

**SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
REGULAR MEETING
MARCH 18, 2021
MINUTES**

CALL TO ORDER 9:06 a.m.

BOARD MEMBERS PRESENT Marilyn Kirkpatrick, Chair
Dan Stewart, Vice Chair
Claudia Bridges
Cedric Crear
Jim Gibson
Justin Jones
John Lee

BOARD MEMBERS ABSENT None

STAFF PRESENT John Entsminger, Colby Pellegrino, Doa Ross, and Tabitha Fiddymont

OTHERS PRESENT None

Unless otherwise indicated, all members present voted in the affirmative.

COMMENTS BY THE GENERAL PUBLIC

For full public comment, visit snwa.com/apps/snwa-agendas/index.cfm

Ed Uehling spoke concerning water conservation, in particular outdoor water use. He said that the Authority should be encouraging indoor water use while discouraging outdoor water use. However, he said that water conservation should not come at the price of causing older homes to lose their lawns. He provided a photo of a home with dead grass in the front yard as an example for the record.

ITEM NO.

1. ***For Possible Action: Approve agenda with the inclusion of tabled and/or reconsidered items, emergency items and/or deletion of items, and approve the minutes from the regular meeting of January 21, 2021.***

FINAL ACTION: Director Gibson made a motion to approve the agenda for this meeting, and to approve the minutes from the regular meeting of January 21, 2021. The motion was approved.

BUSINESS AGENDA

2. ***For Possible Action: Receive a presentation on current and anticipated conservation activities, discuss new programs and approaches to achieve conservation goals, and, if appropriate, direct staff accordingly.***

Colby Pellegrino, Deputy General Manager, Resources, gave a presentation that provided information for items 3-6, and item 8. A copy of her presentation is attached to these minutes.

Director Crear asked about the Authority's past drought media campaign and whether there were plans to do more drought awareness media campaigns. John Entsminger, General Manager, said there was an initial push in 2002 when the drought intensified, and over the years, the Authority has used targeted marketing, such as the Ryan Reaves compliance ads to encourage people to change their watering clocks, to continue to encourage water conservation. Ms. Pellegrino said that staff planned to bring a new advertising and marketing contract to the Board in May for its consideration.

Director Jones asked if commercial projects could be required to separately meter landscaping to better track consumptive uses. Ms. Pellegrino said that it would be possible to meter or sub-meter landscaping, which could be a future discussion among the water purveyors. Chair Kirkpatrick suggested that possibly an incentive could be developed to encourage properties to install sub-meters for landscaping. Mr. Entsminger said that incentive programs, such as the Water Smart Landscapes turf conversion program, have been extremely successful in the past; however, moving forward, the community will need to develop more stringent codes and regulations to achieve additional water conservation.

The Board discussed how to address non-functional turf in common areas and entrances in neighborhoods where the neighborhoods have declined incentives and offers to assist in converting turf to water smart landscaping. Mr. Entsminger said that some neighborhoods have demonstrated that incentives are not enough and that new regulations and enforcement will be required.

Director Jones asked who the target was for artificial turf installation incentive. Ms. Pellegrino said that large turf areas, such as parks and sports fields, were the target of the program. She said that the program was designed to help mitigate the initial installation costs, which are highest during the first installation. The program is designed so that the reduced water costs over the life of the artificial turf installation will offset future replacement costs.

Chair Kirkpatrick encouraged staff to ensure that the turf product used in the installations was of a high quality that would be long-lasting.

Director Crear said that the City of Las Vegas was planning on rehabilitating a number of parks within the city. He said that he would have his staff coordinate with the Authority on those rehabilitations to ascertain what water saving opportunities existed.

Chair Kirkpatrick encouraged staff to look into a comprehensive blanket agreement that might allow local jurisdictions to take advantage of the turf installation program while streamlining the process. Ms. Pellegrino said that the Clark County School District football field conversions were a good example of the benefits that could be derived from such a large-scale bidding process, and that staff would explore the opportunities further. Mr. Enstminger used the example of how most local jurisdictions have an on-call paving master contract that allows for pavement repair, as needed, without going to bid for each individual repair. He said that something similar could be set up for turf installations.

Chair Kirkpatrick asked what were the top water consumptive-use industries in Southern Nevada. Mr. Enstminger said that resorts, golf courses, data centers and sand/gravel operations were some of the highest water users by industry. Director Jones asked how much water was considered high-use. Ms. Pellegrino said that the threshold was a million gallons of water per month, which is about 3 acre-feet of water. She said that there are data centers in Southern Nevada that use more than 100 acre-feet of water per month.

Chair Kirkpatrick suggested that federal funding might be available to help retrofit cooling systems in local municipal buildings to help save water.

Director Jones asked how it would be possible to make it less costly to convert entire neighborhoods from septic systems to the municipal sewer system. Ms. Pellegrino said that the proposed pilot program had limited funding and was focused on first ensuring that homes converting from wells to the municipal water system were also connecting to the sewer system. Based on the results of the pilot program, the Authority would work with the member agencies to possibly revise and expand the program.

Director Gibson asked if there was an estimate of the amount of return-flow credits that would be gained from converting septic systems to municipal sewer systems. Ms. Pellegrino said that staff had not completed an estimate but the potential was fairly significant since there were approximately 14,000 septic systems within the Las Vegas Valley.

NO ACTION REQUIRED

3. ***For Possible Action: Discuss developing a policy regarding large water users and direct staff to work with the member agencies to draft a policy for Board consideration.***

FINAL ACTION: Director Gibson made a motion to approve staff's recommendation. The motion was approved.

4. ***For Possible Action: Authorize a new conservation incentive program for the installation of artificial turf in new recreational fields that would provide a rebate of up to \$2 per square foot.***

FINAL ACTION: Vice Chair Stewart made a motion to approve staff's recommendation. The motion was approved.

5. ***For Possible Action: Approve and authorize the General Manager to sign, in substantially the same form as attached hereto, Amendment No.1 to the existing interlocal agreement for Water Efficient Technologies Projects between the Clark County School District and the Authority for an increase in the amount of \$868,692 to accommodate installation of artificial turf at three additional high schools.***

FINAL ACTION: Director Gibson made a motion to approve staff's recommendation. The motion was approved.

6. ***For Possible Action:*** Approve, in substantially the same form as attached hereto, an interlocal agreement among the Clark County Water Reclamation District, City of Henderson, City of North Las Vegas, City of Las Vegas, and the Authority to establish a septic system conversion pilot program in the Las Vegas Valley; direct staff to amend the Groundwater Management Program’s Well Conversion Guidelines to include septic conversion; approve the Authority’s contribution of \$60,000; and authorize the General Manager or designee to negotiate and execute the agreements necessary to carry out the septic conversions.

FINAL ACTION: Director Jones made a motion to approve staff’s recommendations. The motion was approved.

7. ***For Possible Action:*** Approve and authorize the General Manager to sign, in substantially the same form as attached hereto, an agreement between Brown and Caldwell and the Authority to provide professional design engineering and construction support services for a portion of the Garnet Valley Water System for an amount not to exceed \$888,667.

FINAL ACTION: Director Lee made a motion to approve staff’s recommendation. The motion was approved.

8. ***For Information Only:*** Receive an update from staff on water resources including, but not limited to, drought conditions in the Colorado River Basin, conservation programs and activities, activities on the Colorado River, and water resource acquisition and development.

The update was included as part of the Item 2 presentation.

NO ACTION REQUIRED

Public Comment

Ed Uehling said that the meeting was the best public meeting that he had ever attended; that everyone did a fantastic job, including management. He also spoke regarding consumptive and non-consumptive water use. He said that additional rate tiers should be introduced to encourage water conservation among high water users. He said that construction water should also be charged at a higher tier.

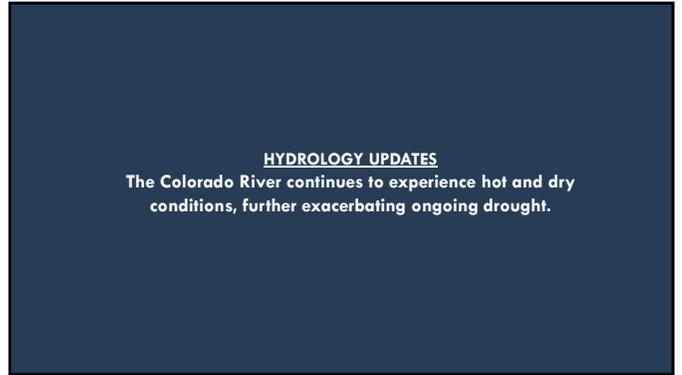
Adjournment

There being no further business to come before the Board, the meeting adjourned at 10:39 a.m.

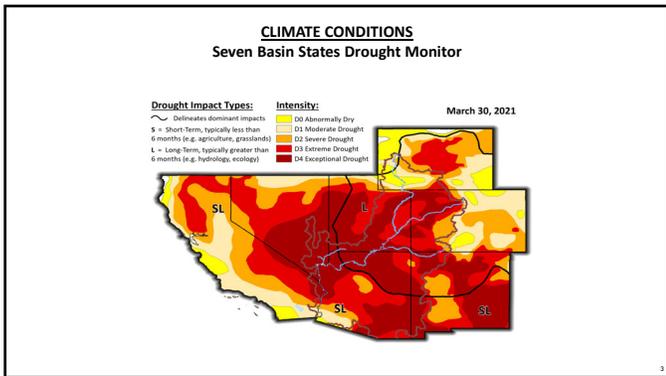
Copies of all original agenda items and minutes, including all attachments, are on file in the General Manager’s office at the Las Vegas Valley Water District, 1001 South Valley View Boulevard, Las Vegas, Nevada.



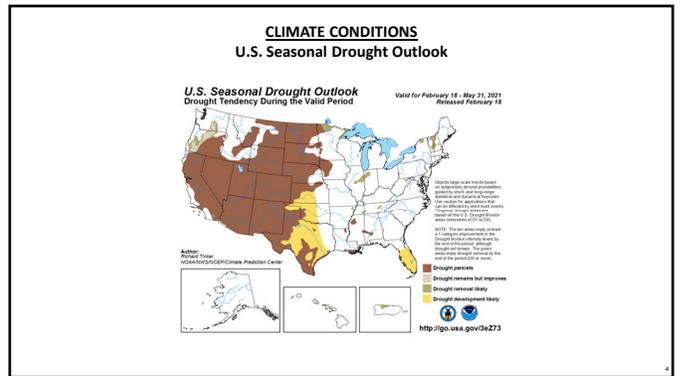
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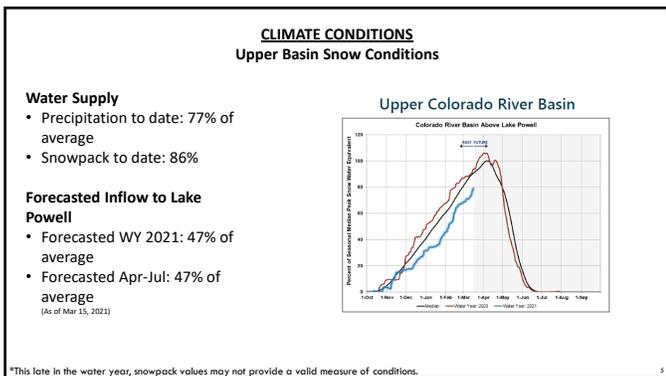
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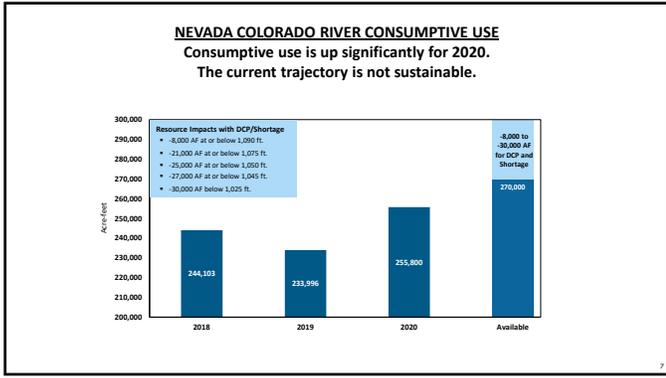
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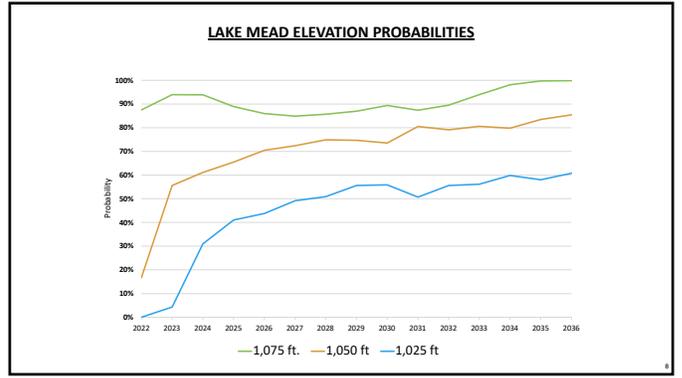
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- NEVADA'S DCP REDUCTIONS AND SHORTAGES**
- 8,000 AF AT OR BELOW 1,090 FT.
 - 21,000 AF AT OR BELOW 1,075 FT.
 - 25,000 AF AT OR BELOW 1,050 FT.
 - 27,000 AF AT OR BELOW 1,045 FT.
 - 30,000 AF BELOW 1,025 FT.

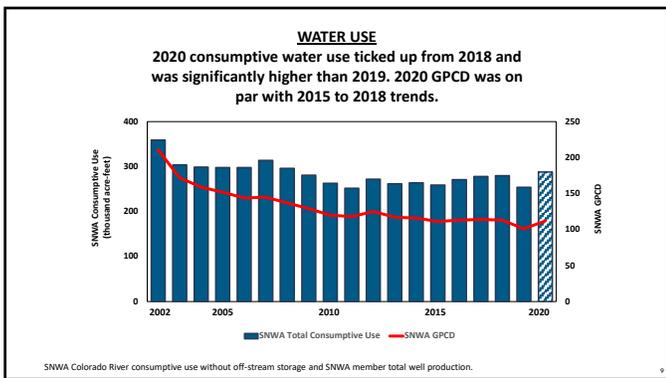
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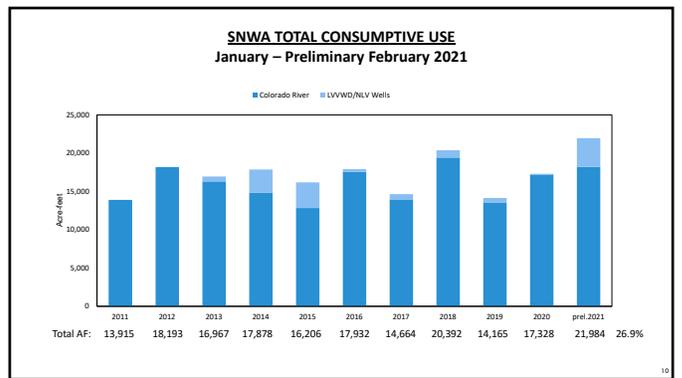
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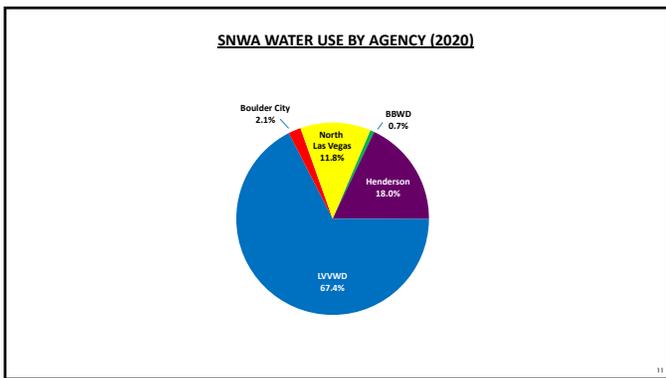
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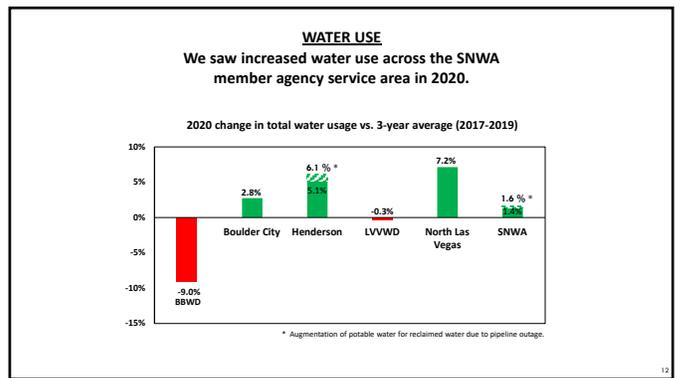
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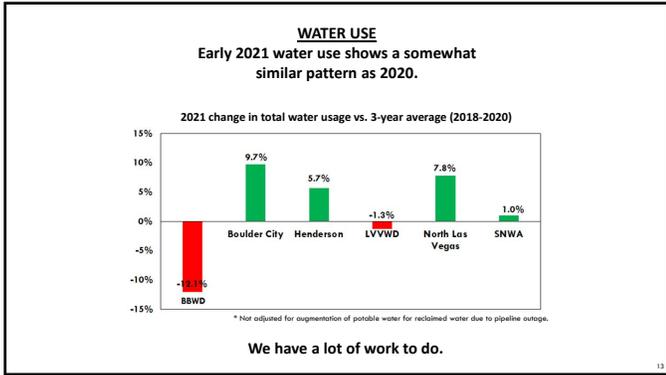
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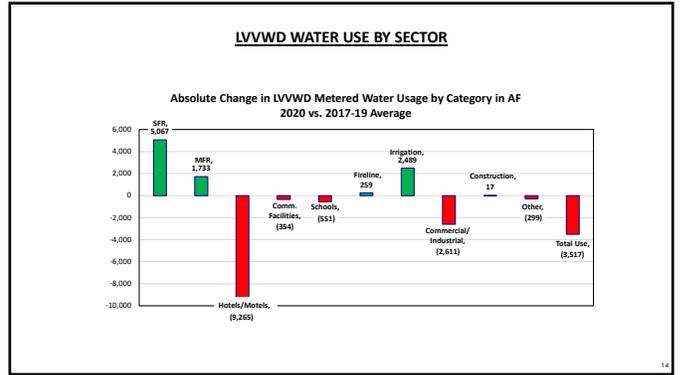
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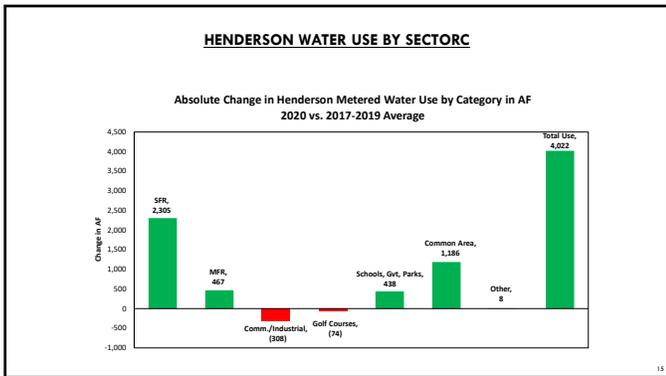
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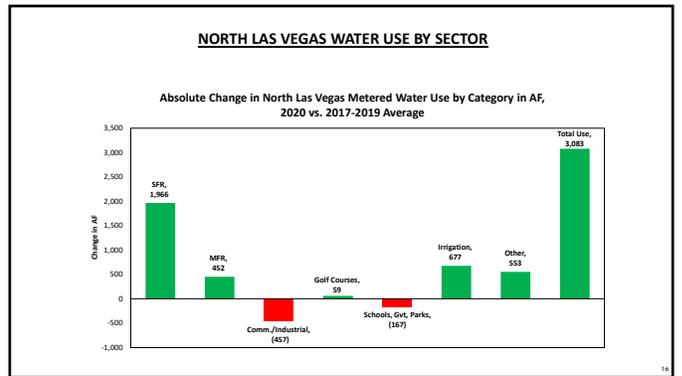
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2020 IN REVIEW

The SNWA continues to monitor conservation progress against established benchmarks and historical water use.

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CONSERVATION PLANNING

The SNWA's Integrated Resource Planning Advisory Committee considered our current conservation goal and factors that will impact water use trends

Climate Change & Aging System

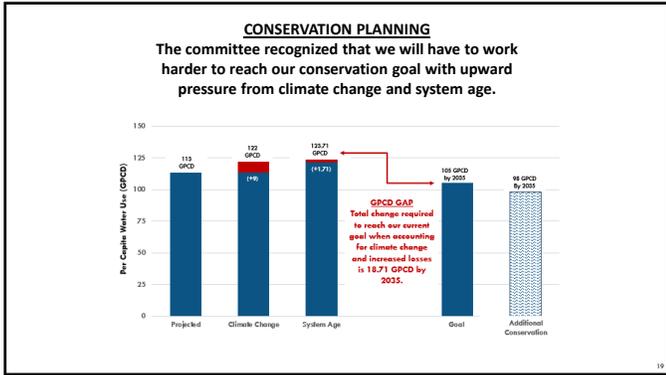
Increasing consumptive water demands due to warmer temperatures, drier soils lower precipitation, and increased system loss due to aging infrastructure.

**105 GPCD
Conservation Goal**

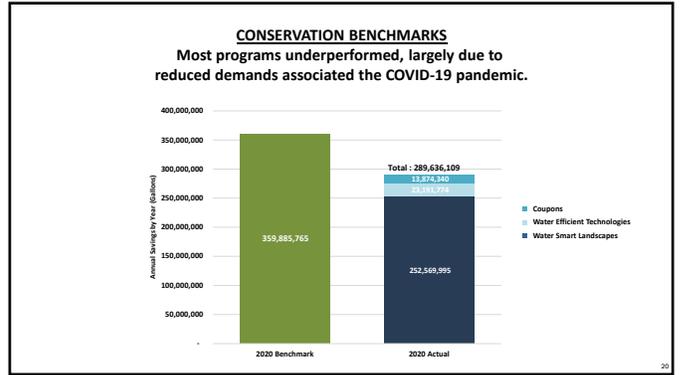
Adaptive Management

Significant additional effort will be required to reduce consumptive water use to meet our conservation goal and maximize the availability of water supplies.

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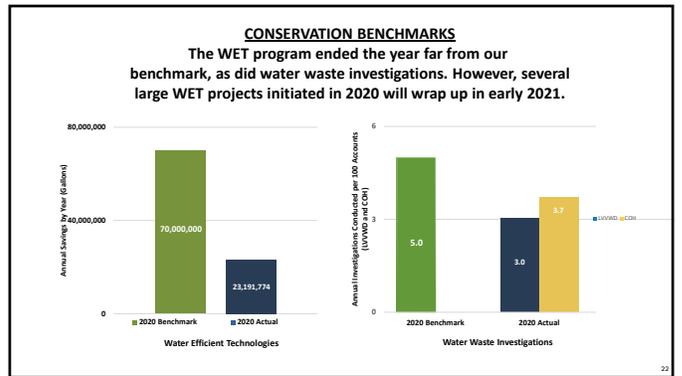
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CONSERVATION STRATEGIC PLAN

The SNWA developed a Conservation Strategic Plan that integrates recommendations from IRPAC and that sets a path for continued conservation progress.

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CONSERVATION STRATEGIC PLAN

Water Efficiency Goals:

- Reduce and restrict the use of non-functional turf.
- Improve water efficiency in new development.
- Improve compliance with landscape watering restrictions and reduce water waste.
- Reduce water losses associated with evaporative cooling.
- Reduce losses associated with single-family leaks.
- Improve system efficiency through asset management.

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CONSERVATION STRATEGIC PLAN

Supporting Goals:

- Engage the public in water conservation efforts.
- Improve water efficiency in new development.
- Improve internal communication and collaboration.
- Use research to inform program and policy development.



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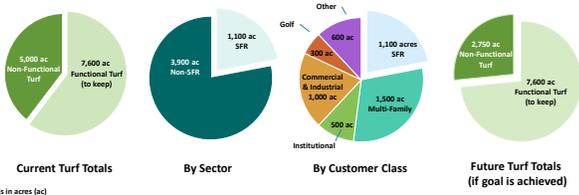
NON-FUNCTIONAL TURF

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OBJECTIVE: Reduce non-functional turf acreage by 150 acres (6.5 million square feet) per year and restrict new turf installations for a 4.76 GPCD water savings by 2035.

CHALLENGES & NEXT STEPS

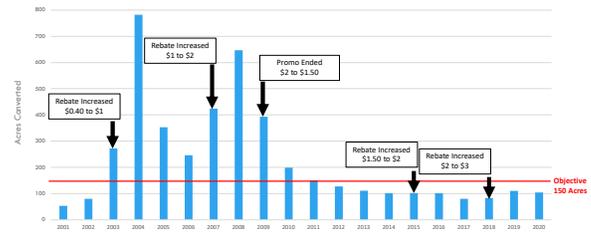
Most of the remaining non-functional turf is in the non-SFR sector. We need to increase participation rates and implement new incentives for turf alternatives.



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OBJECTIVE: Reduce non-functional turf acreage by 150 acres (6.5 million square feet) per year and restrict new turf installations for a 4.76 GPCD water savings by 2035.

Landscape conversions have declined in recent years.



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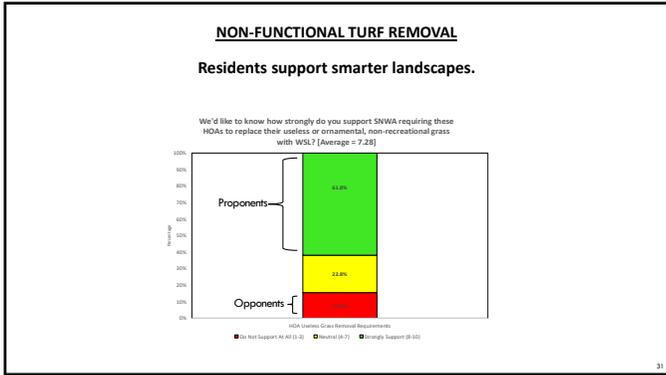
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NON-FUNCTIONAL TURF REMOVAL

“...our community chose Altura for the beautiful green entrance. As we are well aware there is not much of it unless you live on a golf course. With that said, Altura is declining to move forward with the proposed turf replacement.”



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WATER EFFICIENT DEVELOPMENT

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OBJECTIVE: Engage in land use planning and policy processes to reduce consumptive water use in new development for 1.09 GPCD water savings by 2035.

CHALLENGES & NEXT STEPS

Our community needs to consider and address water supply impacts (consumptive vs. non-consumptive water footprint) when planning for economic growth and diversification.

- Work with SNWA member agencies to close loopholes under older developer agreements that may allow for non-functional turf installation in new development projects.
- Ensure compliance with service rule, code and ordinance changes related to new turf installation.

ACTION ITEM: Incentivize artificial turf for new park developments where turf is allowed.

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OBJECTIVE: Engage in land use planning and policy processes to reduce consumptive water use in new development for 1.09 GPCD water savings by 2035.

ARTIFICIAL TURF INCENTIVE

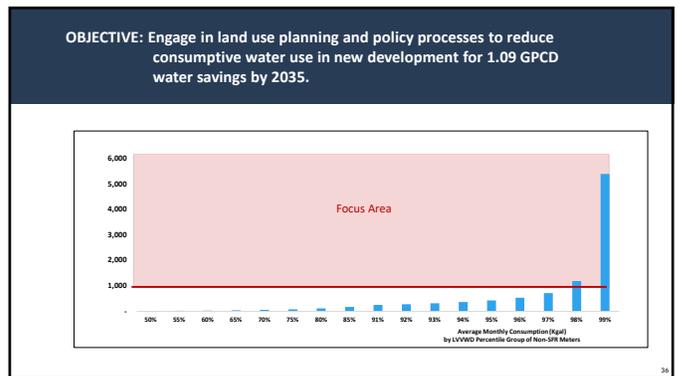
A rebate of up to \$2 per square foot for the installation of artificial turf in new recreational fields will reduce planned consumptive uses and avoid the more costly option of retrofitting these fields later.

Considerations for the incentive:

- Some of the Valley's largest turf areas are functional sporting fields.
- Capital costs for installing synthetic fields are a deterrent to installation.
- Current incentives are not sufficient to compel sports turf managers to consistently choose synthetic fields over irrigated turfgrass.
- Expected to save up to six million gallons annually for a typical football/soccer field.

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OBJECTIVE: Engage in land use planning and policy processes to reduce consumptive water use in new development for 1.09 GPCD water savings by 2035.

CHALLENGES & NEXT STEPS

We need to encourage water efficient development as we work to diversify our local economy. Applying the same kind of water efficiency expectations and standards that we have to resorts for the last 15 years will help to ensure that new development activities do not erode conservation progress.

ACTION ITEM: Work with member agencies to develop and implement the large water user review policy; update service rules, codes and ordinances to target the top 2% of highest water users.



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OBJECTIVE: Engage in land use planning and policy processes to reduce consumptive water use in new development for 1.09 GPCD water savings by 2035.

HIGH WATER USERS POLICY

A policy regarding high water users will help guide decision-makers when considering planning and land use decisions that affect the community.

Considerations for the policy:

- Consumptive versus non-consumptive uses
- Resource footprint
- Mitigation efforts
- Implementation



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EVAPORATIVE COOLING EFFICIENCY

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OBJECTIVE: Implement policy, program and best management practices to improve evaporative cooling efficiency for a 2.23 GPCD water savings by 2035.

CHALLENGES & NEXT STEPS

More research is needed to determine the number of water-cooled HVAC units, quantify consumptive water use and evaluate the effectiveness/efficiency of alternate technologies.

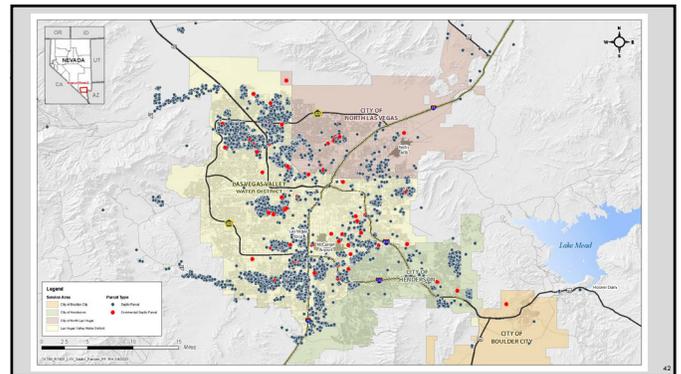
- Conduct research to assess total water use associated with cooling.
- Initiate a pilot study at LVVWD/SNWA facilities to inform program/policy decisions, and best management practices.
- Secure and expand WET program enrollment for cooling water efficiency upgrades through direct-outreach to non-SFR customers.
- Enlist participation from other agencies and businesses in metering and monitoring programs.



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OTHER EFFORTS

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OBJECTIVE: Abandon septic systems and convert to municipal sewer systems to improve groundwater quality and expand water supplies through return-flow credits.

CHALLENGES & NEXT STEPS

The use of septic systems can adversely affect groundwater quality; converting municipal water users (~14,000) from septic to the municipal sewer systems will allow for the capture, treatment and return of water to Lake Mead for return-flow credits.

- **ACTION ITEM:** Consider interlocal agreement/update Groundwater Management Program (GMP) guidelines to require sanitary sewer conversions as a condition connection to a municipal water system; provide financial incentives to support conversions.
- Work with the Southern Nevada Health District to make rule/code changes to reduce the number of new permitted septic systems.

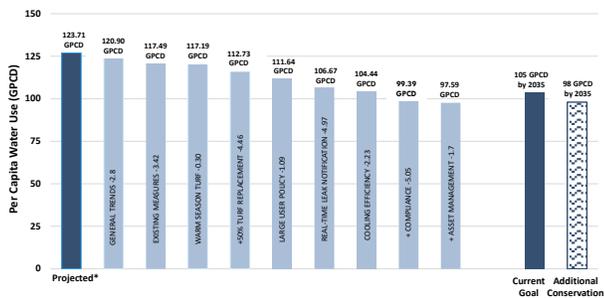


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OVERARCHING OBJECTIVE
Pursue changes necessary to achieve the SNWA's current water conservation goal of 105 GPCD by 2035 and further efforts to achieve additional conservation thereafter.

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THE PATH TO OUR CONSERVATION GOAL



*With climate change & system loss

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HOW YOU CAN HELP

- Encourage municipalities to evaluate and update existing programs for water waste enforcement, customer leak resolution and compliance.
- Use outreach tools (social media platforms, newsletters, agency websites, speaker's bureau presentations, etc.) to encourage constituents to participate in SNWA incentive/rebate programs.
- Prioritize the removal of non-functional turf, replacement of cool-season turf and cooling system upgrades in your jurisdictions.
- Provide direction on:
 - Large Water User Policy
 - Septic conversions
 - Artificial turf incentive for new parks



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 SOUTHERN NEVADA WATER AUTHORITY™

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3/18/2021 SNWA Board Meeting

Public Comment – Ed Uehling

