



**INTEGRATED RESOURCE PLANNING ADVISORY COMMITTEE 2020
MEETING SUMMARY**

January 8, 2020, 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	Peter Guzman
	Carol Jefferies	Andy Maggi
	Bob Murnane	Jonas Peterson
	John Restrepo	Virginia Valentine

IRPAC members absent:	Paul Moradkhan	Tom Morley
	Phil Ralston	

Staff present:	John Entsminger	Dave Johnson
	Julie Wilcox	Kevin Bethel
	Ken Albright	Andy Belanger
	Tabitha Fiddymont	Peter Jauch
	Greg Kodweis	Alisa Mann
	Doa Meade	Frank Milligan
	Colby Pellegrino	Katie Horn
	Jordan Bunker	

Others present:	Terry Murphy, Facilitator
	Guy Hobbs, Financial Consultant

PUBLIC COMMENT

Ed Uehling cited a letter that he wrote to the committee members. He discussed the previous IPRAC meeting and stated that there are other water resource alternatives than those presented by SNWA staff. Mr. Uehling criticized SNWA's California water banking efforts. He suggested that water stay in Southern Nevada. The letter is attached to this meeting summary.

SUMMARY OF ACTIVITIES

The Southern Nevada Water Authority's (SNWA) Integrated Resource Planning Advisory Committee 2020 (IRPAC 2020) met on Wednesday, January 8, 2020. The meeting began at 3:06 p.m.

#1 Approve agenda and minutes from the December 18, 2019 meeting.

Virginia Valentine motioned to approve the agenda and minutes from the December 18th meeting. The agenda and minutes were approved.

#2 Receive an overview of the Southern Nevada's water conservation efforts.

Colby Pellegrino, Director of Water Resources, gave an overview of the SNWA's water conservation efforts since its formation in 1991, which included adoption of its first Drought Plan in 2003. Colby noted that throughout the presentation, there are conservation-related recommendations from staff, that if implemented or evaluated, could reduce water use and achieve the SNWA Conservation Goal.

She discussed the Out-of-Valley Reuse Policy, which was approved by the SNWA Board in 2017 and is intended to maximize water supplies in new areas of the water system. Virginia Valentine asked what changes would be made to the policy. John Entsminger, General Manager, stated that the policy has been adopted by the SNWA Board of Directors, but has not been adopted by SNWA member agencies or embedded into local ordinances or codes, and therefore lacks any regulatory authorities. He stated that as development and expansion occur, putting these principles and policies into a regulatory framework and having more uniform ordinances across member agencies is needed.

Ms. Pellegrino went on to discuss the SNWA's Conservation Plan, which describes current water management measures. She also reviewed several new efforts and strategies that have been implemented since the plan's last update and stated that implementing the conservation plan is estimated to reduce Southern Nevada's gallons per capita per day (GPCD) estimate by 3.42 by 2035.

Despite relative success of SNWA's conservation efforts, she warned that climate change and system age will make it more difficult to achieve the SNWA's 105 GPCD conservation goal. Recognizing this issue, SNWA formed an internal workgroup to consider new approaches to conservation and reducing water use. She reviewed the workgroup's goals which include improving enforcement and water efficiency, leveraging technology and analytics, improving conservation outreach and improving overall system efficiency, among others.

In response to a slide that showed Southern Nevada's GPCD history, Bob Murnane asked why there was such a decrease in GPCD between 2003 and 2004 (down 39 GPCD). Mr. Entsminger replied that it the first time the Southern Nevada community was receiving such a strong drought message and the response was overwhelming. Since then, message saturation, among other things, has led to more conservation stagnation compared to previous years.

Ms. Pellegrino moved on to the issue of non-functional turf in the community, recognizing that turfgrass consumes a lot of water, and non-functional turf is a wasteful use of water resources. She reviewed the Water Smart Landscape (WSL) program and noted its significant achievements as it has helped remove 193 million square feet of turf, resulting in a savings of 130 billion gallons of water. She discussed removing remaining non-functional turf, and clarified that non-functional turf does not include functional grass in parks, ball fields, schools, etc. Under the current WSL program, SNWA is removing approximately 1 percent of available non-functional turf per year. John Restrepo asked what the SNWA attributes to the stagnation of the program. Mr. Entsminger stated that the SNWA has already gotten the low hanging fruit, those willing to participate in the program. Ms. Valentine stated that some HOAs make it extremely difficult to remove existing turf and require a certain amount of foliage at residences. Mr. Entsminger added that commercial conversions are also difficult because it is difficult to track down a person authorized to approve the conversion. Jonas Peterson asked if new non-functional turf coming into the market is monitored and tracked. Ms. Pellegrino stated that new non-functional turf is not specifically tracked, but that building codes, introduced in 2004, are intended to limit new non-functional turf coming in as communities are bound by these regulations, unless they are under old development agreements that pre-date changes to the codes. Ms. Pellegrino stated that there are still conservation opportunities available and that increasing WSL conversions by 56 acres per year through 2035 could yield a 4.46 GPCD savings.

The committee had a brief discussion about WSL opportunities at schools, and asked questions if there was resistance from schools to participate. Ms. Pellegrino reported that the school district is interested in converting non-functional turf to water efficient landscaping and playing fields to synthetic turf, but

the largest obstacle is the capital outlay as the SNWA's program does not fully fund the conversion to synthetic turf.

Mr. Evans asked if the SNWA has surveyed the community as to why they are not participating in the program. Ms. Pellegrino responded that much of the targeted outreach has been done with the HOAs and that much of the feedback from HOAs is that people in the communities like the grass. Mr. Peterson suggested the community might be at a point where we need to start looking at doing more than increasing incentives, and instead evaluate changing service rules, codes, and ordinances. Andy Maggi agreed with Mr. Peterson's comments.

Ms. Pellegrino discussed the Non-Functional Turf Resolution, which was adopted by the SNWA Board in 2019, which aims to further curb installations of new, ornamental turf. She recommended that updates are needed to service rules, codes and ordinances to consistently implement new turf restrictions across the SNWA member agency service area. Mr. Evans asked about the committee's advocacy role, to which Ms. Pellegrino responded the recommendation could be that it is put into all the member agencies codes and service rules so that it can be enforced with uniform application.

Ms. Pellegrino discussed a relatively new SNWA incentive program that offers a reduced rebate to schools and parks that convert functional cool-season turf to more water-efficient varieties, noting that increased program participation could yield a 0.30 GPCD savings. Mr. Evans suggested educating and managing aesthetic expectations when converting to warm-season turf.

Ms. Pellegrino then turned the conversation from non-functional turf to SNWA's watering restrictions. She noted that landscape watering compliance has been part of conservation efforts for many years, and that improving compliance with seasonal watering restrictions remains a high priority. To support this, the SNWA has increased education, advertising and outreach efforts, and is conducting a series of pilot studies to better understand customer response, including one using ITRON meters. She stated that achieving higher levels of compliance could yield a 5.05 GPCD water savings.

The committee discussed advanced meter reading technologies. Committee members asked if advanced metering infrastructure (AMI) technology is a full meter change-out, and Ms. Pellegrino stated that all LVVWD meters have been changed and that the cities of North Las Vegas and Henderson are in the process of implementation. Mr. Entsminger noted that full implementation of this technology is lengthy, as the investment is significant, and the process requires permitting and putting physical assets on the ground.

Ms. Pellegrino also discussed increasing compliance with full-scale deployment of smart controllers (automated time-of-day & day-of-week compliance) and expanded advertising and outreach. Mr. Evans asked how the committee could advocate to which Ms. Pellegrino responded that the conservation opportunity is to implement smart controller technology to automate landscape watering compliance and increase outreach and enforcement efforts to facilitate participation from current and future customers.

Ms. Pellegrino moved on to customer leaks. She shared that LVVWD is using meter data to identify leaks and alert customers and is implementing new metering and billing technology to provide real-time water use information and analytics. She stated that providing near real-time leak notification using AMI technology could yield a 4.97 GPCD water savings.

Committee members asked clarifying questions about how existing leak assistance programs work, how they're budgeted and if any proactive leak programs exist. Ms. Pellegrino reiterated that adding AMI will help detect small leaks on property and ultimately, save water.

Ms. Pellegrino moved to the topic of evaporative cooling – the second largest consumptive use of water in Southern Nevada. To reduce consumptive use from cooling towers, the SNWA is exploring pilot programs to help shape a more efficient cooling program that could complement the existing Water Efficient Technologies (WET) program – an incentive program that currently rebates cooling tower replacements/upgrades for consumptive use reductions. Reducing consumptive water loss from evaporative cooling by 20 percent could yield a 2.23 GPCD water savings. Following committee questions about requiring aging publicly-owned buildings to upgrade or replace their equipment and what the impact of new technologies would be on energy, Ms. Pellegrino responded that the pilot tests will help provide more information to these questions.

Ms. Pellegrino then turned to high water users – large water users who use in excess of 1 million gallons per month. While this customer group is relatively small, there is an opportunity to reduce water use in this sector by establishing an efficiency review policy and process to encourage efficient development and disincentivize consumptive use. Staff estimates implementing an efficiency review policy and process for new large water users could yield a 1.09 GPCD water savings.

Ms. Pellegrino outlined system losses or water lost in the water system from leaks. While Southern Nevada's water system is highly efficient, Ms. Pellegrino warned that investments in ongoing and proactive asset management efforts are needed to maintain current levels of system loss, which is estimated to yield a 1.7 GPCD savings over time.

Ms. Pellegrino noted that public outreach is essential to SNWA's conservation programs, especially to encourage water users to comply with the mandatory watering schedule. She noted a recent outreach proposal from the Las Vegas Raiders and noted that the SNWA is also exploring other opportunities with a similar investment to yield water savings. Ms. Pellegrino noted that SNWA launched a new major compliance campaign in 2019 and is exploring other opportunities to reduce water use and reach the target audience. She reviewed the following chart:

Description	Annual Average Estimated Water Savings	Annual Average Estimated Cost
Raiders Sponsorship	900 million gallons	\$2.5 million/year (10 year commitment)
Outreach Augmentation	900 million gallons	\$2.08 million/year
Enhanced Compliance	1.2 billion gallons	\$2.39 million/year
Expanded Non-SFR Engagement	1.7 billion gallons	\$2.5 million/year
Water Loss Mitigation	700 million gallons	\$2.5 million/year

The committee asked a number of questions regarding the Raiders proposal, the current Vegas Golden Knights outreach partnership, and how other potential outreach efforts compare. Mr. Entsminger and Ms. Pellegrino answered committee questions, affirming that advertising dollars are spent with local firms and that the existing partnership with the Vegas Golden Knights is a three-year agreement. Mr.

Restrepo asked how annual average estimated water savings were calculated. Ms. Pellegrino noted that they are best estimates based on the way existing programs and water use react to advertising campaigns. Ms. Valentine expressed concern with entering into a 10-year agreement with the Raiders to which other members of the committee agreed. Mr. Restrepo suggested that other methods and ways to spend that amount of money could have a similar if not greater impact. Ms. Valentine referenced the proposal's conversion of two CCSD football fields per year and suggested the SNWA do that without a partner or sponsorship. Mr. Maggi noted his concern with the length of the Raiders agreement and asked if the primary target audience would be locals or in-game visitors. Mr. Guzman agreed that a 10-year commitment is concerning but added that advertising and outreach is important. Mr. Entsminger recognized the committee's concerns and reiterated the importance of this committee in shaping what the SNWA's outreach efforts look like.

Ms. Pellegrino summarized the conservation presentation, noting that meeting the conservation goal requires a comprehensive approach to reduce water use across all customers and sectors.

Following Ms. Pellegrino's presentation, Kevin Bethel, Chief Financial Officer, presented financial model assumptions and reviewed the proposed capital costs as presented at previous meetings, which totaled \$3.5 billion. He presented this information to the committee for feedback, as he indicated his plan to present initial financial model runs at the next meeting. He reviewed initial model assumptions, including capital costs (\$3.5 billion), CPI index, population growth, the reserve policy and other variables. He then reviewed current SNWA funding sources but narrowed the scope of the initial model run to the Connection Charge, the Infrastructure Charge and the Commodity Charge.

Mr. Bethel also committed to model rate impacts to a set of sample customers and asked the committee to review a proposed list. Mr. Restrepo requested the sample customer list include a Nevada System of Higher Education campus and Ms. Valentine requested more information on the customers themselves such as size and location. Mr. Bethel committed to providing that information at the next meeting.

Following no more comments or questions from committee members, Ms. Murphy closed the meeting and stated that the next meeting will be held January 29th.

PUBLIC COMMENT

Ed Uehling asked how many consumptive gallons were saved last year with the expenditure of \$2 million outreach dollars. He mentioned that the larger issue is the California water bank. He asked if the GPCD conservation goal includes the tourists that visit Southern Nevada. He also reiterated his suggestion of expanding the tiered water system.

ADJOURNMENT

The meeting was adjourned at 5:21 p.m.