

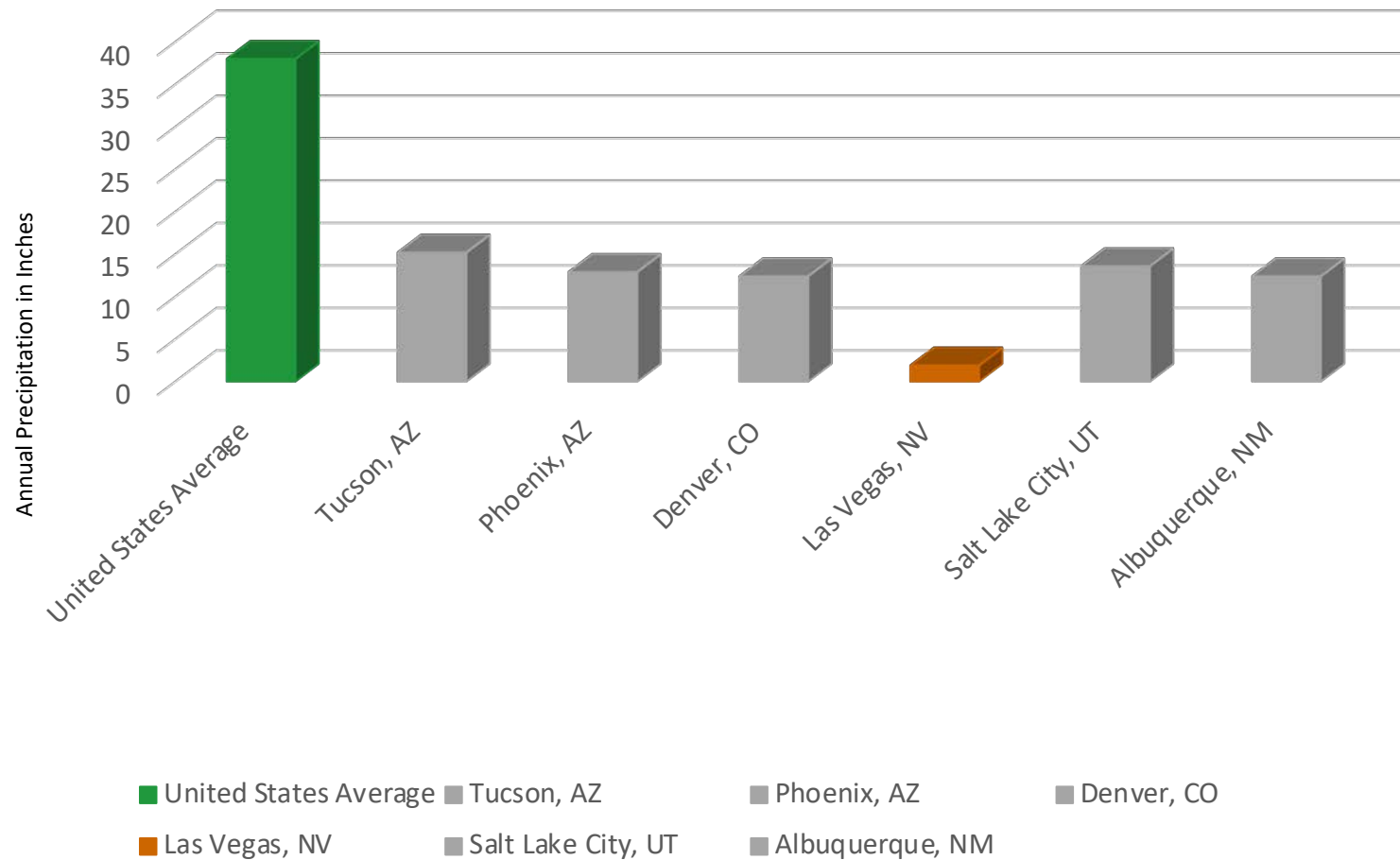


ELIMINATING NON-FUNCTIONAL TURF

The Southern Nevada Experience

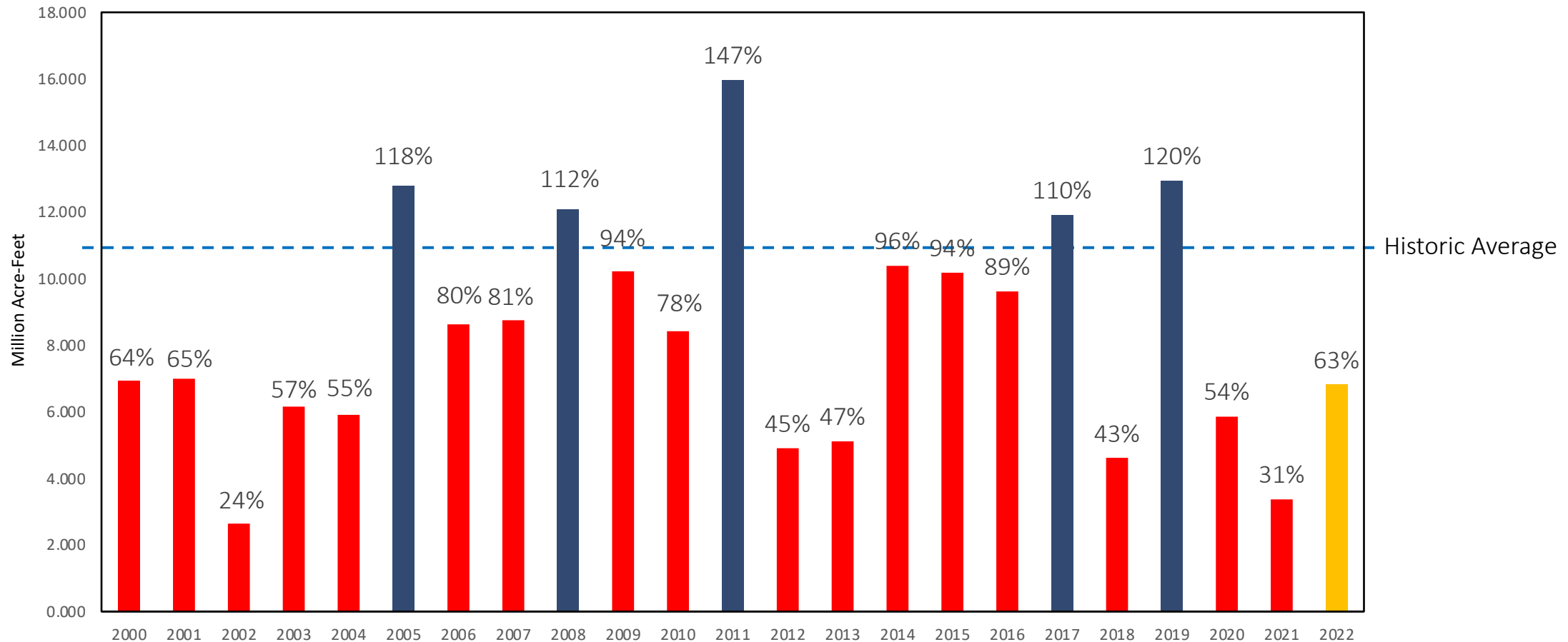
LAS VEGAS: THE ULTIMATE DESERT COMMUNITY

Las Vegas is the driest metropolitan area in the United States.



COLORADO RIVER UPDATE

Since 2000, Colorado River inflows have cumulatively been about 18 trillion gallons below the historical average. 2022 did not help matters.



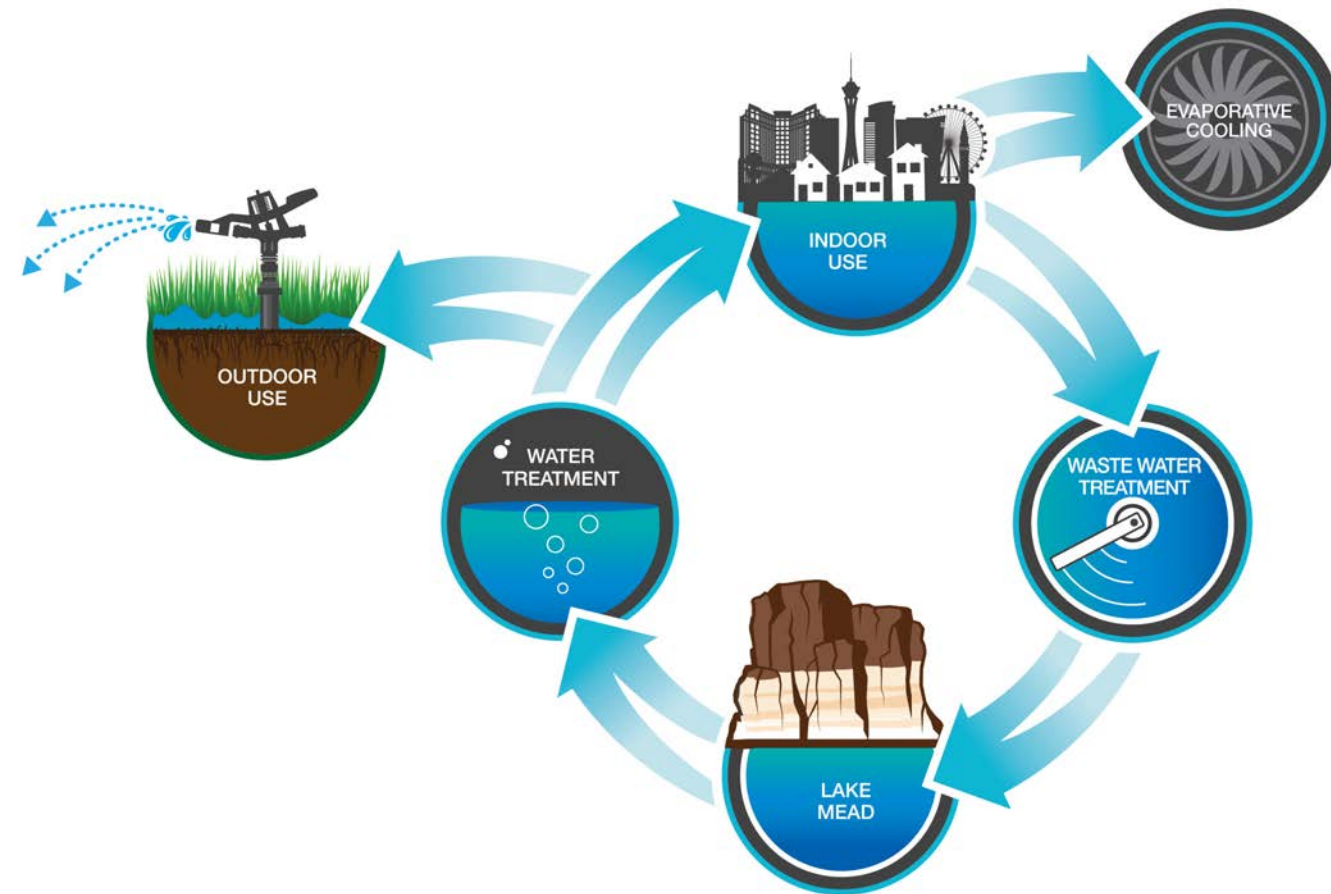
Lake Mead is at significant risk of falling to “deadpool.”

At that elevation:

- Reservoir storage is less than 10 percent of capacity
- The SNWA’s first two intakes are above the surface
- Hoover Dam is unable to release water downstream to Arizona, California or Mexico
- Hoover Dam can no longer generate power
- **Nevada’s allocation will be further curtailed by an undefined, potentially significant quantity**



Despite our challenges, we have advantages, one of which is that Las Vegas is the water equivalent of a perpetual motion machine ... but only for the water used indoors

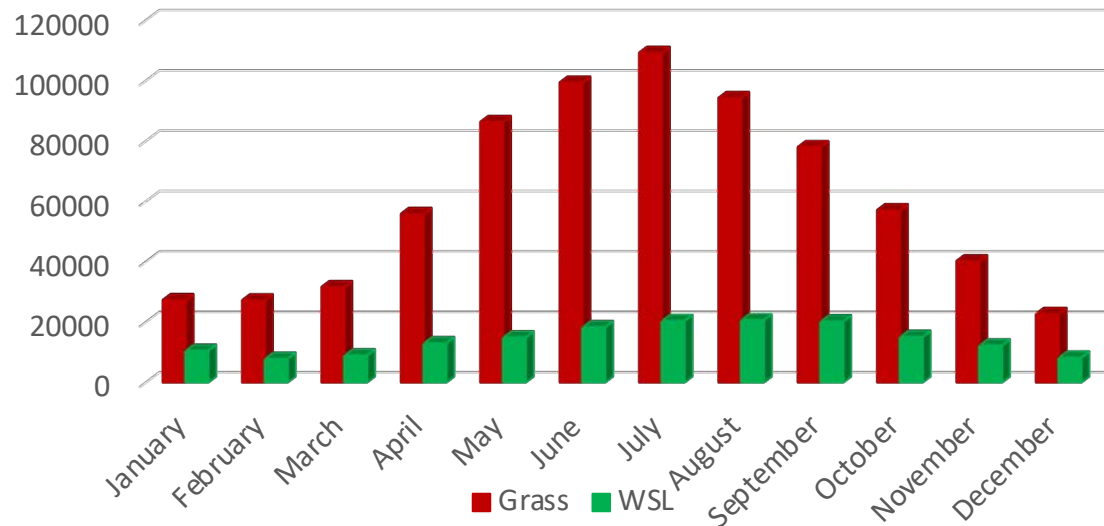


More than 99 percent of water used indoors is captured and recycled.



Outdoor water—primarily for landscape irrigation and commercial-scale evaporative cooling—is not recoverable

Grass requires *four times* more water
-- **55 more gallons per square foot** –
than drip-irrigated landscaping per year.



73

Gallons of water
per square foot
per year



17

Gallons of water
per square foot
per year

Nevada Assembly Bill 356 (2021 Legislative Session)

Signed into law in June 2021, AB 356 ***prohibits the irrigation of nonfunctional turf by community water resources*** as of Jan. 1, 2027.

The bill also required that the SNWA Board establish an advisory committee to help define functional and non-functional turf.



Nonfunctional Turf Removal Advisory Committee

To guide the creation of nonfunctional turf definitions, the SNWA convened a citizen committee

- Nine members representing affected sectors
 - Including commercial, multifamily and HOA
- Met over a four-month period
- Defined “Functional,” “Active/Programmed Recreation,” and “Nonfunctional turf”
- Criteria included proximity to vehicular zones, physical dimensions, accessibility and active/passive recreational amenities
- Committee finalized recommendations with unanimous consent

SOUTHERN NEVADA WATER AUTHORITY

NONFUNCTIONAL TURF REMOVAL ADVISORY COMMITTEE

RECOMMENDATIONS REPORT

NOVEMBER 2021



What is functional turf?

- It's played on and used
- It's large enough to allow for active use
- Provides a recreational benefit to the community
- Easily accessed, safe to reach





What is nonfunctional turf?

- Streetscape turf
- Median turf
- Residential community entry turf
- Turf at commercial and industrial properties
- Turf on slopes
- Narrow or small areas of turf

May also include:

- Multifamily turf
- HOA managed turf

What is functional in HOAs?

Active/Programmed Recreation Turf: Grass in an **active/programmed recreation area**.

Active/programmed recreation turf at existing properties must be:

- 1,500 contiguous square feet or greater.
- Co-located with facilities, including but not limited to trash bins, benches, tables, walking paths and/or other recreational amenities.
- Located at least 10 feet from a public or private street or interior facing parking lot unless:
 - The contiguous turf area is at least 30 feet in all dimensions; or
 - The turf is immediately adjacent to an athletic field

Playground Turf: Grass in **designated play areas with playground amenities** (slides, swings and climbing structures). Playground Turf may be located less than 10 feet from a public or private street if fenced.

Homeowner Associations: Common Nonfunctional Turf Examples



Community frontage turf



Streetscape turf



Median/roundabout turf



Turf on steep slopes

With the exception of dedicated dog parks that meet specific parameters, dog relief areas in homeowners association streetscapes are not functional turf areas

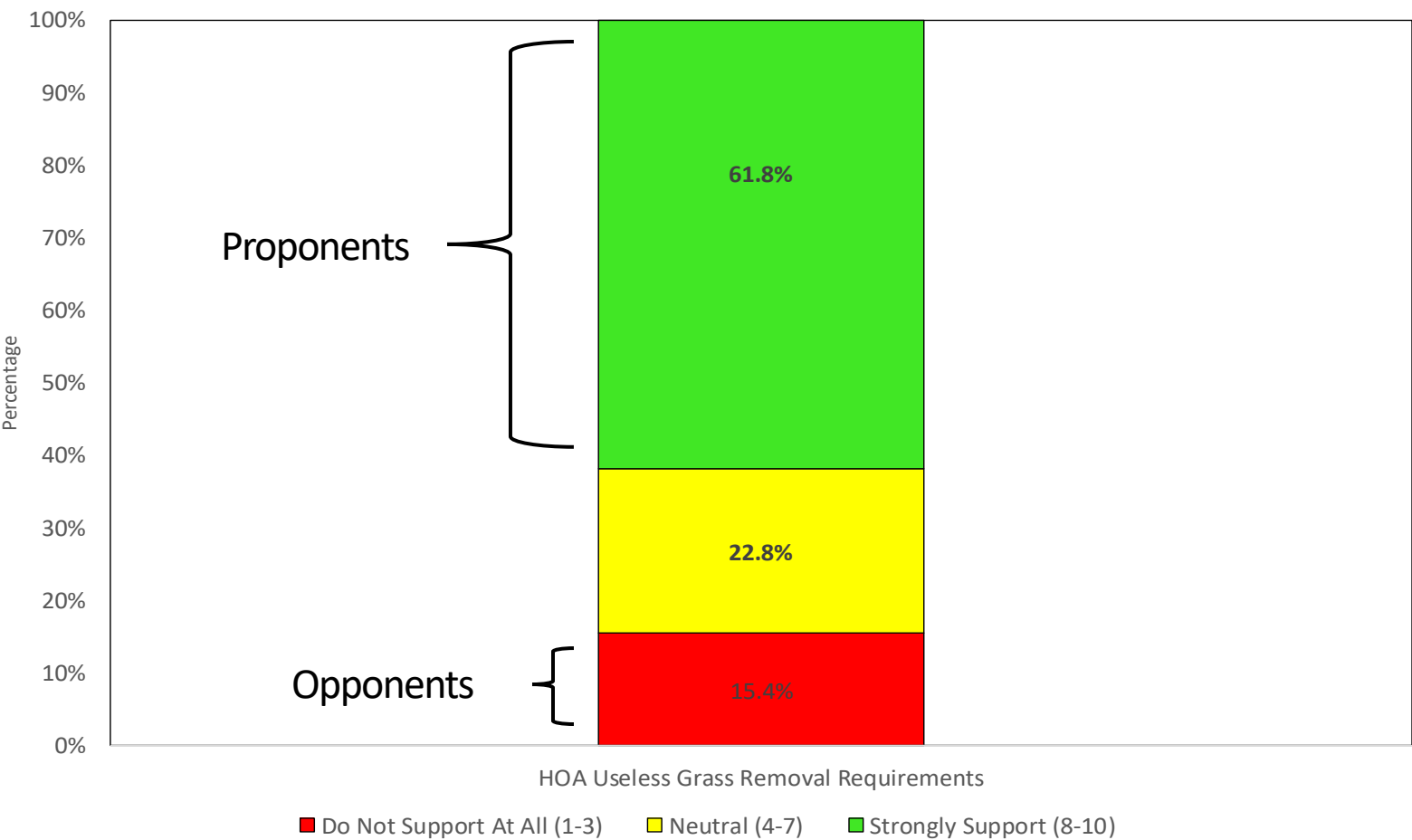
Residents Support Conversions

Pareto's Law in Action:

Quantitative research has proven that HOA members want non-functional turf removed

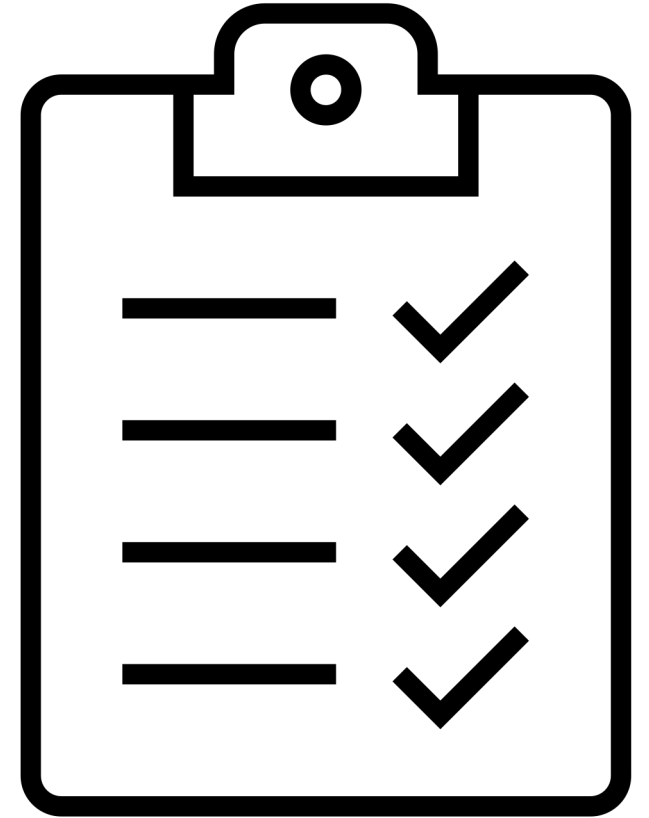
Landscape renewal opponents are a vocal minority, outnumbered by supporters four to one

We'd like to know how strongly do you support SNWA requiring these HOAs to replace their useless or ornamental, non-recreational grass with WSL? [Average = 7.28]



Waiver Process and Criteria

- Some turf areas may serve a legitimate function but not conform precisely to the definitions
- Some property owners may believe their turf is recreational, even though it does not meet the functional turf definition
- The SNWA has developed a Waiver Application process and evaluation criteria to determine whether a turf area “substantially complies” with the definitions of functional turf
- Those materials are available at SNWA.com





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