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# Landscape Plants for Eagle Mountain, Utah

# **Recommended Plants for Low-Water Landscaping**

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### Introduction

The City of Eagle Mountain is one of the fastest growing cities in Utah. Its rapidly increasing population, coupled with a semiarid environment, places a strain on natural resources such as water. Water conservation is a priority for the City of Eagle Mountain in order to create and maintain a comfortable lifestyle for its residents. As part of the city's updated Water Conservation and Management Plan (2014), the city hopes to promote the use of drought-tolerant plants and efficient irrigation in order to conserve water. Eagle Mountain also plans to lead by example by installing a low-water demonstration garden and implementing water-efficient landscaping practices on city-managed landscapes.

### Purpose of Fact Sheet

A low-water landscape can be colorful, inviting and beautiful. The purpose of this fact sheet is to help homeowners of Eagle Mountain select landscape plants that will be successful in this area while also requiring less water. With proper plant selection and efficient irrigation, residents will be able to maintain beautiful landscapes while using less water.

### Location & Population

Eagle Mountain is located in Cedar Valley in northwestern Utah County. The West Desert lies to the west, and the Lake Mountains serve as an eastern barrier between the valley and Utah Lake. Within commuting distance of the Provo-Orem and Salt Lake City metropolitan areas, Eagle Mountain has a population that is rapidly increasing as housing pressure grows. Incorporated in 1996, its population grew from an estimated 2,000 people in 2000 to 30,000 in 2016. It is projected to continue to grow to 41,050 in 2024, and to 120,000 residents by 2040.



Figure 1. Map of Eagle Mountain.

# Plant Selection Ecoregion

Eagle Mountain is located in the semiarid Central Basin and Range ecoregion, which is dominated by sagebrush and bunch grasses. Native vegetation also includes pinyon pine, juniper, rabbitbrush and mountain mahogany; all of which are adapted to the cold temperatures and low rainfall of this region.

#### Climate & Hardiness Zones

According to the USDA Plant Hardiness Zone map, Eagle Mountain ranges from 6a (-10°F to -5°F) to 7a (5°F to 10°F). However, data from nearby weather stations indicate that microclimates in that area vary greatly. Depending on the site location within the city of Eagle Mountain, sites could even be in the USDA Hardiness Zones 4b (-25°F to -20°F) to 5b (-15°F to -10°F).

The closest weather station to Eagle Mountain is located in Fairfield, 5 miles away at about the same elevation as Eagle Mountain's City Center. Annual low temperatures in the last 20 years have dipped down into the -20s several times. Microclimates consisting of low-lying areas throughout the city where cold air settles could possibly be even colder. In contrast, the Ranches area of Eagle Mountain is elevated above the valley floor and partially on the Utah Lake side of the Lake Mountains, which results in warmer temperatures than the City Center area.

The growing season (days between first and last frost) averages 95 days at the Fairfield weather station with the last average spring freeze on June 7<sup>th</sup> and an average first freeze date of September 10<sup>th</sup>. Data from the Utah Lake Lehi climate station may more closely approximate the Ranches area and shows a longer growing season of 138 days with the last freeze on May 15<sup>th</sup> and the first freeze on September 29<sup>th</sup>. This temperature variability throughout the city underscores the importance of understanding individual landscape sites. Plants that will only survive in the Ranches area of the city are noted on the plant list.

# Water Situation Water Source

The current reliance on well water will not sustain the growing population of Eagle Mountain City. Therefore, the city has recently purchased 11,000 acre feet of water from Central Utah Water Conservancy District. This water must be imported from east of Utah Lake and has been treated for culinary use. It is a more expensive source of irrigation water than untreated well water. With typical Utah residents using 50-60% of their water

on their landscapes, finding ways to reduce water use is essential for future growth.

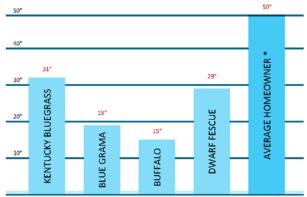
#### Annual Precipitation

The annual precipitation in Eagle Mountain averages 13.5 inches per year (NOAA 2011). In comparison, other cities in Utah average the following:

Ogden: 19.2"Logan: 18.5"

Salt Lake City: 18.6"St. George: 8.8"Provo: 19.8"Moab: 9.5"

For reference, a typical Kentucky bluegrass lawn requires about 30 inches of water per year. The low precipitation means that most landscapes will need supplemental irrigation to survive.



3-year average water meter readings for healthy turfgrass plots at Jordan Valley Conservation Garden Park 2009-2011 \* based on 3-year average for residential sites in the Salt Lake County Water Check Program

Figure 2. Chart of typical turfgrass water use in Salt Lake Valley.

# **Irrigation Requirements**

This publication offers guidelines on plant water requirements by organizing plants into three categories:

- Very Low Water: Plants generally need no additional water once established except in drought conditions. Deep, infrequent watering.
- **Low Water:** Plants generally require water once or twice a month after establishment, depending on weather.
- **Moderate Water:** Plants generally require water once a week, depending on weather.

Keep in mind that this is a guide; microclimate, soil type, plant density and other factors may affect the plant's water needs. Many plants fit into more than one water zone as they can handle less water, but grow faster/bigger with more water. Grouping plants together by water use (hydrozoning) encourages water efficiency by avoiding overwatering.

#### Soils

Soil is as important as hardiness zone in determining plant success in a landscape. Many drought tolerant plants are adapted to well-drained soils that are low in nutrients and organic matter. Soil type may affect plant selection. Since soils are often affected by construction, the best way to determine the characteristics of the soil in a specific landscape is through soil testing. Soil tests can be done by the Utah State University Analytical Laboratories at <a href="www.usual.usu.edu">www.usual.usu.edu</a> or through your county Extension Agent.

#### **Native Soils**

The native soils in Eagle Mountain differ between the upper elevation Ranches neighborhood, and the lower-elevation City Center area. Both soil types are well-drained and not prone to flooding or ponding. A major difference between the two is the higher salinity levels found in the lower-elevation soils.

#### Saline Soils

High levels of salts in the soil can hinder plant growth and aggravate water stress by making it difficult for plants to extract water from the soil (Kotuby-Amacher, Koenig, and Kitchen 2000). Saline soils can originate from mineral weathering of the soils, soil amendments, winter de-icing salts, or irrigation water. Plants that are adapted to saline conditions are noted on the list.

# Soil pH

Soil pH affects plant nutrient availability. Soils in the Eagle Mountain area are generally slightly to moderately alkaline. It is best to choose plants adapted to alkaline soils rather than amending the soil to match the requirements of the plants. Most acid-loving plants, such as blueberries and azaleas, are difficult to grow in Utah and will not thrive in Eagle Mountain landscapes.

#### **Urban Soils Considerations**

It is important to keep in mind, however, that frequently the top layers of soil found in built landscapes are not the native soils. Often topsoil is stripped off during construction and replaced with imported soil. Or, subsoils can be inadvertently brought to the surface. Compaction can also be a problem in built landscapes by making air and water unavailable for plants to produce healthy roots.

#### **Microclimates**

The variability of topography in Eagle Mountain creates soil and temperature distinctions that mean some plants could thrive in one part of town, while suffering in another part. Even within a residential lot, recognizing and planting for microclimates may determine the success of many plants. For example, the north side of a building creates a shady, cool area that can keep moisture in the soil longer. A hot, sunny parking strip is exposed to radiant heat from both street and sidewalk, resulting in plants losing more water more quickly. Understanding plant climatic requirements when siting within a landscape ensures successful landscapes.

#### Planting for Wildlife & Pollinators

As cities grow and encroach into the natural environment, it is important to create and connect areas for the birds, bees and wildlife that rely on these natural resources. A surprising amount and variety of wildlife use residential yards for food, water, habitat and cover. Additionally, inviting wildlife into backyards is of benefit by keeping insects in check and connecting us to the natural world.

Providing wildlife-friendly landscaping can be as simple as including trees that provide berries for birds in the winter. Ensuring a continuous supply of blooms throughout the season will also attract bees and hummingbirds. Some species, such as the Monarch butterfly, need specific plants to feed on at certain stages of their lifecycle.

### **HOA and City Guidelines**

In addition to finding plants adapted to your region and microclimate, check with HOA and city guidelines for restrictions to the amount and placement of certain types of plants. This is especially important in park strips where tall or prickly plants are often restricted.

#### Plant Availability

When selecting plants for low-water landscapes, native plants are often considered since they are adapted to the local conditions. While natives can be very successful, it is important to keep in mind that they may be limited in their availability from local nurseries. However, nurseries can often locate and order natives or other low-water plants that might not be locally available. It is also important to remember that until established in the landscape, native plants require all of the care typically offered to traditional plants.

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# Shrub List for Eagle Mountain, Utah

Botanical Name   Common Name   USDA   control   contro	
2. Arctostaphylos x coloradensis mock bearberry manzanita 5-8 🗹 10-24" x 36-60" 💢 🇘 🚫 🖂 low 🖾 🖾 🖾 🖾 10 S and sage 4-8 3-5' x 4-5' 💢 Med recovers 5-9 Med recovers 5-9 Med recovers 5-9 Med recovers 7-9 Med recovers 8-9 Med recovers 8-9 Med recovers 8-9 Med recovers 9-9	er native
3. Artemisia filifolia sand sage 4-8 3-5' x 4-5' \$\frac{1}{12}\$ \$	Ø
4. Artemisia frigida fringed sage 3-10 12-18" x 12-18" \$\frac{1}{2}\$ \$\	i
5. Artemisia x 'Powis Castle' Powis Castle' artemisia 4-10 36" x 30" \$\frac{1}{12}\$ \$\frac{1}{12	
6. Artemisia tridentata big sagebrush 3-6 3-6' x 3-6' \$\frac{1}{12}\) \$\frac{1}{12}\] \$1	
7. Berberis (Mahonia) repens creeping Oregon grape 4-7 12-18" x 36" \$\frac{1}{12}\$ \$\frac{1}{12}	i
8. Caryopteris x clandonensis blue mist spirea 5-9 2-4' x 2-4' \$\frac{1}{12}\$ \$\	$\overline{\checkmark}$
9. Cercocarpus ledifolius  10. Cercocarpus ledifolius var. intricatus  11. Cercocarpus montanus  12. Chaenomeles spp.  13. Chamaebatiaria millefolium  14-8  15-15-15-15-15-15-15-15-15-15-15-15-15-1	
10. Cercocarpus ledifolius var. intricatus littleleaf mountain mahogany 3-9 4-5' x 3-4' \$\frac{1}{12}\$ \$	
11. Cercocarpus montanus       alder-leaf mountain mahogany       3-9       8-12' x 4-12'       ☼       Ø       ☑ none recovers       ☑         12. Chaenomeles spp.       flowering quince       5-9 ☑       6-10' x 6-10'       ☼       ♠       ♦       none       ☑         13. Chamaebatiaria millefolium       fernbush       4-8       3-6' x 3-6'       ☼       ♠       ♦	$\overline{\checkmark}$
12. Chaenomeles spp. flowering quince 5-9 ☑ 6-10' x 6-10' \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	$\checkmark$
13. Chamaebatiaria millefolium fernbush 4-8 3-6' x 3-6' 🌣 🌣 \delta high 🗹 🗹	$\overline{\checkmark}$
14. Cytisus purgans 'Spanish Gold'® broom 4-9 3-4' x 5-6' 🌣 🗘 🖒 high 🗹 🗹	
15. Ephedra viridis green Mormon tea 3-6 ☑ 3-5' x 3-5'	$\overline{\checkmark}$
16. Ericameria nauseosus var. nauseosus dwarf rabbitbrush 4-9 20-30" x 24-36" 🌣 🕸 🗴 med 🗹 🗹	
17. Fallugia paradoxa Apache plume 4-8 4-6' x 4-6' \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	
18. Juniperus communis 'Alpine Carpet' 'Alpine Carpet' juniper 3-6 12" x 24-36"	
19. Lavandula spp. lavender 5-10 varies 🗘 💍 med [	i
20. Philadelphus lewisii Lewis mockorange 4-8 6-7' x 4-8' 🔅 🔅 🖒 none 🗹	$\overline{\checkmark}$
21. Philadelphus microphyllus little-leaf mockorange 5-9 4-5' x 5' 🔅 🔅 Onne 🗹	$\overline{\checkmark}$
22. Physocarpus malvaceus mallow ninebark 5-9 3-6' x 3-6' \times \frac{1}{2} \times \frac	$\overline{\checkmark}$
23. Paxistima myrsinites mountain lover 3-6 ☑ 2-3' x 4-5' ❖ ★ O - recovers ☑ [	ĭ Ø
24. Prunus besseyi 'Pawnee Buttes' 'Pawnee Buttes'® sand cherry 3-8 15-18" x 4-6' 🌣 🖈 💍 🖒 low recovers 🗹	$\checkmark$
25. Purshia mexicana Mexican cliffrose 5-9 4-6' x 4' ♥ Ø ♦ □ - recovers □	
26. Purshia stansburiana cliffrose 4-9 4-6' x 3-4' 🔅 👂 low recovers	$\checkmark$
27. Rhus aromatica 'Gro-Low' 'Gro-Low' fragrant sumac 4-9 2-3' x 6-8' 🔅 🏚 💍 🗹 - recovers 🗹	
28. Rhus trilobata 'Autumn Amber' 'Autumn Amber' three leaf sumac 4-9 10-14" x 6-8' 🌣 🖈 💍 🗹 med recovers 🗹 🛚	<u>i</u>
29. Rhus glabra var. cismontana dwarf smooth sumac 4-7 10-12' x 4-5' 🌣 🖈 💋 🗹 med -	V
30. Ribes aureum golden currant 4-8 5-6' x 5-6'	
31. Ribes cereum wax currant 5-10 3-5' x 3-5'	
32. Rosa 'Radrazz' 'Knock Out' shrub rose 4-10 3-4' x 3-4'   → Med recovers ✓	
33. Rosa 'White Meidland' 'White Meidland' shrub rose 4-10 2-3' x 5-6' 🔅 ned recovers 🗹	

Recommended plants for	low-water landscapes	Hardiness	Size	Light Requirements	Water Requ	uirements		Attributes					
Botanical Name	Common Name	USDA only in Zone Ranches	height <b>x</b> width	sun part shade	very Iow	moder ate	wildlife value	salt tolerance	deer resistant	pollinator friendly	winter interest	ground- Utai cover nativ	
34. Syringa vulgaris	lilac	3-7	8-15' <b>x</b> 6-12'	≎	0			med	recovers				
35. Teucrium chamaed	rys wall germander	5-9 ☑	12-18" <b>x</b> 18"	<b>\$</b>	0	)		-	V	V		V	
36. Yucca baccata	banana yucca	5-12	3-4' <b>x</b> 4'	<b>\(\phi\)</b>	Ø		V	low	V		V	$\overline{\checkmark}$	
37. Yucca baileyi	Navajo yucca	6-10 ☑	3-4' <b>x</b> 3-4'	<b>\$</b>	Ø		Ø	none	V	V	$\square$	$\overline{\square}$	
38. Yucca harrimaniae	Harriman's yucca	4-8	2-3' <b>x</b> 2-3'	≎	Ø		Ø	none	V	V		$\overline{\checkmark}$	

Perennial List for Eagle Mountain, Utah

Reco	nmmended plants for low-water landsc	apes	Hardiness	Size	Light	Require	ements	Water	Requir	rements		Attributes					
	Botanical Name	Common Name	USDA only in Zone Ranches	height <b>x</b> width	sun	part	shade	very Iow	low	moder ate	wildlife value	salt tolerance	deer resistant	pollinator friendly	winter interest	ground- cover	Utah native
1.	Achillea spp.	yarrow	4-8	varies	☆			Ø	0			low	V	<u> </u>		some	
2.	Agastache spp.	hummingbird mint, licorice mint	4-10	varies	≎			Ø	0			-		$\overline{\checkmark}$			$\overline{\checkmark}$
3.	Amsonia jonesii	Colorado desert blue star	4-9	10-14" <b>x</b> 12-16"	≎	*			0			-					
4.	Antennaria parvifolia	common pussytoes	5-8	2-6" <b>x</b> 3'	≎	*			0			-	Ø				
5.	Asclepias tuberosa	butterfly weed	3-9	18-36" <b>x</b> 18-24"	$\Diamond$			Ø	0		V	none		$\overline{\checkmark}$			$\overline{\mathbf{A}}$
6.	Berlandiera lyrata	chocolate flower	4-9	12-20" <b>x</b> 12-20"	$\Diamond$	*		Ø	0			med					
7.	Callirhoe involucrata	winecups	3-9	8-12" <b>x</b> 4-5'	$\Diamond$	*			0			low		$\overline{\checkmark}$			
8.	Calylophus hartwegii	sundrops	5-9	4-6" <b>x</b> 12-15"	$\Diamond$				$\Diamond$			-					
9.	Ceratostigma plumbaginoides	hardy plumbago	5-9	8-12" <b>x</b> 12"	$\Diamond$	*	*		0	<b>\( \rightarrow\)</b>		-					
10.	Coreopsis grandiflora	coreopsis	3-9	24" <b>x</b> 18"	☆				0			-					
11.	Crambe maritima	curly leaf sea kale	4-8	18-24" <b>x</b> 24-30"	₩				0	<b>\( \rightarrow\)</b>		high		$\overline{\checkmark}$			
12.	Dalea purpurea	purple prairie clover	3-9	18" <b>x</b> 18"	$\Rightarrow$			Ø	0			-		$\checkmark$			$\overline{\checkmark}$
13.	Delosperma cooperi	Coopers' hardy ice plant	5-9	1-2" <b>x</b> 15-18"	$\Rightarrow$	*			0			high				V	
14.	Echinacea tennesseensis	Tennessee coneflower	5-9	24-30" <b>x</b> 18"	$\Diamond$				$\Diamond$			none		$\overline{\checkmark}$			
15.	Echinacea pallida	pale purple coneflower	3-8	30" <b>x</b> 18"	⇔				0	<b>\( \)</b>		-					
16.	Echinacea paradoxa	yellow coneflower	5-8	24-36" <b>x</b> 12-18"	$\Diamond$				0	<b>\( \)</b>		-		$\checkmark$			
17.	Echinacea purpurea hybrids	purple coneflower	3-8	varies	≎				0	<b>\( \)</b>		-	$\square$	$\overline{\checkmark}$			
18.	Epilobium (Zauschneria) garrettii	fire chalice, hummingbird trumpet	5-9	4-6" <b>x</b> 18-24"	$\Diamond$	*		Ø	0			-		$\checkmark$		$\overline{\checkmark}$	
19.	Erigeron divergens	cloud daisy	5-9	6-24" <b>x</b> 12-18"	≎	*			0			-		$\overline{\checkmark}$			$\overline{\checkmark}$
20.	Eriogonum umbellatum	sulphur buckwheat	3-8	12-16" <b>x</b> 18-24"	$\Diamond$	*		Ø	0			high		$\checkmark$		$\overline{\checkmark}$	$\overline{\checkmark}$
21.	Gaillardia spp.	Indian blanket flower	4-10	varies	$\Diamond$				0			none					
22.	Gaura lindheimeri	whirling butterflies	5-10	24-36" <b>x</b> 24-36"	☆	*			0			_					
23.	Geum triflorum	prairie smoke	3-8	6-18" <b>x</b> 6-12"	≎	*		Ø	0			none					
24.	Helianthus maximiliani	Maximilian sunflower	3-9	6-8' <b>x</b> 4'	$\Rightarrow$	*		Ø	0		V	none	V				
25.	Helianthemum nummularium	rockrose, sunrose	4-9	10-12" <b>x</b> 18"	₩				0			-				Ø	

Recommended plants for low-water landsco	Hardiness	Size	Light R	Light Requirements Wate				ements	Attributes							
Botanical Name	Common Name	USDA only in Zone Ranches	height <b>x</b> width	sun	part	shade	very Iow	low	moder ate	wildlife value	salt tolerance	deer resistant	pollinator friendly	winter interest	ground- cover	Utah nativ
26. Helleborus orientalis	Lenten rose	4-9	12" x 36"	≎	*			0			-			$\checkmark$	V	
27. Heuchera sanguinea	coral bells	4-7	8-10" <b>x</b> 4-8"	≎	*	拳		0	<b>\( \)</b>		none	$\square$	$\overline{\mathbf{V}}$	V	V	
28. Hyssopus officinalis	hyssop	4-9	18-24" <b>x</b> 18-24"	≎	*		Ø	0			-	$\overline{\mathbf{V}}$	$\overline{\checkmark}$			
29. Iris hookeri	dwarf beach-head iris	3-8	8-12" <b>x</b> 8-12"	≎	*			0			-	$\square$	V			
30. Iris pallida	variegated iris	4-9	24-36" <b>x</b> 18-24"	≎	*			$\Diamond$			-					
31. Kniphofia caulescens	regal torch lily	5-9	36-40" <b>x</b> 24-30"	₩	*			0	<b>\( \)</b>		-	$\square$	V			
32. Linum lewisii	blue flax	3-9	24"- 30" <b>x</b> 10-12"	≎	*		Ø	0		V	low	$\overline{\mathbf{A}}$				$\overline{\checkmark}$
33. Marrubium rotundifolium	silverheels horehound	4-9	4" <b>x</b> 18-30"	≎				0			-		$\overline{\mathbf{Q}}$		V	
34. Mirabilis multiflora	desert four o'clock	4-6	12-24" <b>x</b> 4-6'	☆			Ø			V	high	$\overline{\mathbf{V}}$	$\overline{\mathbf{V}}$		V	$\checkmark$
35. Monarda didyma	bee balm	4-8	24"-48" <b>x</b> 18-24"	₩	*			0	<b>\( \)</b>	V	-	Ø	V			
36. Monardella macrantha	scarlet monardella	5-9	4-6" <b>x</b> 8-12"	≎	*	*	Ø				low	Ø	V			
37. Monardella odoratissima	mountain monardella	4-10	10-12" <b>x</b> 12-18"	₩	*		Ø				low		V			
38. Nepeta spp.	catmint	3-10	18-36" <b>x</b> 12-36"	≎	*		Ø	0			-	$\overline{\mathbf{Q}}$	V			
9. Oenothera caespitosa	tufted evening primrose	4-10	8-10" <b>x</b> 8-10"	≎				0		V	med		$\overline{\mathbf{Q}}$			V
0. Oenothera fremontii	narrowleaf evening primrose	4-8	10" <b>x</b> 15-18"	≎				0			-	$\overline{\mathbf{Q}}$	V			
1. Oenothera macrocarpa	Missouri evening primrose	4-8	6-8" <b>x</b> 18-24"	₩				0			-		V		V	
2. Oenothera pallida	pale evening primrose	4-10	8-20" <b>x</b> 24-30"	≎			Ø				none		$\overline{\checkmark}$			✓
3. Penstemon eatonii	firecracker penstemon	4-10	18-24" <b>x</b> 14-16"	₩			Ø	0		V	none		$\overline{\mathbf{A}}$			V
4. Penstemon mexicali	mexicali hybrid penstemons	4-10	12-24" <b>x</b> 8-18"	≎	*			0			-					
5. Penstemon palmeri	Palmer's penstemon	4-9	48-60" <b>x</b> 12-36"	₩	*		Ø	0		V	none		$\overline{\checkmark}$			V
16. Penstemon pinifolius	pineleaf penstemon	4-10	12-18" <b>x</b> 18-24"	₩	*			0			-		$\overline{\checkmark}$			
7. Penstemon platyphullus 'Uvatung'	Uvatung broadleaf beardtongue	4-7	18-24" <b>x</b> 12-18"	₩	*		Ø	0			-	$\square$	$\overline{\mathbf{Z}}$			V
18. Penstemon strictus	Rocky Mountain penstemon	4-9	24-30" <b>x</b> 24-36"	₩				0	<b>\( \)</b>	$\overline{\mathbf{V}}$	none		$\overline{\checkmark}$			V
19. Phlomis cashmeriana	Cashmere sage	5-10 🗹	36-60" <b>x</b> 18-30"	≎	*			0			-	V	$\overline{\checkmark}$	$\square$		
0. Ratibida columnifera	Mexican hat	4-10	24-36" <b>x</b> 18-24"	≎				$\Diamond$		V	low					
51. Rudbeckia fulgida	black-eyed Susan	4-9	18-36" <b>x</b> 24"	♡				0	<b>\( \rightarrow\)</b>		-	V	$\overline{\checkmark}$			
52. Salvia argentea	silver sage	4-10	24-36" <b>x</b> 18-24"	♡	*		Ø	0			-		V			
53. Salvia daghestanica	dwarf silver-leaf sage	5-10 🗹	8-12" <b>x</b> 12-18"	♡	*		Ø	0			-	V	V			
4. Salvia dorrii var. clokeyi 'Purple Chip'	Dorr's sage	5-9	18-24" <b>x</b> 24-32"	♡			Ø	0		V	low		$\overline{\checkmark}$		V	V
55. Salvia greggii	Texas sage	5-10 ☑	18-24" <b>x</b> 18-24"	♡	*		Ø	0			-	Ø	$\overline{\mathbf{Z}}$			
66. Salvia nemerosa	meadow sage	3-8	18-24" <b>x</b> 8-18"	⇔				0			-	V	$\overline{\mathbf{A}}$			
57. Salvia officinalis	culinary sage	5-8	18-24" <b>x</b> 18-36"	♦			Ø	0			-	Ø	V			
58. Salvia pachyphylla	Mojave sage	5-10 ☑	18-24" <b>x</b> 24-30"	≎			Ø	0			-	Ø	V			
59. Scrophularia macrantha	red birds in a tree	4-9 ☑	30-36" <b>x</b> 18-20"	₩			Ø	0			-		$\overline{\mathbf{V}}$			

Reco	ommended plants for low-water landsc	apes	Hardiness	Size	Light Requirements	Water	Requirements		Attributes						
	Botanical Name	Common Name	USDA only in Zone Ranches	height <b>x</b> width	sun part shade	very low	low moder ate	wildlife salt value tolerance	deer resistant	pollinator friendly	winter interest	ground- cover	Utah native		
60.	Sedum 'Autumn Joy'	'Autumn Joy' stonecrop	4-10	12-30" <b>x</b> 18-24"	≎	Ø	0	high		<b>V</b>	$\checkmark$				
61.	Sedum 'Mr. Goodbud'	'Mr. Goodbud' stonecrop	4-10	12-18" <b>x</b> 18-20"	≎	Ø	0	high	V	V	V				
62.	Sphaeralcea spp.	globemallow	4-9	24-36" <b>x</b> 18-24"	☆	Ø		med	V	V			$\checkmark$		
63.	Stachys byzantina 'Big Ears'	'Big Ears' lamb's ears	4-9	8-18" <b>x</b> 18-24"	☆ ♦	Ø	0	-	V	V		V			
64.	Tetraneuris (Hymenoxis) acaulis	sundancer daisy	5-10	15" <b>x</b> 15"	☼	Ø	0	-	V	V		V			
65.	Thymus serphyllum	wooly thyme	4-9	1-4" <b>x</b> 12-16"	<b>☆ ☆</b>	Ø	0	-	V	V		V			
66.	Veronica liwanensis	Turkish veronica	3-10	1-2" <b>x</b> 15-18"	<b>☆ ☆</b>		$\Diamond$	-				$\overline{\checkmark}$			
67.	Veronica pectinata	woolly veronica	4-9	2-3" <b>x</b> 12-18"	☆ ₩		0	-				V			
68.	Zinnia grandiflora	Rocky Mountain zinnia	4-8	8-10" <b>x</b> 18+"	≎	Ø		-	V	V		$\overline{\checkmark}$	$\overline{\checkmark}$		

Ornamental Grass List for Eagle Mountain, Utah

Recommended plants for low-water land	dscapes	Hardiness	Size	Size Light Requirements V							Attrib	utes		
Botanical Name	Common Name	USDA only in Zone Ranches	height <b>x</b> width	sun	part shade	very low	low	moder ate	wildlife value	salt tolerance	deer resistant	winter interest	ground- cover	Utah native
1. Achnatherum calamagrostis	silver spike grass	4-9	24-36" <b>x</b> 24-36"	≎			0	<b>\( \)</b>		-	V			
2. Achnatherum hymenoides	Indian ricegrass	3-9	12-24" <b>x</b> 12-24"	≎		Ø	0		V	low				$\overline{\checkmark}$
3. Bouteloua curtipendula	side-oats grama	4-9	18-24" <b>x</b> 18-24"	≎		Ø	0		V	low				$\square$
4. Distichlis spicata	saltgrass	4-10	6-20" x spreading	≎		Ø	0	<b>\( \)</b>	V	high				$\overline{\mathbf{A}}$
5. Festuca mairei	Atlas fescue	4-8	24-36" <b>x</b> 24-36"	≎	*		0			-	V			
6. Helictotrichon sempervirens	blue oat grass	4-9	24-36" <b>x</b> 24"	≎			0	<b>\( \)</b>		-	V			
7. Muhlenbergia reverchonii	ruby muhly grass	5-9	24-36" <b>x</b> 18-34"	₩			0			-	V			
8. Panicum virgatum	swithchgrass	4-9	3-5' <b>x</b> spreading	≎	*		$\Diamond$	<b>\( \rightarrow\)</b>		low	V			
9. Pennisetum alopecuroides	fountain grass	5-10 ☑	varies	₩	₩		0	<b>\( \)</b>		low	V			
10. Poa fendleriana	mini blue oat grass	4-9	12-24" <b>x</b> 10-12"	☆						low				$\overline{\checkmark}$
11. Schizachyrium scoparium	little bluestem	3-8	24-36" <b>x</b> 15-18"	≎		Ø	0		Ø	low	V			
12. Sorghastrum nutans	Indian grass	4-9	6-8' <b>x</b> 2-3'	≎		Ø	0		V	med	V	$\overline{\checkmark}$		V
13. Sporobolus airoides	alkali sacaton	5-8	24-36" <b>x</b> 24-36"	₩		Ø	δ		V	high	V	$\overline{\checkmark}$		V

# Tree List for Eagle Mountain, Utah

Recommended plants for low-water landscap	oes	Har	diness	Size	Light	Requirement	s Wate	r Requi	rements	Attributes					
Botanical Name	Common Name	USDA Zone	only in Ranches	<i>height</i> <b>x</b> width	sun	part shad	e very	low	mode rate	wildlife value	salt tolerance	deer resistant	pollinator friendly	winter interest	Utah native
Acer grandidentatum	bigtooth maple	3-8	V	20-40' x 20-30'	♡			0		V	med	recovers		$\overline{\checkmark}$	$\overline{\checkmark}$
2. Acer tataricum 'Hot Wings'	'Hot Wings'® Tatarian maple	4-10		15-18' <b>x</b> 15-18'	♡	*		0			med	recovers	V	<b>V</b>	
3. Celtis occidentalis	hackberry	2-9		40-60' <b>x</b> 40-60'	♡	₩:	Ø	0	<b>\( \)</b>		med				
5. Chionanthus retusus	Chinese fringe tree	5-9		10-20' x 10-20'	≎	*	Ø	٥	<b>\( \)</b>	V	med		Ø		
6. Cotinus coggygria	purple smokebush	5-8		8-15' <b>x</b> 8-15'	≎	₩		٥			med	Ø			
7. Crataegus ambigua	Russian hawthorn	4-9		16-20' <b>x</b> 12-16'	₩	₩	Ø	0		V	med	recovers	Ø		
8. Crataegus crus-galli inermis	Cockspur hawthorn	4-8		20-30' <b>x</b> 20-35'	₩		Ø	٥		V	med	recovers			
9. Ginkgo biloba	ginkgo	5-9		50-80' <b>x</b> 30-40'	₩			0			med	$\square$			
10. Gleditsia tricanthos 'Imperial'	honey locust	4-8		30-35' <b>x</b> 30-35	₩			$\Diamond$			med				
Juniperus scopulorum	juniper	3-9		varies	₩		Ø	٥		V	high			$\overline{\checkmark}$	$\overline{\checkmark}$
11. 'Blue Point'	'Blue Point' columnar juniper	4-9		12' <b>x</b> 4'	₩		Ø			V	high	recovers		$\overline{\checkmark}$	$\overline{\checkmark}$
12. 'Woodward'	Woodward' columnar juniper	3-9		20' <b>x</b> 2-4'	₩		Ø			V	high	recovers			V
13. Gymnocladus dioicus	Kentucky coffeetree	3-8		60-70' <b>x</b> 40-50'				٥			med				
14. Koelreuteria paniculata	golden rain tree	5-9		20-30' <b>x</b> 25-35'	♡		Ø	٥			med				
15. Maclura pomifera	Osage orange	4-9		30-60' <b>x</b> 20-40'	♡			٥	$\triangle$		med				
16. Malus spp.	crabapple	3-9		15-25' <b>x</b> 15-25'				0		V	med				
17. Picea pungens	blue spruce	3-8		30-60' <b>x</b> 15-20'	♡			٥		V	med	$\square$		$\overline{\checkmark}$	$\overline{\checkmark}$
18. Pinus aristata	bristlecone pine	4-8		20-40' <b>x</b> 20-40	₩		Ø				med				
19. Pinus flexilis 'Vanderwolf's Pyramid'	limber pine	3-7		20-25' <b>x</b> 10-20'	₿			٥			med			$\overline{\checkmark}$	$\overline{\checkmark}$
20. Pinus edulis	pinyon Pine	4-8		20-35' <b>x</b> 10-15'	₩		2	5		V	med				$\overline{\checkmark}$
21. Pinus heldreichii	Bosnian pine	3-8	$\overline{\mathbf{A}}$	20-40' <b>x</b> 20-30'	₿			0			med				
22. Pinus nigra	Austrian pine	5-8		50-80' <b>x</b> 25-40'	♥			٥	_		med			$\square$	
23. Plantanus x acerifolia	London planetree	4-8		75-100' <b>x</b> 60-75'	₿			٥	<b>\( \)</b>		med			$\overline{\checkmark}$	
24. Quercus gambelii	gambel oak	4-8		20-30' <b>x</b> 15-20'	₿		2	5 0		V	med	recovers			
25. Quercus macrocarpa	bur oak	3-8		70-90' <b>x</b> 60-80'	♡			٥		V	med	recovers			
26. Rhus glabra	smooth sumac	3-9		10-15' <b>x</b> 10-15'	≎	*	2			V	low	recovers			$\overline{\checkmark}$
27. Robinia neomexicana	New Mexico locust	5-9		20-25' <b>x</b> 20-25'	♡		2	5		V	high	-	V		<b>V</b>
28. Syringa reticulata	Japanese lilac tree	3-7		20-30' <b>x</b> 15-20'	♡			٥		V	med				
29. Ulmus parvifolia	Chinese elm	4-9	V	40-50 <b>x</b> 25-40	≎	₩:		0			med				
30. Xanthoceras sorbifolium	yellowhorn	5-8		18-22' <b>x</b> 10-15'	₩		Ø	٥			-		Ø	$\square$	

# Turfgrass List for Eagle Mountain, Utah

Recommended plants for low-water	r landscapes	Hardiness	Growin	g Season	Light	Require	ements	Wa	ter Re	quirements	Attributes			
Botanical Name	Common Name	USDA Zone	cool season	warm season	sun	part	shade	very Iow	low	moder ate	traffic tolerance	heat tolerance	salt tolerance	
1. Agropyron cristatum	crested wheatgrass	varies	V		☼			Ø			low	low	med	
2. Bouteloua gracilis	blue grama	3-8		$\square$	$\Diamond$				0		med	high	med	
3. Buchloe dactyloide 'Sundancer'	buffalograss	3-9		$\square$	$\Diamond$				0		med	high	med	
4. Festuca arundinacea	tall fescue	5-8	V		$\Diamond$	*				<b>\( \)</b>	med	high	med	
5. Festuca spp.	fine fescue	4-10	V			*				<b>\( \)</b>	med	low	low	
6. Lolium perenne	perennial ryegrass	3-10	V		$\Rightarrow$					•	med	med	med	
7. Pascopyrum smithii	western wheatgrass	3-8	V		$\Diamond$			Ø			low	low	med	
8. Poa pratensis	Kentucky bluegrass	3-9	V		$\Rightarrow$					•	high	med	low	
9. Poa secunda	Sandberg bluegrass	4-10	V		≎	*				<b>\( \)</b>	low	low	low	
9. Zoysia japonica	Zoysiagrass	5-10		$\square$	$\Diamond$	*			0		med	high	med	