



## INTEGRATED RESOURCE PLANNING ADVISORY COMMITTEE 2020 MEETING SUMMARY

*November 20, 2019, 3:00 p.m.*

*Colorado River Conference Rooms, Southern Nevada Water Authority  
100 City Parkway, 7th Floor, Las Vegas, Nevada*

IRPAC members present:	Ken Evans Carol Jefferies Tom Morley Virginia Valentine	Peter Guzman Andy Maggi John Restrepo
IRPAC members absent:	Paul Moradkhan Jonas Peterson	Bob Murnane Phil Ralston
Staff present:	John Entsminger Julie Wilcox Ken Albright Tabitha Fiddymment Greg Kodweis Colby Pellegrino Jordan Bunker	Dave Johnson Kevin Bethel Andy Belanger Peter Jauch Doa Meade Katie Horn
Others present:	Terry Murphy, Facilitator Guy Hobbs, Financial Consultant	

### **PUBLIC COMMENT**

There were no speakers.

### **SUMMARY OF ACTIVITIES**

The Southern Nevada Water Authority's (SNWA) Integrated Resource Planning Advisory Committee 2020 (IRPAC 2020) met on Wednesday, November 20, 2019. The meeting began at 3:11 p.m.

*#1 Approve agenda and minutes from the October 30, 2019 meeting.* Tom Morley motioned to approve the agenda and minutes from the October 30<sup>th</sup> meeting. The agenda and minutes were approved.

Terry Murphy discussed a potential time change for future committee meetings and mentioned that the SNWA Board of Directors would like the committee to discuss an advertising agreement between the SNWA and the Las Vegas Raiders at January's IRPAC meeting when conservation initiatives will be presented.

*#2 Receive an overview of the SNWA's capital planning efforts.* Dave Johnson, Deputy General Manager of Engineering and Operations, gave an overview of the SNWA's capital planning efforts beginning by reviewing the regional water system and the SNWA's role as a water wholesaler to local purveyors. He also discussed the SNWA's capital approach in four major buckets, including the Major Construction and Capital Plan (MCCP), the operating capital (smaller asset management), capital equipment (vehicles and tools), and the Lower Las Vegas Wash.

When planning for future facilities, Mr. Johnson mentioned that the SNWA considers four principal variables: 1) capacity 2) reliability 3) redundancy, and 4) resource maximization. He discussed each variable, its planning consideration and stated that many large infrastructure projects in the past required significant lead time from the time the decision was made to the time that the infrastructure became operational. Peter Guzman asked if the length of time to complete projects was due to financing to which Mr. Johnson responded that most times it is due to the complexity of the project and its components, including initial evaluation, pre-design, design, permitting, right-of-way acquisition and construction.

Mr. Johnson stated that today's regional water system has sufficient capacity to meet current demands, but not future demand with the planned economic development efforts throughout Southern Nevada. He discussed the MCCP, which is the document established to help meet the community's water needs, and stated that it needs to be updated to account for these new, future demands. This document requires approval by the SNWA Board of Directors and all its purveyor member agencies.

*#3 Receive an overview of proposed regional water and power facilities recommended for inclusion in the SNWA's Major Construction and Capital Plan.* Mr. Johnson introduced many MCCP candidate projects beginning with the Horizon Lateral, and gave an overview of the existing SNWA South Valley Lateral and the need for future infrastructure to improve capacity, reliability and redundancy to the system. In 2008, a proposed new lateral on that part of the system was contemplated, but shelved due to the recession impacts. Mr. Johnson stated that by 2024, the existing South Valley Lateral will be at 90% capacity, and a new lateral is needed to meet demands. To meet future demands, a scoping process is underway to evaluate the need for a new lateral. Mr. Guzman commented that it may be beneficial for the SNWA to highlight the economic impact that a project of this magnitude will have on the community in terms of job creation. Tom Morley asked if there was a plan to communicate to the public about the proposed lateral project. Mr. Entsminger stated that public roll out can be part of the committees' deliberation as we get further into the process. Andy Maggi asked about tunneling near or through the Sloan Canyon conservation area. Mr. Johnson responded that this project will likely fall outside the conservation area. Ken Evans also commented on the significant economic impact that design, construction and long-term maintenance of this infrastructure will have on the community. Mr. Johnson shared the management of these proposed facilities and SNWA's existing facilities are part of the MCCP.

He then gave an overview of the Garnet Valley Water System, which is a 16-parcel industrial park in North Las Vegas. He shared the anticipated facilities that are part of the project, a proposed timeline and estimated costs. Mr. Evans asked if this estimate assumes that the land acquisition and rights-of-way are already in place. Mr. Johnson stated that this project timeline has not yet gone into that type of detail, but that it falls under the design component. He also stated that most of the routing will be done on an existing right-of-way, but that these are still just initial estimates. Mr. Evans asked if these major projects can be done concurrently to which Mr. Johnson stated these projects are all planned to be constructed concurrently to meet water demand.

Mr. Johnson proceeded to give an overview of the Garnet Valley Wastewater System, which will maximize water resources by constructing a means to return Apex's used water back to Lake Mead for return-flow credits. He spoke to the existing out-of-valley water use policy, which is to provide for the long-term sustainable development of resources and reduce demand impacts to Colorado River resources. He shared the anticipated facilities that are part of this project, a proposed timeline and estimated costs. Virginia Valentine asked that if the SNWA paid for the backbone of the system, would

the City of North Las Vegas (CNLV) be responsible for paying for the treatment. Mr. Johnson stated that the SNWA would construct the system, and the CNLV would operate the system and bill their customers accordingly. Mr. Evans asked if the residents of the CNLV would pay the connection fees. John Entsminger, General Manager, stated that there would still need to be service laterals and other infrastructure constructed by the CNLV, so it would be up to them to recover their costs. He also stated that in terms of financing this and other projects that will be discussed with the committee, the SNWA's initial assumption is that Connection Charges will be one of the primary mechanisms for financing, along with Infrastructure and Commodity Charges, but that finances will be discussed more in-depth at a future meeting. Ms. Valentine asked how much water is expected to be returned for credit. Mr. Johnson stated that the latest water demand figure from the CNLV is 16 MGD and an estimated 8 MGD would be returned. He stated that the area has not yet been developed, but the reason for the infrastructure is to ensure that water is returned to the wastewater treatment facility. John Restrepo asked what role, if any, the Clark County Water Reclamation District will have in the project. Mr. Entsminger stated that, in this case, the jurisdictional boundaries fall under the CNLV's wastewater system.

Mr. Johnson then gave an overview of the proposed Boulder City Wastewater System, which is also intended to maximize water resources that currently do not have any way to be returned to Lake Mead for return-flow credits. Boulder City currently sends approximately 1.3 MGD to evaporation ponds annually, and this proposed project would provide a pipeline to convey an estimated 1 MGD to the City of Henderson's treatment facility and return it to the Las Vegas Wash. He reviewed the anticipated facilities that are part of this project, a proposed timeline and estimated costs. Mr. Entsminger stated that the estimated \$26 million would save approximately 1,300 acre-feet of water today and more if Boulder City expands, noting that this water is currently being evaporated. Carol Jefferies asked if the 1,300 acre-feet of water savings is an annual figure, to which Mr. Entsminger affirmed.

Mr. Johnson proceeded to give an overview of a large-scale solar photovoltaic (PV) project, which will improve capacity, reliability, redundancy and maximize resources. Until recently, the SNWA has been participating voluntarily to meet the Nevada Renewable Portfolio Standard of 25 percent by 2025. Under recent legislation, the SNWA is now mandated to comply with the goal, and Mr. Johnson stated that this project is critical to meeting the new standard and reviewed the anticipated facilities that are part of this project, a proposed timeline and estimated costs. Mr. Evans asked if the transmission lines can be shared with others, to which Mr. Johnson replied in the affirmative and discussed additional wheeling revenue. ibV Energy, a private company who is constructing the energy project, will build, own and operate the solar PV plant and the SNWA will enter into a 25-year Power Purchase Agreement with an 8-mile expansion to its existing transmission system. Ms. Jefferies asked if the SNWA will pay for the construction of the transmission lines. Mr. Johnson stated that the SNWA will fund the transmission lines, and Mr. Entsminger added that the SNWA wants to own its own transmission lines because it is a strategic asset which offers the organization energy stability.

Mr. Johnson then gave an overview of a various asset management projects, which primarily relate to rehabilitation or improvement to the existing regional water system. He discussed upgrades to the SNWA's Stage 2 infrastructure, aging in-valley water storage and transmission facilities, an ozone rehabilitation at the SNWA's water treatment facilities, filter improvements at the Alfred Merritt Smith Water Treatment Facility, and an in-valley maintenance facility that will be required with an increased project workload. John Restrepo asked where a new building for maintenance would be constructed. Mr. Johnson stated that there are several possibilities, but one option is on the LVVWD's Valley View campus. Mr. Restrepo asked if land would need to be purchased for the other options. Mr. Johnson stated that estimates have included the acquisition of land. He also stated that the Low Lake Level

Pumping Station has a few, smaller projects that remain in order to complete the station and they would be included in an updated MCCP. He noted other asset management projects, including asset management software replacement, a microbiology research lab retrofit, SCADA upgrades, water quality testing equipment and a system-wide valve actuator upgrade. Mr. Maggi asked for some examples of emerging contaminants as it relates to microbiology. Mr. Johnson stated that Microcystis is an issue of concern and that a lab retrofit will allow for better testing and measuring for these types of issues. He then gave a cost estimate overview of all the total asset management projects and a total of all MCCP facility project costs.

Mr. Johnson discussed the operating capital budget, which is made up of 190 smaller asset management projects and the capital equipment budget, which includes items such as tools, machines and vehicles. He also discussed the Lower Las Vegas Wash, which requires significant work to address erosion. The SNWA estimates the current rate of erosion in the Lower Wash is 2 – 3 vertical feet per year. He shared information about the anticipated structures that are part of this project, as well as estimated costs.

#### **Total MCCP Facility Project Costs**

Horizon Lateral	\$1,596.7 million
Garnet Valley Water	129.8 million
Garnet Valley Wastewater	120.0 million
Boulder City Wastewater System	26.0 million
Large-Scale Solar PV Project	20.8 million
Asset Management	229.7 million
<b>Total</b>	<b>\$2.1 billion</b>

#### **Total SNWA Capital**

Major Construction and Capital Plan	\$3,003.3 million
Facilities	\$2,123.0 million
Resources	\$880.3 million
Operating Capital	176.7 million
Capital Equipment	50.0 million
Lower Las Vegas Wash	122.5 million
<b>TOTAL SNWA CAPITAL</b>	<b>\$3.35 billion</b>

Mr. Johnson then gave a total for the SNWA capital, which totals \$3.35 billion. Mr. Entsminger added that some of it is covered by existing revenue streams. Mr. Restrepo asked if the operating capital will be spent over time to which Mr. Johnson responded that it would be spent over an approximately 10-year period.

Ms. Murphy mentioned that those not in attendance will receive the same information prior to the next committee meeting. She asked for further questions from the committee, closed the meeting and stated that the next meeting will be held December 18<sup>th</sup>.

#### **PUBLIC COMMENT**

There were no speakers.

#### **ADJOURNMENT**

The meeting was adjourned at 4:28 p.m.