

Handout

Agenda Item

5G

Date

July 14, 2016

Board Reports

WESTCAS Conference

June 22, 23 & 24

Santa Fe New Mexico

I would like to thank my fellow LGVSD Board members that allowed me to attend this conference. WESTCAS is an interesting group. Unlike a CASA conference where you expect to see 300 + people at the conference - WESTCAS is a much smaller group of around 50 people. I have not attended a WESTCAS conference in the last few years. I believe it has been around 5 years, so I was interested to see if they offered anything of value for LGVSD. I found the presentations to be useful and informative and was glad to have attended.

Santa Fe was very interesting itself. It is the oldest state capital in the USA -1610, predating the Mayflower and Plymouth Rock. It is also the highest state capital @ 7,199'. Quite a historical city, yet with a fairly small population of about 83,000.

I missed the tour of the Santa Fe Watershed which was on June 21. When I think of "the watershed" I think of not only the creeks and streams in uninhabited locations - but the urbanized area as well. In New Mexico what they refer to as "the watershed" is basically the headlands of the main streams, creeks and rivers in the area. The Santa Fe watershed is fenced off and people are not allowed in it. This seems like a pretty drastic measure to me - but this is what they do.

The welcome and opening session on Wednesday was given by Kelly Collins * WESTCAS president and the former mayor - now councilmember who filled in for the current mayor Javier Gonzalez.

Watershed Conservation Tax

A joint presentation given by Brad Hiltcher, Executive Legislative Representative - and Deven Upadhyay, Manager, water resources group - Metropolitan Water District of Southern California.

The presentation focused on ways to promote water conservation. There are three ways to motivate people or in this case agencies.

1. Fine or penalize if standards not met
2. Use carrot approach - reward them
3. (most effective method) - change people's perspective and get them to believe it needs to be done each and every day.

Metropolitan Water District - when the drought became a real concern started issuing rebates to people who conserved water use. One of the biggest success stories was turf removal / replacement. More than 50% of former turf has been removed replaced with something using far less water.

The Rub - Energy gets tax exemption relief - Water is not getting this. New legislation is being introduced to remedy the situation.

Metro Wastewater Reclamation District Integrated Plan

Lisa Hollander -government affairs officer - Denver Metro Wastewater Reclamation District -described her agencies integrated plan - it is a 20 year plan - focused on watershed protection - phosphorus - is a big concern. Nutrient removal is next biggest concern. They do a cost-benefit analysis - and are moving to become tertiary treatment. They are hoping to get away from traditional methods so that they can better achieve goals * Finding co-benefits and partners on nutrient removal, but this will require regulatory approval. They are seeing more flexibility from the EPA with new permit.

Efforts to Develop a Sustainable Colorado River

Bill Hasencamp, manager Colorado River Resources - Metropolitan Water District of Southern California

The Colorado River has reached a critical point - and it is time to make changes - Lake Mead continues to recede - yet Bill claims that drought conditions are not existing. The problem is allocation rights are based off of a study which was performed during years of abnormal rainfall. There is more water being allocated from the Colorado River than actually exists. His point that Lake Powell is not receding proves his "not in a drought" point. He advocates a new agreement which would allocate water from what is actually available. Thinks working together rather than fighting the key.

Washington Report

Hicks & Ray Associates

Despite control of both the House and Senate by the Republicans - the presidential veto is able to create gridlock - House and Senate get long vacation - and things that are hoped to get approval are getting pushed out to 2017 - June was the cut off date for 2016

Lacey Act - many states fighting with each other

WRDA - moving along - WRDA is the means which the Army Corp. gets authority to do projects - lots of political manuring happening with WRDA.

Lunch Speakers -

William deBuys - author of several books including - *The Great Aridness* - climate change and the future of the American Southwest - and *The Last Unicorn*

Mr. deBuys gave an outstanding presentation on climate change * despite a rude member of the audience trying to claim that climate change is just a hoax * almost funny - crowd had to force this guy to remain quiet - Mr. deBuys believes the drought will continue to get worse - and extend up California to nearly the Oregon Border. Many of the trees we know and love will be gone - along with the rise in temperature - insects harming trees will increase - he expects much of California to represent more of what we see in Arizona and New Mexico -yikes!

US Bureau of Reclamation

Gray Payer - represents 17 western states

Says size of pie has not changed - but slice sizes different

Big issues drought, climate change and aging infrastructures

We are no longer in stage to build - we are now in phase of how to manage water. Too many agencies are focused on their own issues and not looking to group management. Wants agencies to submit more applications - * this will create more funding from Capital Hill.

Wants to see direct potable reuse projects * needs desalination projects as back up. Made the point that just because a project is authorized - it does not mean funding for it will follow. Many authorized projects become outdated before they are funded. Might need to un-authorize some. Wants to see more private / public partnerships - creative ways to finance. Stressed the importance of well written applications - they can't read between the lines - requests must be clear otherwise some good projects will never go far.

Getting serious about investing in water infrastructure

Ryan Flynn - first non-Texan to head region - Houston now has highest number of sewer overflows in the Country * used to be Los Angeles -

Mr. Flynn updated status of issues with states he has jurisdiction - Nutrients issue seems to be major issue for most all

Montana - has agreed to meet in 20 years

Utah - will have 10 years - unless they can prove economic hardship

New Mexico - now using pristine watershed as standard - they are trying to use economic hardship to avoid - arguing that other states are not required to comply so why should New Mexico?

Colorado - one of six states "leading the way" on nutrient removal - has monitoring on both upstream and downstream - state has mandated 20 of the 45 facilities have nutrient removal in permits. Working with agriculture to develop incentives - looking to develop education program. However - they are not getting results from data submitted in 2014 - just now submitting test results from 2015

Texas - adaptive management program -on hold. Chlorophyll standards for reservoirs, estuaries and streams need limits still - no limits predicted until 2017 - endangered mussels has 5 year permit

Nevada - with Lake Mead water level dropping - Las Vegas now needs to build new pump so they can pump from lower level of lake - new plan to go to 400,000 acre feet by year 2050

California - new delta proposal coming out - new chromium standards for drinking water will come with high cost - \$750-\$1200 per acre foot - this cost is predicted to double current water rates for many water districts in CA

Stream Monitoring Using SRP Flotography

Salt River Northern Arizona to Phoenix. They set up remote camera to powered by solar to take photos every 15 minutes. This shows change and events taking place regarding water resources.

Buckman Direct Diversion

Randy Sugrue - chief operator Buckman Direct Diversion

This is a jointly funded project between the City of Santa Fe and the County of Santa Fe. The Rio Grande River which is about 20 miles from Santa Fe and at a much lower elevation has a variable quality of water - The direct diversion project which was completed 8 years ago replaced a series of wells and pumps and has a total of 225 miles of pipe

A Tribal Perspective on the Aamodt Settlement and Ploaque Basin Regional Water System Project.

Charlie Dorame - former Governor of Governmental Affairs Liaison, Pueblo of Tesuque

Water rights in the Santa Fe area have been very difficult to sort out. Going back to rights granted by the King of Spain and the many different rights handed out to Native American tribes took quite an effort to sort out. The Pueblo Indians alone have 36 tribes in the area. When the Pueblo tribes were flourishing there were roughly 10,000 people. Today the number is around 2,500. Charlie stated it took lots of give and take on all parties. When he was in high school much of the now closed off to public watershed was a place where he and his friends would party.

End Day 1

Aquifer Recharge and Beneficial Reuse in El Paso TX

Scott Reinert, Water Resources Manager, El Paso Water Utilities

In the 70's El Paso had all the water they needed and it stayed that way up to 1988. A steady decline then began and persisted up to 2009. In 2008 with a joint project with an Army base in the area a desalination plant was built. The Army base previously got water from the aquifer - they found that treated wastewater was much higher quality. They have 10 injection wells to recharge groundwater, and send reclaimed water to the power plant and a golf course. They went through a difficult study to show reclaimed water cost effective compared to alternatives, not to mention higher quality water. They have found that the injection wells will fit nicely in smaller areas / urbanized areas. Only high quality water now allowed for recharge projects.

A new project will combine treated wastewater with treated surface run-off. The number of wells in the area is consistently going down - while recharge injections are increasing. The challenge is the two-month period when harvesting surface water and incoming wastewater is peaking.

Optimizing Reuse to Head Off Climate Change

Bill Schneider - City of Santa Fe

The want to optimize recharging reclamation to head off climate change.

Santa Fe already has the lowest water use in the state

They are continually looking for ecco-friendly water sources - have found that reclaimed water is the best solution - reclaimed water is consistent - buying more water rights is bad alternative. New Mexico's biggest issue involves reclaimed water - indirect or direct?

Goals -1 Expand non-potable reuse 2- Rio Grande return flow credit - good source of water but needs lots of pipe laid. 3 - Upper Santa Fe

River recharge - this is not cheap 4- Lower Santa Fe River recharge - has carbon footprint to consider 5- Buckman Water wells aquifer storage - risky and costly - 6 Reservoir Augmentation * like San Diego - could impact watershed - 7 - Direct Potable Reuse - makes most sense - use Big Spring TX as example - public has resistance - best cost effectiveness - best for Rio Grande -

The Art of Drought Rates

Sanjay Gaur - Akbar Alikhan - Raftelis Financial consultants

Plan ahead - not during crisis -

Do not compare yourself to what neighbors are doing - figure it out yourself

What is fair? Social? Morale? Financial?

Two agencies right next to each other can still be very different

Rates will stabilize reserves

Lunch - Keynote Speaker - Dr. Siegfried Hecker - Emeritus Director, Los Alamos National Laboratory

So up to now I would rate the conference as being very good - I was not prepared to listen to Dr. Siegfried Hecker - everyone there was impressed and were really treated to hear his presentation. This was by far the best presentation @ the conference.

Dr. Hecker immigrated to the USA in 1956. He was a researcher in his native Country Austria. Because he loved his research work he took a position at the newly created Los Alamos Lab. He was not really excited about working on making bombs - but it was research non the less. He worked with team USA and the men involved with making powerful bombs like Oppenheimer.

His career saw him at various positions and he became the Director of Los Alamos which he served from 1988 - 1999. When he retired his work did not stop and continues today. Although Dr. Hecker does not officially represent the USA his reputation and background has made him one of the most respected men in the world on nuclear weapons. He told us he has made over 70 trips around the world to such places as Russia, China, North Korea, India, Pakistan, Iran and on and on.

Dr. Hecker told us that the fact that countries in the world who now have nuclear weapons is no longer the biggest problem. The risk that such weapons might end up in the hands of terrorists is much greater. His visits to countries around the world is primarily around safe handling.

Dr. Hecker answered questions - and we learned that nuclear power should not be phased out - it is now safe and should play an important part in our future.

What a special treat this was to listen to him.

Nutrients panel -state approaches to Permit Limits in Nutrient Impaired Waters

The long and short of it is - there are so many variables and unknowns at this point - agencies are being given years - 5 - 20 to comply - not much more to report than we are all hoping more facts become available so that we can meet the challenge

State Caucuses / Election of Officers / State reports

A total of 5 of us met for California - the current CA WESTCAS rep was re-elected - the biggest news from CA had to do with water rates expected to rise significantly.