. "Long-term, this deal was always intended to bring those lands back into production and I think that's still eminently doable."

## Plan B

Controversial by the nature of its narrow approval by the IID Board of Directors, the perceived practicality of the QSA prompted a revisiting of the core issues through work done by DuMars' Law and Resource Planning Associates, which produced the Plan B report. The draft presented to the IID Board in May contains "alternative suggestions as how to deal with the potential changes that are occurring under the QSA and how to

*Imperial Valley has a well-known reputation for growing midwinter salad vegetables. Above, harvesting lettuce.*



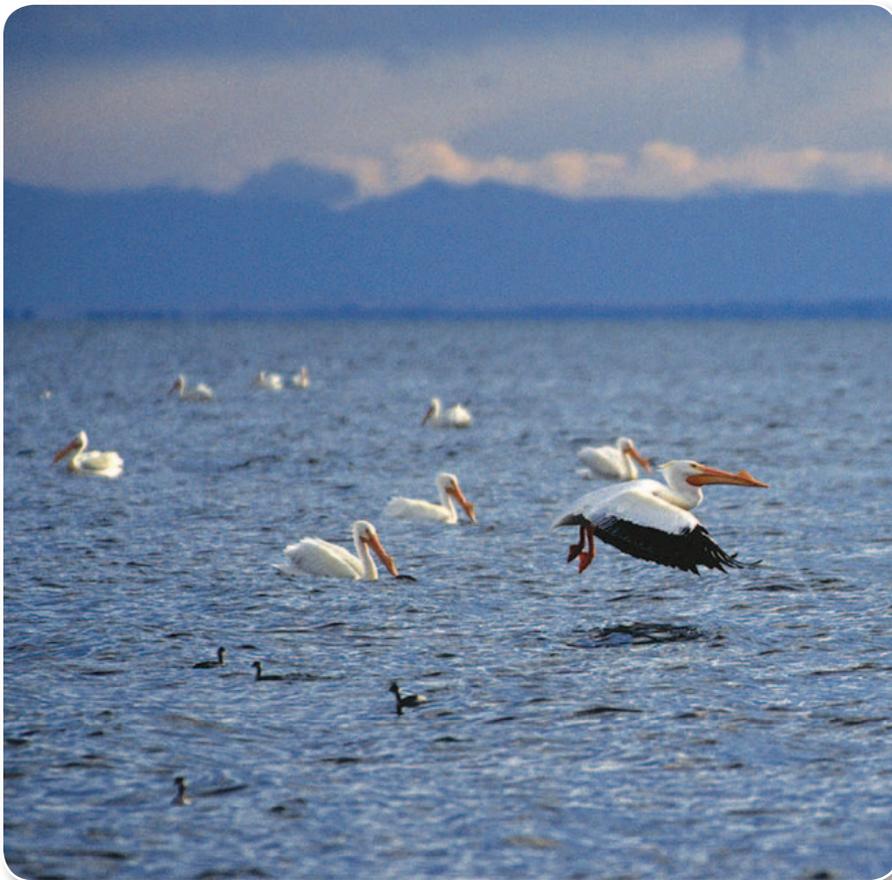
protect the environmental interests and the agricultural interests in the community,” he said.

IID’s obligation to conserve water to meet the parameters of the QSA should not mean a loss of revenue for the Imperial Valley, DuMars told the board May 15.

“We suggest you cannot allow the program to be converted from a conservation program to a fallowing program to meet the needs of San Diego,” he said.

“Critical” to a sustainable water supply for the Valley is that IID “must reject in every forum, both publically and privately the concept that by preserving the Salton Sea it was a wasteful entity [that] did not deserve the water delivered to it under its early priority date,” according to the report, which notes that the district “has been under constant attack”

*White pelicans fly above the Salton Sea.*



*“The Salton Sea represents a pretty significant and important link in keeping these birds fueled and rested as they move up and down the Pacific coast.”*

– Kent Nelson, California DWR

since the State Water Board declared IID a water waster.

That finding has essentially been revisited “insofar as we now realize that just because you had flooding that went into the Sea it was not waste; it was the one thing that sustained the Sea and now that it is being taken away the Sea is declining naturally without any QSA,” said DuMars.

QSA water transfers “can only remain sustainable if the accelerating pace and costs of necessary mitigation and eventual restoration are incorporated into the operational parameters of the QSA as a comprehensive affirmative program for

a sustainable ecosystem, economy and regulatory climate, rather than being conceived as a potential ‘liability’ to be minimized and avoided,” the report says.

### **Protecting ‘Some Variety’ of the Salton Sea**

A key component of the Pacific Flyway, the Salton Sea is an important stopping point for more than 400 species of resident and migrating birds. Accidentally created more than a century ago, the Salton Sea has survived thanks primarily to the agricultural tail and tile water that flows into it from the surrounding farms. It is viewed as a vital resource for birds migrating along the Pacific Flyway.

“The Salton Sea represents a pretty significant and important link in keeping these birds fueled and rested as they move up and down the Pacific coast,” said Kent Nelson, Salton Sea program manager with the California Department of Water Resources (DWR).

State and local agencies have for years struggled with what to do with the Salton Sea. Once envisioned as a Riviera paradise, the Sea has hit troubled times as its base condition slowly worsens. With no outlet except evaporation, salinity increases, leading to a point to where the Sea’s ecosystem will collapse – a calamity for migratory and resident birds, as well as the fish and invertebrates that currently populate the Sea.

“The most serious and immediate threat to the Salton Sea ecosystem is the loss of fishery resources that support [fish-eating] birds,” according to a draft Environmental Impact Report by DWR. “The birds that feed on invertebrates have more options and resources, because the invertebrate fauna has a wider range of salinity tolerances. [Fish-eating] birds, on the other hand, are at risk of decline.”

Scientists at the Sea are not sure why the level is dropping, considering the rate of inflow has not dramatically declined.

“We are not quite sure what’s going on,” said Doug Barnum, science coordinator with the U.S. Geological Survey’s Salton Sea Science Office. “All we know is that the lake level is dropping at a rate

faster than one would expect given the stated inflows.”

Finding a long-term solution to the problems of the Salton Sea has eluded decision-makers at the local and state level for years. Despite being the state’s largest lake, the Salton Sea seems constantly overlooked and forgotten.

“I think it’s a combination of things,” said V. Manuel Pérez, the Democratic lawmaker who represents the area in the state Assembly. “It’s not Lake Tahoe, although it probably should be. I think we are dealing with an area that is very rural that is underserved and not very affluent. You have working class people there. The Salton Sea is not a priority per se [and] that’s the reason why we need wide appeal.”

The state and its partners aim to help the Sea through the Species Conservation Habitat Project, which target species of fish-eating birds that use the Sea’s shallow saline habitat. Nelson said the goal is for scientists and others to gain a sense of what works in creating replacement habitat for these birds. To do that, it is necessary to establish a standardized system for determining the performance of the new habitat ponds to make sure they are providing target benefits. Lessons learned from this monitoring may be applied to other, similar habitat projects at the Salton Sea “now and in the future.”

“We will establish protocols for monitoring and assessment so everybody’s not out there doing some different thing and in the end you can’t really associate the information or do any statistical analysis for the performance of all these various activities,” said Nelson.

In their joint petition to the State Water Board, IID and SDCWA say the Species Conservation Habitat Project and similar ventures “can sooner provide greater quantities of better, and more durable wildlife habitat, while protecting opportunities for renewable energy development on exposed Salton Sea shoreline and air mitigation of some of the emissive Salton Sea shoreline during the years 2014-2017, as compared to the delivery of 480,000 acre-feet of environmental

mitigation water to the Salton Sea in that same time period.”

IID supports the Habitat Project and would like to see it “expanded greatly,” said Kelley. The petition to the State Water Board, which is undergoing environmental review, would ideally free up water to be transferred to MWD in exchange for investment in “more enduring” habitat features and air quality impact control measures at the Salton Sea, said Kelley.

Given the Sea’s downward trajectory, officials are “evaluating the first steps in dealing with the habitat issues,” said Nelson.

“Shallow saline habitat ponds are a common element of all comprehensive restoration plans across the board, so what we are doing is starting to implement ‘no regrets’ strategies to developing habitat in advance of the accelerated demise of the Salton Sea as the QSA water gets turned off in 2017,” he said.

Contributors of that water would prefer the water be shut off sooner, especially if a Salton Sea restoration plan is not forthcoming.

“It would serve no purpose, and indeed be counter-productive ... to require that mitigation water be sent to the Sea from 2014-2017, when those funds could be used instead to start much earlier on beneficial durable mitigation habitat projects,” the joint petition says.

Doing nothing means the Sea becomes saline to the point where it can no longer support fish, which is a “fairly critical issue,” said Nelson.

“When the fish disappear, this whole guild of fish-eating birds is not going to have anything to eat and they will probably stop using the Sea,” he said. “The problem is there are not a lot of other places for these birds to stop and fuel up.”

Environmentalists went along with the QSA with the understanding that a restoration plan for the Salton Sea would happen within 15 years, said Cohen. A proposed \$9 billion preferred alternative met universal disdain in 2007 and remains unfunded by the Legislature.



*Dead fish along the shores of the Salton Sea.*

The scale of efforts is nothing more than “nibbling around the edges,” said Cohen, adding “the part that is frustrating is it’s pretty easy to do things down there.”

“Essentially you put some water out on the desert and birds show up,” he said. “What’s frustrating is the state is going to spend millions of dollars to dig out deep holes to create fish habitat but they have no idea if it’s going to work.”

An approach may be coming through Pérez’ AB 939, which aims to “transfer

Salton Sea decision-making to the local Salton Sea Authority, giving locals a chance to define the type and scope of projects to restore or maintain the Salton Sea,” said Pérez.

The bill, which passed the Senate Natural Resources and Water Committee July 3, directs the Salton Sea Authority and the Natural Resources Agency to deliver a restoration plan to the Legislature by June 30, 2014. The plan would include input from DWR, the Department of Fish and Game, California Energy Commission, Air Resources Board, USGS, environmental groups and local stakeholders.

Pérez, in his second term representing the Imperial Valley, is acutely aware of the fractured history of Salton Sea governance said there is “a lot of momentum” and that “I think we can get somewhere now” in devising a strategy for the Salton Sea. However, his attempt to facilitate a \$2 million appropriation in existing state bond money to help identify feasible and fundable restoration alternatives was vetoed by Gov. Jerry Brown.

The governor’s office “is favorable” to the idea of the study but wants to ensure that departmental funds are not compromised, said Amy Wilson, Pérez

*Part of IID’s water conservation program includes installation of water meters to improve water management and reduce overruns.*



*“We have some pretty smart people – we can solve most of the problems that confront us. If we fall into litigation, then it’s a much more dismal future.”*

*– Bill Hasencamp,  
MWD of Southern California*

communications director, adding that “our intent has always been for this study to be funded through bond money appropriated for the Salton Sea and not departmental funds.”

The potential public health impacts of the diminished Sea are of concern because Imperial County has the highest incidence rate of asthma in the state. The dust was so bad on a recent trip from Imperial to Riverside that visibility was less than five feet, said Pérez.

“I can’t imagine what that place would look like if we don’t do anything about the Sea,” he said.

Glennon said it would be a “tragedy” if nothing can be done to prevent the end of the Salton Sea, based on his experience seeing it firsthand. “As I walked

around and watched tens of thousands of birds fly overhead, it’s like, ‘you can’t let this happen, you can’t let the Sea die off,’” he said. “This is the last stop on the Flyway. Something has to be done to protect some variety of the Salton Sea.”

## **Finding Practicality and Sensibility**

Solutions to the many challenges facing the QSA stakeholders may come from the legal realm but it is also clear that cooperation is needed.

“The key is the response,” said Bill Hasencamp, MWD’s manager of Colorado River Resources, at the Executive Briefing. “We have some pretty smart people – we can solve most of the problems that confront us. If we fall into litigation, then it’s a much more dismal future.”

Cohen said he’s “frustrated” at the lack of progress in dealing with the Salton Sea after working on it for 14 years and that it will inevitably take a crisis to spur action. He blamed the ongoing Sacramento-San Joaquin Delta crisis, which “sucks up most of the energy.” Conversely, the Salton Sea “is so far beyond most people’s wish list or work list they don’t even think about it.”

That will change in a few years, when the Sea “goes over the cliff” into an accelerated rate of decline.

“In 2018 people will start to say, ‘wow, there is a lot of dust blowing off the Salton Sea and we are seeing a lot of dead birds,’” said Cohen. “Then it will become a big story and everybody will say ‘what a disaster, why didn’t we see this coming?’ Then the state and federal government will say ‘we’ve got to do something about this’ then argue about it for two to three years and then it will take another three years to get funding.”

“Then because the Sea is so huge, any construction will take years to complete so we are looking at 10 years after the impacts are first seen before there are any projects on the ground.”

Nelson acknowledged the \$9 billion restoration alternative “is probably not going to happen” but that doesn’t mean

# Calendar

the Sea's issues can't be addressed.

"What I'm hoping will happen is the various government and non-government agencies ... can sit down ... and figure out what pieces of the past plans ... are practical, what makes sense and what is affordable," he said.

Critical to that process is determining how restoration occurs without any additional water, said Nelson. "Everybody wants a beautiful Salton Sea that's more similar to the way it was 30 or 40 years ago but nobody really wants to give up any water to make that happen so it's almost an intractable conflict between interests," he said. "If no additional water is made available to the Salton Sea then we are going to have to plan for a smaller Sea."

Despite the Sea's troubled past, Pérez said a practical plan will emerge that balances the interests of local stakeholders with the state.

"I am optimistic it can be done," he said. "Where there is a will there is way, but I am not 'pie in the sky' because I know the history."

Rancor regarding the QSA is not going away, nor is the animosity that is sometimes directed at IID. "There are a host of competing theories about what should be done in the Imperial Valley and a debate as to what the greater good is," said Cohen. "Some farmers contend they – not IID – should have the right to determine the best use of the water. Others in IID oppose what they see as the heavy hand of the state forcing them to transfer their water."

Kelley said there "is a broader recognition in the general public [now] that a water transfer like the one we have in place is inevitable, but how best to effect a transfer that large and sweeping is always going to be hotly disputed."

Pérez said his support for ending the mitigation water obligation early "depends on what alternative plans or solutions are proposed" but that "I do think people did not get what they should have" from the QSA.

"I don't believe that whatever was negotiated – the amount of dollars that

*Continued on page 11*

## August

- 1-3 Western Water Seminar, sponsored by National Water Resources Association, Sun Valley, ID  
<http://www.nwra.org/events/2012/8/western-water-seminar-2>
- 18 Fryingpan-Arkansas Project 50th Anniversary, sponsored by Southeastern Colorado Water Conservancy District, Lake Pueblo State Park, Pueblo, CO  
<http://www.secwcd.org>
- 9-10 Arizona Water Law, sponsored by CLE International, Phoenix, AZ,  
[http://www.cle.com/product.php?proid=1340&src=Featured&page=Arizona\\_Water\\_Law](http://www.cle.com/product.php?proid=1340&src=Featured&page=Arizona_Water_Law)
- 15-17 Summer Conference, sponsored by Colorado Water Congress, Steamboat Springs, CO <http://coloradowatercongresscoassoc.weblinkconnect.com/cwt/External/WCPages/WCEvents/EventDetail.aspx?EventID=83>

## September

- 10-11 New Mexico Water Law, sponsored by CLE International, Santa Fe, NM  
[http://www.cle.com/product.php?proid=1344&src=Featured&page=New\\_Mexico\\_Water\\_Law](http://www.cle.com/product.php?proid=1344&src=Featured&page=New_Mexico_Water_Law)
- 18-21 Arizona Hydrological Society Annual Symposium, Phoenix, AZ  
<http://azhydrosoc.org/2012Symposium/default.html>
- 24-26 NIDIS (National Integrated Drought Information System Workshop, sponsored by Western States Water Council and California DWR  
[http://www.westgov.org/wswc/NIDIS%20workshop\\_Sep2012.html](http://www.westgov.org/wswc/NIDIS%20workshop_Sep2012.html)

## October

- 3-5 WaterSmart Innovations 2012 Conference and Exposition, Las Vegas, NV  
<http://www.watersmartinnovations.com/index.php>
- 30-31 Restoring the West Conference 2012, Logan, UT <http://restoringthewest.org>
- 31-Nov. 1 Annual Conference, sponsored by National Water Resources Association, Coronado, CA  
<http://www.nwra.org/events/2012/10/annual-conference-2>

## November

- 13-16 Meeting Irrigation Demands in a Water-Challenged Environment, sponsored by the U.S. Committee for Irrigation and Drainage, Reno, NV  
<http://www.uscid.org>
- 14-16 Water Management Symposium on Infrastructure, sponsored by Western States Water Council, Phoenix, AZ  
<http://www.westgov.org/wswc/meetings.html>

## December

- 12-14 Colorado River Water Users Association Conference, sponsored by the Colorado River Water Users Association, Las Vegas, NV  
<http://www.crwua.org/AboutUs/FutureConferences.aspx>

*Contact Sue McClurg with your calendar items from January 2013 through June 2013 for inclusion in the Winter issue of River Report, [smcclurg@watereducation.org](mailto:smcclurg@watereducation.org) or 717 K Street, Suite 317, Sacramento, CA 95814*

## Pulse Flow Releases to Grand Canyon to Continue, Interior Says



*Federal officials have decided that experimental high-flow releases from Glen Canyon Dam designed to pump up sandbars in the Grand Canyon will continue. Scientists previously conducted high-flow releases in 1996, 2004 and 2008.*

Experimental high-flow releases from Glen Canyon Dam designed to pump up sandbars in the Grand Canyon will continue, the Department of the Interior announced May 23.

Previous high flow releases in 1996, 2004 and 2008 provided the “necessary, flexible framework to conduct further experimental releases through 2020 to determine the optimal timing, duration, frequency, and conditions that will maximize ecological and riparian benefits downstream in the Grand Canyon,” says Interior’s press release. The releases will occur when conditions are present to maximize sediment flows.

Advocates for the Grand Canyon push for a regime that more closely mimics conditions pre-dam – steady flows punctuated by periodic bursts of high flows that leave rich deposits of sediment that sustains a thriving riparian habitat. More than 90 percent of the sand that formerly moved through the Colorado River is trapped behind Glen Canyon Dam.

Modifying dam operations concerns those who believe Interior is going out of its way to address national park and environmental issues without considering the impacts to hydropower and other downstream resources.

Previous experimental releases included one weeklong and 2-1/2 days of steady flows of 45,000 to 42,000 cubic feet per second in March and April, November and early March, respectively, to study the effects on sandbars. In each case sandbars were rebuilt in upper reaches of the Grand Canyon with the distributed sediment, but ultimately washed away with the return of normal fluctuating flow operations.

“We’ve gained tremendous knowledge about the unique resources of the Grand Canyon in the Colorado River downstream of Glen Canyon Dam over the past sixteen years,” said Interior Secretary Ken Salazar. “The decision constitutes a milestone in the history of the Colorado River and will provide a scientific foundation to improve future operations to benefit resources in the Grand Canyon, as well as the millions of Americans who rely on the river for water and power.”

Interior also plans to control the trout that threaten the viability of the endangered humpback chub in the Grand Canyon. Extensive government-to-government tribal consultations and analyses were conducted “to ensure the required non-native fish control actions can be implemented in a way that respects tribal perspectives,” according to the press release.

Further experimental releases and the protection of the chub “marks a huge step forward in integrating the management of a dam that’s critical to the delivery of water and power to millions of people in the Southwest with better conservation of the incredible values of the Grand Canyon,” said Anne Castle, assistant Interior secretary for Water and Science. “We are refining our operations to reflect what we’ve learned and address the concerns expressed by several Native American tribes about the management of fish at locations honored as sacred sites by many of the tribes and pueblos.” •

– Gary Pitzer

## FEATURE

*Continued from page 9*

San Diego was going to pay – I don't believe the folks in Imperial County received the better end," he said.

Glennon said there are "some fairly major changes" in Imperial's future, as several "utility-scale" solar power projects will vie for farm acreage.

"That itself is a big change," Glennon said. "It will be interesting to see how IID and the Valley react to this – is this a threat or is this an opportunity for transitioning some people out of alfalfa growing to other kinds of economic enterprises?"

Glennon said he admires IID "because it's a district where everyone in the community gets to vote for the board and so it's a board that's very sensitive not just to the farmers, but to the farm-workers and the farm implementers – the pesticide and fertilizer guys, the John Deere dealers and a local government that has to deal with tax revenues that are down."

For all its criticism, the QSA in all likelihood remains the tie that binds Colorado River water users, agricultural and urban.

"The recent history of Colorado River relations among Southern California water agencies has been rife with conflict and legal wrangling and the QSA was supposed to set all that aside," Kelley

## Major Features

### The QSA:

- Quantifies Imperial Irrigation District's (IID) Colorado River entitlement at 3.1 million acre-feet;
- Quantifies Coachella Valley Water District's (CVWD) Colorado River entitlement at 330,000 acre-feet;
- Settles disputes among the four agencies and seven states that share the Colorado River;
- Provides for large-scale water transfers:
  - IID-San Diego County Water Authority (SDCWA) transfer: Ramps up to 200,000 acre-feet per year in 2021 from IID to the Water Authority for up to 75 years.
  - IID-Metropolitan Water District of Southern California (MWD) transfer: Up to 110,000 acre-feet per year from IID to MWD;
  - IID-CVWD transfer: Ramping up to 103,000 acre-feet per year from IID to CVWD;
  - Transfers of between 25,000 and 111,000 acre-feet annually from the Palo Verde Irrigation District to MWD
- Provides for lining portions of the All-American and Coachella canals, which conserve and transfer 77,700 acre-feet per year to the Water Authority, and 16,000 acre-feet per year to several San Diego County Indian bands to resolve a decades-old water rights dispute.

The Coachella Canal Lining Project was completed in 2006. It conserves 26,000 acre-feet per year.

The All-American Canal Lining Project was completed in 2010. It conserves 67,700 acre-feet per year.

*Source: San Diego County Water Authority*

said. "You could argue it's been successful in doing that but you'd have to make that argument recognizing we have been in court ever since it was signed; it's a

fragile alliance among the water agencies and I think that it holds together so as long as each agency believes its interests are being served." •



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