Grass facts to help you re-evaluate your yard

There has been a lot of discussion on grass and its place in our desert climate. As we look to maximize our water supplies, finding ways to reduce our individual water use plays an important role. With most of our water use occurring in our yards and landscapes, adopting a desert-adapted landscape can have a significant impact. Properly planting and irrigating drought-tolerant plants and trees takes less maintenance and water than lawns. This is why so many of the AMWUA cities are offering rebates and incentives for landscape conversions.

However, if you have grass or are thinking of installing some - natural or artificial - it's vital to have all the facts to ensure you make the right decision. After all, practical water-wise changes in our desert climate will positively impact your community's water future. So, we are here to give you some helpful facts about grass in addition to the recent push to skip overseeding this winter.

NON-FUNCTIONAL VS FUNCTIONAL GRASS

There are different spaces where you will find grass. If it is not considered a functional grass area, then you should consider removing it to help save water, money, and time that is spent on maintenance.

What is Functional Grass?
Functional grass is actively used as a recreation space for people and pets and is often found in backyards, side yards, and HOA common areas. These areas tend to be flat with straight edges, making it easy to irrigate and limiting water waste. Functional grass is easily accessible, usually by a sidewalk or pathway.

Functional grass areas are sometimes used for stormwater retention purposes. For more information about retention basins, contact your city's Planning Department.

What is Non-Functional Grass?
If your grass serves no practical purpose and is difficult to water, it is probably non-functional. Those areas tend to be ornamental or for looks only and are typically found in front yards, along streets, or entrances to HOAs. Non-functional grass areas have many curves and unique angles, making it hard to irrigate efficiently with standard

irrigation equipment, which causes runoff. Overspray or runoff can damage paint, walls, asphalt, or other infrastructure.

If you are still unsure about a grass space and whether it is considered non-functional, ask yourself if you would want to have a picnic on that grass, play with a child or dog on the space, or if the only time you step on that grass is to mow it. Your answers should provide more clarity.

How Much Functional Grass Space is Acceptable?
There is not a precise amount that is recommended; however, most people find that about 1,000 square feet of functional grass area is enough to satisfy their needs.

REMOVING YOUR GRASS

Removing your grass may seem daunting, but you can quickly transform your landscape with the proper knowledge and tools.

How Much Water Will You Save?
Did you know that the majority of water use occurs outdoors in your yard? Converting to a xeriscape can save 50% or more on outdoor water use. A Bermuda or Bermuda hybrid lawn requires more than 55 inches of water per year (with winter overseed) and over 40 inches per year (without winter overseed). The average xeriscape requires less than 18 inches per year. Compare that with our average rainfall of eight inches, and you will have a better idea of precisely how much water your grass requires.

Before You Start, Have a Good Plan
Creating a plan will ensure you create a landscape that meets your needs, tastes, and budget. It will also keep you from making costly mistakes. If you require some help in planning your new landscape, visit your city's conservation page for helpful tips, free resources like workshops and classes, and rebates.

ARTIFICIAL GRASS

Did you know that research conducted by Arizona State University (ASU) found that the surface temperature of artificial turf can be hotter than asphalt and brick during certain times of the day? While it is easy to see the water savings potential of artificial turf, we are also committed to a resilient urban environment.

Before determining if synthetic turf is the right choice for your yard, consider the following other factors:

Will kids and pets play on the artificial turf? There are safety concerns with artificial turf, which is often too hot for children and pets to play on, reaching over 150 degrees Fahrenheit during the day (ASU).

Artificial turf does not behave the same way as living grass. It does not return to its upright position after activities. Therefore, it requires infill to be added between the blades to help them spring back. Different types of infill have various benefits and tradeoffs; however, adequate risk assessments have not been performed to assess their safety for children and pets. Exposure to chemicals in artificial turf infill may pose potential health risks to humans and animals.

How much maintenance are you willing to perform? Artificial turf is not maintenance-free. It must be brushed and rinsed off with water (and sometimes soap) to keep the area clean and avoid staining. Additionally, you need to regularly remove debris, like leaves and pet waste, to prevent mold buildup or other containments. You must also pull weeds from the surrounding areas because they can invade your artificial turf landscape. Artificial turf doesn't allow water to permeate, creating runoff/pooling concerns, so be especially mindful if the area has a slope or is next to a pool.

What will go on the artificial turf? Patio furniture with sharp legs can puncture and damage artificial turf. Keep grills, fire pits, fireworks, and other combustible heat sources far from your artificial turf, as embers can also cause serious damage.

Do you have living plants in the same yard? Artificial turf has artificial components that can negatively impact your soil quality, making it difficult for living plants to thrive in the surrounding areas of your yard. In addition, the heat from the surface of the artificial turf affects the air temperature and can create microclimates that some plants may not tolerate.

What is the longevity of your investment? Artificial turf does not last forever. Different products have different lifespans, but regardless of your chosen product, it will eventually need to be replaced because plastic does not hold up well under the Arizona sun. When the time comes, you must also consider how and where you dispose of your artificial turf.

Now that you have some additional information on grass, we hope you can better plan your landscape to ensure it is resilient and sustainable for the long-term while minimizing your water footprint in our desert communities. As you re-evaluate your yard and head outdoors for some upkeep and updates, we strongly encourage perusing all of our landscape information to help you better plan and prepare your outdoor space.

Additionally, the AMWUA cities remain dedicated to minimizing the amount of non-functional turf at their own facilities and throughout their communities. Since 1986, the AMWUA cities have removed more than 15.7 million square feet of grass, highlighting the continuing shift to

*low-water landscapes in our desert climate. In 2022, AMWUA members collectively incentivized the conversion of 573,334 square feet of grass, saving at least 11 million gallons of water – a **75%** increase in grass removed since **2021**.*

To learn more about available rebates for landscape conversions, visit your city's conservation webpage.

For over 50 years, the Arizona Municipal Water Users Association has worked to protect our member cities' ability to provide assured, safe, and sustainable water supplies to their communities. For more water information, visit www.amwua.org.