



CCRSCO

Clean Colorado River Sustainability Coalition
DRAFT Meeting Minutes
Teleconference Hosted by Bullhead City
2355 Trane Road, Bullhead City, AZ 86442-City Hall -Room 159
Thursday, August 8, 2013
10:00 a.m.

Voting Membership Present

Mark Nexsen-Chairman	Lake Havasu City
Wayne Posey	Buckskin Sanitary District (via phone)
Jack Hakim	Bullhead City
Bill Cox	Chemehuevi Indian Tribe (via phone)
Jake Jacobson-Secretary/Treasurer	Clark County Water Reclamation District
Andy Jones	Colorado River Sewage Systems (via phone)
D.L. Wilson	LaPaz County Supervisors (via phone)
Jim Nafsey	Metropolitan Water District of So. California (via phone)
Karen Flenniken	Mohave County Supervisor-Steve Moss, District 5
David Brownlee	Needles (via phone)
Peggy Roefer	Southern Nevada Water Authority

Others in Attendance

Dr. David Young	Arizona State University (LHC Campus)
Bob Leuck	Bullhead City
Steven Escobar	Chemehuevi Indian Tribe
Charlie Cassens	Lake Havasu City
Doyle Wilson	Lake Havasu City
Jerri Bracamonte	Lake Havasu City

Call to Order

Chairman Nexsen called the meeting to order at 10:02 a.m. Roll call was taken and it was determined that there was a quorum.

1. Approval of Minutes from March 19, 2013 Regular Meeting

Andy Jones made a motion to approve the minutes from the March 19, 2013, Regular Meeting. The motion was seconded by Mayor Jack Hakim and unanimously carried.

2. Treasurer's Report

The Treasurer's Report was given by Secretary/Treasurer Jake Jacobson and is attached. Mr. Jacobson provided a brief overview of the treasurer report including membership dues and financial status for May to current. He reported that in May there was a positive ending balance of \$139,862. June reflected no activity but the interest earned. In July, \$6000 of membership money was deposited and \$2,268 was expensed for insurance. The ending balance as of July 31, 2013, is \$143,609.67.

David Brownlee made a motion to approve the Treasurer's Report as presented. The motion was seconded by Andy Jones and unanimously carried.

3. Board Policy 2013-1 and Resolution 13-001 for Future Members and Financial Obligations in Excess of Dues Payment – Mayor Mark Nexsen

Chairman Nexsen reminded the Board that our Attorney advised that the bylaws permit members to withdraw from CCRSCo but does not address pending financial obligations. He explained that at the last meeting, the Board discussed the benefit of adopting a policy in regard to the financial obligations of members incurred in excess of the revenue generated by dues and any existing reserves. The policy adopts a goal for CCRSCo of keeping expenditures within the revenue generated by dues and any existing reserves. The policy further provides that any expenditure in excess of these amounts must be conditioned upon payment in advance by members of the excess financial obligation in a share to be determined by the Board. Draft Board Policy No. 2013-1 and Resolution No. 13-001 are attached.

Andy Jones made a motion to adopt Board Policy No. 2013-1 in regard to financial obligations of members in excess of revenue generated by dues and existing reserves. The motion was seconded by Jake Jacobson and unanimously carried.

Mayor Hakim made a motion to adopt Resolution No. 13-001 authorizing the Chairperson to execute the amendment to the bylaws in regard to financial obligations of members in excess of revenue generated by dues and existing reserves. The motion was seconded by Andy Jones and unanimously carried.

4. Status Update on Amended and Restated Articles of Incorporation-Mayor Nexsen

Chairman Nexsen announced that the Articles of Incorporation were finally approved by the Arizona Corporation Commission (ACC). He explained that the ACC initially rejected the submittal due to the presentation of the wording of the reference to the initial incorporators, but then they approved the second submittal with the suggested changes. The Articles were approved by the ACC on August 1, 2013. He announced that they will be published as soon as we receive them back from the ACC, and the Board will be notified once the publication is complete.

6. American Rivers Declares Colorado River as America's Most Endangered River-Mayor

Chairman Nexsen advised that the American Rivers declared the Colorado River as America's most endangered river due to water quantity threats. He said what is interesting is, in 2004 they also declared the Colorado River as America's most endangered river, but due to the threats to the river's quality. He explained that his impression is that our group is more interested in water quality and not so much with water quantity in monitoring our river. He said that Congress is being urged to take action and asked if members would like to join in on that action to assist in considering solutions to deal with water shortages.

Chairman Nexsen asked if there were any members that have been involved in congressional action or any kind of discussion regarding water quality or water quantity.

Member Andy Jones advised the Board that a year or so ago, they were seeing large amounts of foam in the river at their location and called out the Bureau of Reclamation (BOR) to visit and take a look. He said they took samples and sent them off to the lab. At one point, he made a call

into the EPA and asked them to take a look and they took samples below Parker Dam and below the Head Gate Dam and concluded that the foam was due to organic loading at the bottom of the lake and not to worry about it. He said they explained that when the surface water is colder than the bottom water and switches, the warmer water comes up and creates the foam. Andy said that he has lived in Parker for many years and never noticed it before.

Mayor Hakim said they have the same situation on the river in his area coming from the dam and that this was the first year it was intense. He said the foam was collecting in the dam area and in the coves. Mayor Hakim also contacted EPA and sent them a sample for testing and the answer was the same – EPA said not to worry about it.

Jake Jacobson says they are one of the dischargers of the river, and he received a call a year or two ago, during the cold season, where foam was seen. He said they did investigate and noticed that it did start to accumulate at the dam, but as the weather stabilized the foam disappeared. He thinks that there might be some value to what EPA is saying, but does not have the longevity that other members might have to make a determination.

Doyle Wilson said that what Andy Jones was talking about was quite extensive. He said that they took samples also and the only thing that stuck out and sparked his curiosity was high levels of phosphorus content. He said that although it's a natural occurrence, it's one of those first time events, curiously since the quagga mussels established themselves in our system. He would like to see some kind of study or research on this correlation or find out what is different that caused this phenomenon.

Peggy Roefer said that they took over the water treatment plant in Laughlin, and started monitoring Lake Mohave on a monthly basis, trying to figure out what is going on from the quaggas. She said it would be helpful if someone could let them know when there is foam, so that they could address the issues below the dam. She also mentioned that they lowered the water level of Lake Mohave, further than they have before, and may have exposed sediments that could have resulted in foaming.

Steven Escobar with the Chemehuevi Tribe also offered to conduct testing for the phosphorus source in addition to the routine testing that he conducts on his side of the lake. He also mentioned that he works for Tribal Environmental for Chemehuevi and they are required to incorporate a Watershed Based Plan for their area. In the past years, they have tried and failed because they have only incorporated the Tribe. His goal is to reach out to other organizations such as CCRSCo to help develop a plan to protect our waters and watershed. The area that he has broken it down to is from Topoc Gorge to Parker Dam. Doyle Wilson mentioned that there is a grant opportunity to expand our group into the watershed, and that we may want to look into applying for this next year to help us facilitate. Doyle will bring more details at the next meeting.

After much discussion on this item, the Board members agreed that although water quantity is important, the focus of CCRSCo moving forward is going to be on water quality. Mayor suggested that we continue to monitor and test the river; however, at this time we don't want to sound any alarms. He also suggested arranging a visit to Topoc for a future CCRSCo meeting and see how their mitigation process is working with regards to Chromium 6. Dr. David Young, from ASU in Lake Havasu City, said that they are looking for projects for their life science students and faculty. He said they all have to do a Capstone Senior project and could help with the Board's efforts in their laboratories in Lake Havasu City as well as in Tempe.

8. Discussion and Possible Action on new logo-Treasurer/Secretary Jake Jacobson

Jake Jacobson asked the Board if they were interested in changing the design of the CCRSCo logo in addition to the new name change modification. He suggested that he would like to hire a third party professional company to provide different designs and will bring the information to the next meeting. The Board agreed that a new design is needed.

7. Topics of Interest for Future Agenda Items-Treasurer/Secretary Jake Jacobson

Jake Jacobson informed the Board that he would like to entertain a bylaw modification that pertains to membership of a quorum. He explained that there is a struggle with scheduling meetings based on the 2/3 membership participation required for a quorum. He said we have voting members that are not active which impacts our numbers when trying to make a quorum. Mayor Nexsen suggested changing the bylaws to just a simple majority. Mr. Jacobson said that he will discuss with Maureen George and find out what will be required to modify the bylaws, and possibly, the articles as well.

Peggy Roefer said that they finished the database that we were using as the match for the Bureau of Reclamation grant, and therefore, the Board needs to come up with other activities to fulfill the obligation. Bob Leuck suggested scheduling a TAC meeting to come up with some programs such as the quagga mussel and foaming issues. Mayor Nexsen agreed they should setup a TAC meeting soon and bring their discussion back to the Board at the next meeting.

Doyle Wilson advised that he currently sits on the Arizona statewide Advisory Panel on Emerging Contaminants for ADEQ. They advise ADEQ and water utilities on matters concerning unregulated chemicals and pathogens of emerging concern that threaten the continued safety of water that CCRSCo may want to be aware of.

5. Presentation on Quagga Mussels-Mr. Heath Phillips, Sales Manager-Zequanox, Marrone Bio Innovations

Mr. Heath Phillips, of Marrone Bio Innovations, gave a presentation on the Zequanox product treatment and its effects on invasive mussels. He stated that their company's goals are to discover, commercialize, and develop biological pesticides. They see the need for alternatives in the industry where chemicals are being overused. He explained what makes Marrone Bio Innovations different from other companies is that they have their own screening laboratory where they are continuously screening different types of naturally occurring bacteria and substances that can be used for pest control in some way.

He displayed a USGS map of the locations of invasive mussels in the United States and gave a brief history of how the mussels came to the United States. He explained how the zebra and quagga mussels are native to the Caspian Sea in Europe and were brought into the U.S. by shipping vessels into the Great Lakes area. They eventually migrated from the east to the west on contaminated boats and are becoming a national issue. He said that the invasive mussel challenges are causing billions of dollars to water systems. They are crippling power, industrial, and municipal operations by restricting water intake pumps, process lines, cooling water systems, heat exchangers, and condensers; accelerating corrosion and pitting concrete and steel; and damaging piping, seals, valves, and other mechanical equipment. He said that the impact of a mussel infestation will vary, but most facility operators experience increased maintenance costs and a reduction in the lifespan of equipment and infrastructure.

He further explained that traditional chemical treatments have certain impacts with discharge due to permitting requirements, safety concerns, corrosion, and detoxification to prevent

harmful effects. He stated that the Zequanox product is a safe alternative to chemical treatments as it produces no carcinogenic substances, requires only minimal permitting, does not require detoxification, has no risk for corrosion, and can be used as frequently as needed for population control. It is a low-risk molluscicide composed of dead cells from a natural occurring microbe called *Pseudomonas fluorescens* strain that has low toxicity and presents little risk to non-target organisms. He explained that Zequanox is recognized by invasive mussels as a nonthreatening food source and is readily consumed. Once ingested, Zequanox destroys the mussel's digestive system.

He explained that the product comes in a powder form and it's mixed it into a slurry using raw water and is injected into whatever system they are treating within two hours after it's mixed. It works in a broad range of water conditions and temperatures, and controls mussels at all life stages. He stated that in trials and commercial facility treatments, results show that Zequanox is highly effective-achieving greater than 90% mortality. The onset of mussel mortality typically occurs within a few days of the treatment day, but ongoing mortality can be observed for several weeks thereafter.

He concluded his presentation by stating that currently EPA limits them to enclosed water systems at this time. By October or November of this year, they hope to treat large open bodies of water. He concluded by stating that the presentation is geared more towards industrial applications, and explained that in open body water systems, what you are going to see is that eradication is not economically or environmentally feasible; however, it could be used on open body water systems through restoration of key areas such as habitats, beaches, coves, or marinas.

Bob Leuck stated that he would be interested in inviting this company back next year after EPA limits have been lifted, for open body water system solutions.

9. Discussion on Current Events

No discussion on this item.

10. Future Meetings -September 12 and December 4 or 5

Members discussed the next meeting date and decided on October 17, with the intention to meet and tour Gene Camp if it's available.

11. Adjournment

A motion to adjourn was made by Jake Jacobson and seconded by Andy Jones. Mayor Nexsen declared the meeting adjourned at 12:09 p.m.