Grass Removal Rebate Packet

For the most current rebate applications and packet, go to
ScottsdaleAZ.gov, search "rebates" or email WaterConservation@ScottsdaleAZ.gov

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Removal Area Installation Requirements

Removal area installation requirements for all projects.

- Replacement landscaping must consist of non-water-intensive materials. These materials may include low-water-use plants, decking, pavers, decomposed granite (rock), and/or a limited amount of artificial turf.
  - **There is a 1,000 sq. ft. maximum for artificial turf**. If more than 1,000 sq. ft. of artificial turf is installed anywhere on the property during the rebate period, the project is ineligible for a rebate.
- Water-intensive features such as fountains or pools and high water-use plants/trees are not permitted.
- In-ground sprinkler heads must be removed or converted to drip and zoned separately from any remaining grass on the property.
- Plastic sheeting (impermeable weed barrier) is not permitted.
- All exposed soil must be covered with a minimum of 2" of approved top dressings. Artificial turf must be attached to the ground and installed per manufacturer's specifications and it **may not** cover a city-owned meter or valve box thereby inhibiting city access to city-owned assets.
- Applicants may apply for two rebates, one per program year. The second rebate requires the removal of all remaining grass on the property. Artificial turf may be installed on either the first or second rebate, not both.

Applicants often request information on what to use or how to kill grass. Information is available in this publication from the University of Arizona or by searching for "How to Kill Grass Naturally" using an internet browser.

Additional installation requirements for projects larger than 1,000 Sq. Ft.

- When more than 1,000 sq. ft. of grass is being removed anywhere on the property during the rebate period, living Arizona-friendly plants must also be installed. The minimum mature plant canopy coverage is 25%.
  - Arizona-friendly plants are defined as low-water-use by the Arizona Department of Water Resources. The minimum required plant canopy coverage is calculated by subtracting 1,000 sq. ft. from the measured removal area, and then by multiplying the remaining sq. ft. by 25%. For example, a 2,000 sq. ft. measured removal area has a 250 sq. ft. minimum mature plant canopy coverage requirement. Conservation will provide your minimum sq. ft. coverage requirement via an email after the pre-inspection occurs.
  - If the plant is listed with ADWR but does not have a width published, the final authority used for mature canopy coverage is the *Sunset Western Gardener* Book.
- The commonly selected plants and their plant canopy coverages that starts on page 4 of this packet is not an exhaustive list of all Arizona-friendly plants that can be used for your plant canopy coverage requirement, but it represents the frequently selected plants. For questions about canopy coverage and plants not listed, email WaterConservation@ScottsdaleAZ.gov or call 480-312-5650.
- **Plants do not need to be at mature size for planting.**



Landscape Plants for the Arizona Desert
AMWUA.org/plants
For print, call 480-312-5650 or order online at ScottsdaleAZ.gov, search "water publications"

Department of Water Resources
Low Water Use Drought Tolerant Plant List AZWater.gov/conservation/

- **Calculating Mature Plant Canopy Coverage**
  - The mature canopy coverages are based on the width (diameter) of the plant, which is the second number listed in the Arizona Landscape Plants for the Arizona Desert "Growth" section. For any canopy coverage not estimated, use the area of a circle (3.14 x r2) and use half of width of the plant as "r". Canopy coverages are advantageously rounded to the nearest fifth. Additionally, due to cacti and succulents not producing any foliage and their importance to our native landscapes, cacti & succulent canopy coverage measurements are increased by an additional 20%.
- **Trunk or stem of the plant must be planted within the removal area to count towards the 25% requirement**. Existing low-water-use trees and plants may count towards the 25% requirement if established. Established refers to plant material planted in the ground for at least two years. See Figure 1 for a visual explanation of removal area; eligible and ineligible existing plants; and eligible and ineligible new plants.

Figure 1 A hypothetical grass removal and landscape renovation in the One Civic Center area. The yellow area indicates the grass removal area. The circles indicate existing plants which have been planted for at least two years. The triangles indicate proposed new plantings. If the circle or triangle is green, it is eligible to count towards the minimum 25% mature plant canopy coverage. If the circle or triangle is red, it is outside of the removal area and does not count towards the minimum.



Conservation encourages the use of native species to enhance the natural Sonoran Desert landscape characteristic of the city. Native species are noted in this packet and additional resources include:

– Plant Native: https://plantnative.org/rpl-az.htm
– AZ State Parks: https://azstateparks.com/desert-plants
– AZ Audubon: https://az.audubon.org/conservation/top-10-bird-plants-central-arizona

Most Common Selected Plants from *Landscape Plants for the Arizona Desert*

Green text = Plants that are native to Arizona and/or the Sonoran Desert.
◆ = Deciduous tree. These trees may help save energy when planted on the west side of the home. They provide shade in the hot summer months but drop leaves to allow for sunlight during the cooler winter months.
ꕥ = Attracts pollinators or wildlife.

Consider planting the right plant for the right place. Lists are organized from the largest specimens in sq. ft. to the smallest. Consider the size of the area you are removing and the mature size of the plants you are selecting.

Cacti & Succulents

Cacti are icons of the desert and many also have extraordinary blooms. They are versatile and can accept a wide range of growing conditions.

Common Name	Canopy Coverage (sq. ft.)
Ocotillo ꕥ	100
Saguaro ꕥ	100
Totem Pole	100
Prickly Pear (Purple, Engelmann's, Beaver- tail) ꕥ	100
Organ Pipe	100
Soaptree Yucca	100
Mexican Fencepost	100
Medicinal Aloe ꕥ	25
Octopus Agave	25
Buckhorn Cholla	25
Yucca (Red, Banana, Paleleaf, Blue) ꕥ	25
Elephant's Food	15
Sago palm	15
Desert Spoon	15
Desert Milkweed ꕥ	10
Smooth Agave	10
Slipper Flower ꕥ	10
Argentine Giant	10
Golden Barrel	5
Parry's Agave	5
Candelilla	5
Engelmann's Hedgehog	5

Trees

Trees can provide shade, helping to lower the temperature of the surrounding environment. Well-maintained, mature trees add value to your home.

Common Name	Canopy Coverage (sq. ft.)
Blue Palo Verde ꕥ	700
Texas Honey Mesquite ◆	700
Ironwood	500
Velvet Mesquite ◆ꕥ	500
Palo Brea	500
Acacia (**Sweet**, **White Thorn**, Shoestring) ꕥ	315
Chaste Tree ◆	315
Desert Willow ◆ꕥ	315
Mastic Tree	315
Mexican Ebony	315
Cascalote	175
Feather Bush	175
Foothills Palo Verde	175
Red-Cap Gum (Eucalyptus)	175
Texas Ebony	175
Kidneywood	80
Mexican Buckeye ◆	80
Palo Blanco	80
Mexican Blue Palm	50
Anacacho Orchid Tree	30

Grasses - Grasses are great for softening, especially near boulders, and for adding motion to a landscape.

Common Name	Canopy Coverage (sq. ft)
Deer Grass	15
Pink Muhly	10
Blue Grama	5
Sideoats Grama ꕥ	5

Most Common Selected Plants from *Landscape Plants for the Arizona Desert*

Green text = Plants that are native to Arizona and/or the Sonoran Desert.
◆ = Deciduous tree — great for energy use, if planted on the west side of the home, provides shade in the hot summer months but drops leaves to allow sunlight in during the cooler winter months.
ꕥ = Attracts pollinators or wildlife.

Consider planting the right plant for the right place. Lists are organized from the largest specimens in sq. ft. to the smallest. Consider the size of the area you are removing and the mature size of the plants you are selecting.

Shrubs

The differences in shrub size, form, texture, and flower color allow them to be used for many landscape purposes. Select shrubs with a variety of flower colors and blooming periods to provide seasonal impact.

Common Name	Canopy Coverage (sq. ft.)
Texas Olive	80
Arizona Rosewood	50
Hop Bush ꕥ	50
Mexican Bird of Paradise ꕥ	50
Arizona Yellow Bells ꕥ	30
Creosote Bush	30
Jojoba	30
Red Bird of Paradise ꕥ	30
Texas Mountain Laurel	30
Baja Fairy Duster ꕥ	20
Cape Honeysuckle ꕥ	20
Dalea (Black, **Bush**, **Weeping**) ꕥ	20
Orange Bells (All varieties) ꕥ	20
Red Eremophila ꕥ	20
Leucophyllum Sages (All varieties)	20
Yellow Bird of Paradise ꕥ	20
Woolly Butterfly Bush ꕥ	20
Baja Ruellia ꕥ	15
Brittlebush ꕥ	15
Chuparosa ꕥ	15
Flame Honeysuckle ꕥ	15
Oleander	15
Pink Fairy Duster ꕥ	15
San Marcos Hibiscus	15
Superstition (Indian) Mallow	10
Triangleleaf Bursage	5

Groundcovers

From a design sense, groundcovers help unify and blend separate elements of the landscape. Their many uses include stabilizing soil, minimizing dust, shading and cooling bare surfaces, and creating visual interest.

Common Name	Canopy Coverage (sq. ft.)
Red Spike Ice Plant	30
Myoporum	30
Trailing Dalea	30
Trailing Rosemary	15
Lantana - Trailing ꕥ	15
Bush Morning Glory ꕥ	10
Blue Euphorbia	10
Lantana - Mounding ꕥ	10
Tufted Evening Primrose	5
Katie Ruellia	5

Vines

Vines can add vertical dimension to the landscape. Many provide masses of colorful, fragrant flowers and cool, green foliage. Use vines to cover walls, screen views, or dress up posts or columns.

Common Name	Canopy Coverage (sq. ft.)
Bougainvillea	315
Yellow Orchid Vine	180
Lady Banks Rose	180
Queen's Wreath	180
Lilac Vine	80
Potato Vine	80
Baja Passion Vine ꕥ	80

Perennials

Perennials add splashes of color to a landscape. Each perennial from the *Landscape Plants for the Arizona Desert* will count as 5 sq. ft.

Q: Do I have enough grass to qualify for a rebate?
A: A minimum of 500 square feet (sq. ft.) of grass is required unless you remove all the remaining grass on your property. You can combine areas to meet the minimum square footage. Grass must be growing at a minimum 50% density and/or have a permanent, functioning, and scheduled irrigation system to count towards the 500 sq. ft. removal minimum. Scheduled refers to a consistent watering routine, as shown through historical water usage.

Q: What if I already removed the grass?
A: Any grass removed before the pre-inspection and Notice to Proceed is issued will not count in the rebated square footage. Rebates are not retroactive so photos of the project before and after the grass was removed does not qualify. Per ordinance, all removal rebates require a pre-inspection to verify eligibility.

Q: How long do I have to complete the project?
A: Your project's rebate money is reserved once you receive your Notice to Proceed until the project Completion and Notification Deadline. Extension information is available on page 1 and on page 5 of the Single-family Residential Grass Removal Rebate Application.

Q: What if I run out of time to complete the project?
A: If funds are available and a Notice to Proceed was issued, an extension may be granted. To request a four-month extension, contact Conservation; Refer to page 5 of the current *Grass Removal Rebate Application* under *Variances, Deadlines and Extensions* for how-to instructions.

Q: Why do you require Arizona-friendly plants? They use water!
A: Yes, plants use water – but they also provide shade, reduce the urban heat island effect, clean air, create color in a yard, and can attract pollinators! Arizona-friendly plants, when watered correctly, use significantly less water than grass. With rainwater harvesting, after establishment, some Arizona-friendly plants do not need irrigation. To learn how to efficiently water and plan your Arizona-friendly landscape, refer to page 8 in this packet for resources.

Q: Why limit artificial turf?
A: While Conservation recognizes the water savings potential of artificial turf, Scottsdale Water is also committed to a healthy, resilient urban environment. Research conducted by the Scottsdale and Arizona State University consistently shows artificial turf areas as being one of the hottest surfaces during the intense summer heat. Both surface and radiant heat were high for artificial turf, which increases the heat load on a person's body; on pets, on surrounding plants/trees, and on buildings. Additionally, large applications of artificial turf may require sprinkler systems or other cooling methods for heat control.

Q: Where may artificial turf be beneficial?
A: Artificial turf may be beneficial in difficult-to-water areas such as small, shaded gathering areas. Living grass is difficult to grow in tree shaded areas, but the shade may be desired to help control heat effects. However, be cautious of the proximity of artificial turf to tree trunks and tree roots (refer to next question).

Q: Where may artificial turf not be beneficial?
A: Artificial turf may not be beneficial in areas that are frequently used by children or pets, especially in large applications without shade, due to the heat effects. Additionally, it may not be beneficial around tree roots or near plants that may be negatively affected by radiant heat, such as saguaros or other cacti, or over areas where infrastructure may need to be accessed in the future (e.g., a city-owned meter or valve box, drip irrigation lines, underground cables, etc.).

Q: What is mature size? Do I have to pay for larger plants?
A: Mature size refers to the typical width and height when the plant is fully grown. Width is the number used for calculating plant canopy coverage – and we have provided a cheat sheet in this packet of the most used plants and their canopy coverage at mature size (pages 4-5 of this packet). When you install plants for a rebate, you may choose one gallon or larger. Calculations for canopy coverage will be made using typical mature size, regardless of the plant size you install.

Additional Arizona-friendly plants with their width and height are provided in the *Landscape Plants for the Arizona Desert* publication (available online or in print). The width (w) is the first number under "Growth" – half of "w" is "r". This is used for a circle formula ($3.14 \times r^2$) to calculate the canopy coverage. We round the size to the nearest fifth. Cacti and succulents are given an extra 20% to account for not having foliage.

If you want to install an Arizona-friendly plant that is on ADWR's *Low Water Use Drought Tolerant Plant List* but is not listed in *Landscape Plants for the Arizona Desert,* the ultimate authority for sizing plant canopy coverage is the *Sunset Western Gardener* book. Email WaterConservation@ScottsdaleAZ.gov for more information.

Q: Do my existing plants count?
A: So long as the plant has been planted in the same place for at least two years and the trunk or stem is in the removal area, then the plant canopy may count, regardless of whether it is Arizona-friendly or high-water-use. If you remove grass around a tree or other large plant, you may want to consider supplemental irrigation to that tree or plant because it is likely receiving irrigation from the grass.

Q: Does the city have a preferred landscaper list, or can it provide design services?
A: No – the city does not have a preferred landscaper list. However, applicants can utilize Smartscape to search for trained professionals. The city does not provide design services, but it does have a list of resources to help customers through the design process. Refer to page 8 for these resources.

Q: Do I have to leave the rebate as a credit on the utility billing statement until it is gone?
A: No - after the rebate credit is applied to the active water account (it may take up to two billing cycles), it will be listed on your utility billing statement under *BILLING SUMMARY*; contact Utility Billing at 480-312-2461 and ask for your utility account balance.

- Water – Use It Wisely Interactive Plant Watering Guide (Step 1)
- Water – Use It Wisely Programming Your Irrigation Controller/Timer (Step 2)
- Water – Use It Wisely How to Xeriscape
- Water – Use It Wisely Our Top Landscape Ideas
- Water – Use It Wisely Efficient Irrigation
- Water – Use It Wisely Rainwater Harvesting
- Water – Use It Wisely Drab to Fab Video Series
- Order FREE Water Conservation Publications from Scottsdale Water (Step 1)
- Watch recorded workshops from Scottsdale Water
- City of Mesa Low Impact Development Toolkit
- Greater Phoenix Green Infrastructure Handbook
- Drought and Extreme Heat: Plant Responses and Landscape Maintenance Practices

A low-water-use landscape is only low-water-use if it is irrigated efficiently!

To help you establish and water your new landscape efficiently, complete the following:

1. Utilize the interactive plant watering guide from Water – Use It Wisely
   - Order the *Landscape Watering by the Numbers* publication from Scottsdale Water if you prefer a paper copy.
2. Program your irrigation controller/timer correctly.
   - Consider installing a WaterSense-labelled irrigation controller (rebates available).
3. Check your work for leaks – sign up for WaterSmart to monitor your water usage and look for a decrease in irrigation events.
4. Schedule a free Outdoor Water Efficiency Check after your grass removal project is complete. Call 480-312-5650 to schedule an appointment.

Applicant's Selected Plant List

Applicant name _____

Address where grass removal is occurring _____

Use the worksheet to calculate the square footage of mature Arizona-friendly plants. To qualify, after the first 1,000 sq. ft. removed, at least 25% of the remaining landscape area converted must be replanted with Arizona-friendly living plant material. For example, if you have a conversion area of 2,000 sq. ft., at least 250 sq. ft. must be covered using the mature size of the Arizona-friendly plants. Plants do not have to be of mature size when planted.

Total landscape area converted in sq. ft.				
Total plant coverage required in sq. ft. (25% of the total landscape area converted)				
Common Plant Name	**Existing or New Plant for Removal Area?**	**Mature Plant Canopy**	**Number of Plants**	**Total Canopy Coverage**
Example: Olive Tree	Existing	490 sq. ft.	1	490 sq. ft.
Example: Medicinal Aloe	New	25 sq. ft	2	50 sq. ft.
Sum Plant Coverage Square Footage				