

LAS VEGAS VALLEY WATERSHED ADVISORY COMMITTEE

Southern Nevada Water SNWA
100 City Parkway
Las Vegas, NV
April 9, 2019
2:00 p.m.

Members Present: Keiba Crear, *Las Vegas Valley Water District (LVVWD, alt.)*
Mark Dunbar, *City of Las Vegas (CLV)*
Priscilla Howell, *City of Henderson (COH)*
Joemel Llamado, *City of North Las Vegas (CNLV, alt.)*
Zane Marshall, *Southern Nevada Water Authority (SNWA)*
Tom Minwegen, *Clark County Water Reclamation District (CCWRD)*
Steve Parrish, *Clark County Regional Flood Control District (CCRFCD)*
Randy Tarr, *Clark County (CC)*

Also Present:

Steven Anderson	Angela MacKinnon
Jason Bailey	Tom Maher
Elizabeth Bickmore	Jason Neil
Syndi Dudley	Ryan Pearson
Adrian Edwards	Peggy Roefer
Dan Fischer	Ashley Selvy
Sara Gedo	John Solvie
Daniel Hernandez	David Stoft
John Hiatt	Todd Tietjen
Zach Hills	Debbie Van Dooremolen
Eric Hsu	Daniel Ybarra
Lisa Luptowitz	

- 1. Welcome/Call to Order**
Steve Parrish called the meeting to order at 2:00 p.m.
- 2. Public Comment**
Seeing no request for public comment, Steve moved forward with the meeting.
- 3. Introductions**
Participants introduced themselves.
- 4. Approve January 8, 2019 Meeting Minutes**
Motion to approve the minutes 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**
Zane Marshall noted that the SNWA Board of Directors will have the LVVWAC interlocal agreement on its May meeting agenda. Steve Parrish mentioned that the CCRFCD Board of Directors will have that item on its May agenda as well.

Ryan Pearson reported that, pending approval of the Las Vegas Wash Capital Improvements Plan at today's meeting, it will also be on the SNWA Board's May agenda.

6. Review and Approve the 2019 Las Vegas Wash Capital Improvements Plan

Ryan Pearson presented the Las Vegas Wash Capital Improvements Plan (Wash CIP). The annual Wash CIP revision includes the estimated project capital cost, design and construction schedules, total costs, cash flow forecasts, priority-based scoring system, a two-year outlook and pay-as-we-go financial plan. The ranking criteria was not used this year because construction of the weirs has been completed. The last item remaining in the channel bed stabilization is the final weir modifications, which will ensure that all of the weirs are constructed at their planned lines and grades. This is the final item listed on the construction schedule that extends out to mid-to-late 2021. He also stated that there is \$3.6 million in the CIP per year to complete the weir modifications and money for revegetation through fiscal year 2020/2021. The plan forecasts spending \$10.4 million over the next two years and that approximately \$9.1 million in sales tax revenue will be generated, resulting in an overall shortfall of \$1.3 million.

Motion to approve the Wash CIP passed.

7. Receive an Update on Louis Berger's Las Vegas Wash Assessment Study

Syndi Dudley, Louis Berger, presented on the Las Vegas Wash (Wash) assessment study. SNWA has hired Louis Berger to provide support in its transition from construction to long-term operation and maintenance of the Wash. Louis Berger was given three primary engineering service tasks: facilities assessment, long-term operation plan and a Federal Emergency Management Agency letter of map revision. The facilities assessment report is the focus of this presentation and its objective is to conduct an assessment of the Wash CIP facilities and develop a benchmark for future maintenance and vegetation management. There are five steps to assessing the Wash, with the first step focused on looking at federal floodplain regulations as they pertain to the Wash, mainly Title 44 Code of Federal Regulations, Subchapter B, parts 60 and 65. Any such plan for the Wash should address vegetation management because it has a significant effect on flow hydraulics. The second step was for Louis Berger to prepare a detailed inventory of facilities and materials. There were a total of 360 elements inventoried with a unique description and photos. The third step was to conduct a condition assessment of the inventoried list. Of the 360 elements, about 35 percent were obscured by vegetation. Louis Berger rated what they could see as good, moderate or poor. About 90 percent of the facilities were in good condition and only 2 percent were rated poor condition, primarily in the Bostick Weir area. The fourth step was to perform a hydraulic analysis to evaluate the effects of wetland and riparian vegetation on channel capacity and boundary shear. The model chosen was HEC-RAS 2D because it provides a very detailed look. Model outputs included depth, velocity and shear stress, both with and without vegetation. The fifth and final step was to develop a vegetation management plan to help reduce the forces on the weir structures. Louis Berger recommends that all vegetation be removed from the surface of the weir structures and islands that are encroaching on the weirs so there can be an even distribution of flow across the crest.

Zane Marshall asked if any empirical data was collected to validate the model's projection on the shear stresses. Syndi replied that in the early 2000's, Colorado State University performed some testing to measure depth and velocities across the riprap until failure. They found, in general, that the numbers used in the current study are somewhat conservative.

John Hiatt questioned why vegetation growth on the weirs had not been planned for and asked how the vegetation will be removed without significant regrowth implications that would require annual or bi-annual maintenance of the structures. Syndi replied that, at least for the weirs she designed, she recommended the vegetation be kept clear. (Note: the original direction from SNWA Engineering was to keep the weirs free of woody vegetation. Emergent marsh vegetation was considered acceptable, even beneficial, as it could help improve water quality.) Ryan Pearson responded that mechanical maintenance is used and not chemical removal.

Liz Bickmore asked if there were any considerations about trash removal. Syndi replied that the next step would be the long-term operating plan, which would address cleaning up the debris and trash. Steve Parrish asked if sediment removal is included in that, to which Syndi replied that there would be an initial expense to create a baseline and then maintenance would occur from that point.

8. Receive an Update from the Wastewater Dischargers

Dan Fischer presented CCWRD's wastewater discharger update. He reported on the influent flows for all four wastewater treatment plants and noted any variations (mainly seasonal). He also showed the annual total flow averages of all dischargers, which saw a very small increase from last year and is relatively similar to the yearly flows over the previous decade. The influent flow percentages across the four wastewater treatments plant are as follows: CCWRD (55 percent), CLV (23 percent), COH (13 percent), CNLV (9 percent). CCWRD's flow in 2018 was 105 million gallons per day, a 14 percent increase from 2010. The facility has also seen increases in concentrations in the water due to conservation and low flow fixtures, which result in less water flowing into the plants. Dan also showed Nevada's consumptive use of the Colorado River, the diversions, returns and consumptions. The CCWRD had a citizens advisory committee that met throughout the majority of 2018. The committee endorsed the CCWRD Capital Improvement Program (CIP) at a cost of \$1.47 billion over 15 years and paying for it through a connection fee increase, a sewer service charge increase and the ¼-cent sales tax revenue. Over the next five years, the CCWRD CIP will focus on a Flamingo Plant expansion, dissolved air flotation tank (DAFT) rehabs, and new or improved stations, plants and piping, including the small systems.

John Hiatt asked about previous thinking and discussion surrounding offsite preliminary treatment locations to help reduce the load on the primary plant. Tom Minwegen responded that the current focus is to get the water flows back to the plants and then back into Lake Mead.

Steve Parrish asked if the increases in the connection and service fees took into account a sunset of the ¼-cent sales tax. Dan Fischer responded that the increases would need to be adjusted if the sales tax goes away. All member agencies, both water and wastewater, would be affected by a tax sunset.

Joemel Llamado presented CNLV's wastewater discharger update. He reported on the construction of the Nellis reuse waterline that will supply reuse water to ponds that feed Nellis Air Force Base golf courses. Construction progress is at 33 percent complete with a cost of \$3.1 million. He also reported on a proposed flow equalization basin. The general layout will be a three-cell configuration with a gravity flow and diffusers and mixers.

Mark Dunbar presented CLV's wastewater discharger update. He stated that business has been "as usual" within their wastewater plants. He talked about plant upgrades and expansions that will result in some demolition of older and unused facilities. The CLV received a National Association of Clean Water Agencies Peak Performance Award for 2019 and expects to receive one next year, resulting in 20 consecutive years of peak performance. Mark talked about the CLV getting into renewable natural gas sales from their anaerobic digesters. They are working with a buyer to hand over processing as it is becoming increasingly desirable. He also reported on an agreement with Western Elite, who will begin hauling 30 percent of the city's sludge for a beneficial use product. The agreement is a one-year deal with four one-year renewal options.

Adrian Edwards presented COH's wastewater discharger update. He reported on the city's significant achievements in 2018, including 8.9 billion gallons of wastewater treated with 2.5 billion gallons of reclaimed water delivered and no permit violations. He also talked about the completion of their wastewater treatment facility and effluent master plan, which includes facility improvements and expansions. The city recently constructed and put online a new air treatment system as well as a replacement to their aging SCADA system software, hardware and communication systems. Another significant achievement last year was the repair of the 27-inch Green Valley reclaimed pipeline, which corroded and ruptured. Upcoming opportunities for the city this year include growth in developer supplied facilities and plant capacity expansions as well as rehabilitation of aging facilities.

9. 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

Keiba Crear invited the group to participate in the Wash tour on April 23, beginning at 8:30 a.m. Steve Parrish invited the group to participate in their citizens advisory committee tour of various flood control facilities on April 19, beginning at 8:00 a.m.

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

The next meeting is scheduled for July 9, 2019.

11. Public Comment

There were no comments. Meeting adjourned.