#### LAS VEGAS VALLEY WATERSHED ADVISORY COMMITTEE

Southern Nevada Water Authority 100 City Parkway Las Vegas, NV April 18, 2017 2:00 p.m.

Members Present:Keiba Crear, Las Vegas Valley Water District (alt. LVVWD)<br/>Randy DeVaul, City of North Las Vegas (CNLV)<br/>Priscilla Howell, City of Henderson (COH)<br/>Zane Marshall, Southern Nevada Water Authority (SNWA)<br/>Tom Minwegen, Clark County Water Reclamation District (CCWRD)<br/>Brian Oswalt, City of Las Vegas (alt. CLV)<br/>Steve Parrish, Clark County Regional Flood Control District (CCRFCD)<br/>Jane Pike, Clark County (alt. CC)

Also Present:	Elizabeth Bickmore Adrian Edwards Tabitha Fiddyment Dan Fischer Zach Hills Lisa Luptowitz Carlton Parker	Peggy Roefer Frazier Speaks David Stoft John Tennert Todd Tietjen Andrew Trelease Debbie Van Dooremolen
	Ryan Pearson	

#### 1. Welcome/Call to Order

Zane Marshall called the meeting to order at 2:20 p.m. Technical difficulties delayed the start.

### 2. Public Comment

Seeing no request for public comment, Zane moved forward with the meeting.

#### 3. Introductions

Participants introduced themselves.

- **4. Approve January 10, 2017 Meeting Minutes** Motion to approve the summary passed.
- 5. Receive an Informational Update on Items Related to the Las Vegas Valley Watershed Advisory Committee (LVVWAC) that may appear on Future Regular Board Meetings of LVVWAC Members' Appointing Agencies

Jane Pike indicated that  $\overline{CC}$  would be taking the Las Vegas Wash interlocal agreement to the board in conjunction with CCWRD in May; Tom Minwegen concurred.

Randy DeVaul said the agreement was on the CNLV agenda as well.

Zane noted that SNWA was set to hold their budget workshop in April. In May, the board of directors will consider the interlocal agreement and approval of the 2017 Las Vegas Wash Capital Improvements Plan (CIP) pending approval from today's meeting.

Priscilla Howell and Steve Parrish reported that the interlocal was also on the COH and CCRFCD agendas, respectively, for May.

Brian Oswalt was unaware of any items for CLV.

# 6. Review and Approve the 2017 Las Vegas Wash Capital Improvements Plan

Ryan Pearson, SNWA, presented. The 2017 Las Vegas Wash CIP includes a revision to the estimated project capital cost, estimated design and construction schedule, CIP total cost, cash flow forecasts, priority based on scoring system and the two-year work plan. Ryan also displayed the ranking criteria and channel bed stabilization priorities.

Construction of the Tropicana Weir is ongoing. The Historic Lateral and Sunrise Mountain weirs are ready to go to bid pending ongoing coordination with Nevada Environmental Response Trust (NERT) and Southern Nevada Public Land Management Act (SNPLMA) funding. The fiscal year (FY) 2017/2018 work plan includes the Tropicana Weir, on which construction began in November 2016, the Historic Lateral Weir expansion and Sunrise Mountain Weir with construction on both expected to begin October 2017, for a projected cost of \$18,020,000; revegetation (ongoing at Three Kids, Silver Bowl, and Archery weirs and new efforts at Tropicana Weir) for a cost of \$378,000; and comprehensive programs at \$300,000, for a total of \$18,698,000. With \$4,000,000 in projected grant funding, that leaves the local share at \$14,698,000 for FY 2017/2018. Over the life of the program, there is a projected shortfall of nearly \$7 million that can be covered by an interagency loan from SNWA.

Tom Minwegen suggested that the LVVWAC should issue a letter to the Nevada Congressional Delegation regarding the lower Las Vegas Wash (Wash). Zane indicated that there would be minor updates added to the letter and it would be issued to the LVVWAC for review and approval before sending.

Zane asked if SNPLMA funding for the weirs had been approved by the committee. Ryan responded yes, it had already been approved, that they are just waiting on the funding agreement from the Bureau of Land Management. Once received, the next step will be for the agreement to be considered and approved by the SNWA board, hopefully at the July meeting.

Steve Parrish asked if the funds expected were encumbered or were funds that had been issued and not spent. Ryan indicated that it was his understanding that the funds were encumbered.

The CIP was approved by the LVVWAC.

# 7. Receive an Update on the Stormwater Quality Management Committee

John Tennert, CCRFCD, presented. The Stormwater Quality Program is required by the Clean Water Act as part of the National Pollutant Discharge Elimination System (NPDES). The program is in charge of addressing non-point source pollution in the Las Vegas Valley resulting from stormwater runoff. It is currently operating under its fourth Municipal Separate Storm Sewer System (MS4) permit and covers the developed areas of the Las Vegas Valley. Although

the permit expired in 2015, it has been administratively extended. The CCRFCD is the coordinating agency for program implementation but has no inspection or enforcement authority. The permittees, the local municipalities, are responsible for the day-to-day program implementation, such as enacting and enforcing ordinances and implementing best management practices.

During the 2014 audit, the Nevada Division of Environmental Protection (NDEP) identified potential permit violations in six areas and four areas needing improvement. A high priority was the need to ramp up training. As part of a collaborative process beginning in 2015, permittees met with NDEP to address audit findings and agreed to work on six major deliverables, with the understanding that substantial completion would preclude the need for a more formal compliance vehicle. The audit should be closed soon and hopefully work will begin on development of a new permit by the end of the year. Permittees completed a lot of work in a short period of time. As a result, the program is robust and effective and there is no evidence that water quality is being impaired by stormwater.

Randy DeVaul commended John Tennert and the Stormwater Quality Management Committee for their efforts in completing all deliverables without an administrative order.

### 8. Receive an Update on the Wastewater Dischargers

Adrian Edwards, COH, provided the update. The COH has the capacity to treat 40 million gallons a day (MGD) between two treatment plants. In 2016, 8.6 billion gallons of water were treated. Currently, there are 15 lift stations and 2 stations planned.

The COH's reclaimed water system is comprised of 8 reservoirs, 4 pump stations, 94 miles of pipe and 12 customers which are mostly golf courses and Palm Mortuary. The reclaimed system delivered three billion gallons of water in 2016. The COH's collection system consists of 953 miles of sanitary sewers, 15 sanitary sewer stations and more than 22,000 sanitary sewer manholes. COH plans to spend approximately \$180 million over the next 10 years through their CIP in replacement, rehabilitation and improvement projects.

Brian Oswalt, CLV, provided the update. The CLV Water Pollution Control Facility (WPCF) has a \$28 million odor control project that aims to reduce dependence on chemicals, reduce maintenance requirements and replace failing odor control systems. The WPCF also has a \$24 million, 3 mega-watt solar project that covers 25 acres with 15,162 individual solar panels and is located on the east side of the Wash. Lastly, the WPCF's electrical and headworks project is a \$20 million project that uses redundant power from NV Energy to help prevent power outages.

A member of the audience asked what the lifecycle was of the biological odor control media and if there was an opportunity for sourcing it locally. Brian responded that it was a five-year lifecycle and it was outsourced; staff tried to source it locally but were unable to find a local company to fulfil the requirements.

Zane asked what the costs were to construct plants seven and eight. Brian responded that it would cost approximately \$25 to \$30 million.

Dan Fischer, CCWRD, provided the update. Dan indicated that 100 percent of water at publicly owned treatment works is reclaimed both through indirect reuse and direct non-potable reuse.

Dan gave a brief overview of several projects that CCWRD has completed or are currently under construction. These projects include a sewer pipeline, a 30 MGD demonstration project that combines ultrafiltration membranes with ozone, 65 MGD dual medial filters and the Wash channelization project.

Frazier Speaks, CNLV, provided the update. The CNLV Water Reclamation Facility is a stateof-the art membrane bioreactor facility with a capacity to treat 25 MGD. Currently, the facility treats 17 MGD.

The CNLV collection system is comprised of 774 miles of sewer main, 62,300 sanitary sewer service connections, no public lift stations and cleans 35 to 40,000 linear feet per month.

Steve Parrish asked if the northeast project that Frazier mentioned was the same one located by the speedway. Frazier responded that it was.

9. Receive Presentation and Discuss New Selenium Standard and Take Appropriate Action Todd Tietjen, SNWA, gave the presentation on the new selenium (Se) standard and Se data along the Wash, tributaries, and Lake Mead. Covering Lake Mead, the proposed standard for lentic (lake) waters is  $1.5 \ \mu g/L$  (30-day average), and covering the Wash and tributaries, the proposed standard for lotic (flowing) waters is  $3.1 \ \mu g/L$  (30-day average). These conditions are not to be exceeded more than once in three years. In fish tissue, the criterion components are as follows; whole body:  $8.5 \ \mu g/g$  dry weight; muscle tissue:  $11.3 \ \mu g/g$  dry weight and in egg – ovary:  $15.1 \ \mu g/g$  dry weight. Fish tissue concentrations are not to be exceeded in any samples. The maximum contaminant level for drinking water is  $50 \ \mu g/L$ .

To clarify, there is one proposed criterion for Se with two media and four elements, a fish-tissue based media with egg-ovary and whole-body or muscle elements and a water-based media with monthly and intermittent water column (lentic or lotic) elements. (The criterion has been finalized by the EPA but has yet to be officially adopted by NDEP.)

Todd showed charts of Se concentrations in Lake Mead, Lake Mohave, the upper Wash and tributaries, and the lower Wash at Northshore Road Bridge. Most sample concentrations in Lake Mead exceed the proposed lentic standard. Most sample concentrations in the upper Wash and the tributaries exceed the proposed lotic standard, as do several at Northshore Road Bridge. Additionally, he showed a map of the locations with the highest concentrations of Se in groundwater: Flamingo Wash and Whitney Drainage. Todd also pointed out that there are no current fish studies available to meet the new Se standards; the last fish studies on the Wash were completed in 2010 and several sites showed exceedances. It is possible that Lake Mead might be able to pass the standard using fish.

Other considerations include onsite treatment at hotspots and treatment through the wastewater stream, as well as site specific standards (based on the most sensitive fish species found at the site; requires food web analysis). There are also those that have conducted research on Se, including the Desert Research Institute and Dale Devitt (University of Nevada Las Vegas School of Life Sciences), who have expressed interest in working with SNWA on Se investigations again in the future if there is work to be done.

Todd noted that through informal discussions with Se regulators, they reported that they envision a slow path forward with the new Se standard as it is not a top regulatory concern right now. Also, if data suggested exceedances, regulators would work with SNWA to develop site specific standards. Lastly, EPA has released an implementation guidance document that may cloud the issue.

A member of the audience asked how long it would take to go through the site specific standard process. Todd responded that it could probably be completed in a year if a lot of money was available for the project. There are five sites, so all sites could be done at once or one site could be completed per year. Debbie Van Dooremolen asked what equaled "a lot of money." Todd responded that he didn't know how much a consultant would charge for this type of work. However, it was known that this work was expensive.

10. Receive an Update from Members and Staff Regarding Water Resources, Stormwater, Wastewater, and Water Quality, Including but Not Limited to Regulations, Permitting and Status of the Lower Las Vegas Wash

Randy reported that CNLV is continuing work on both water and wastewater in Apex. The wastewater treatment plant design is 30 percent complete. Staff is also looking at a 13-mile water line to bring Colorado River water to Apex.

# 11. Set Next Meeting Date and Propose Items for the Next Meeting's Agenda

The next meeting is scheduled for July 11, 2017. The July meeting is typically canceled but will be keep on the calendar for the time being. Staff will coordinate the agenda.

### **12. Public Comment**

There were no comments. Meeting adjourned.