



**EAGLE MOUNTAIN CITY
PLANNING COMMISSION MEETING
JULY 12, 2022**

TITLE:	ACTION ITEM/PUBLIC HEARING - Eagle Mountain Municipal Code Regarding Water Efficient Landscape Standards
ITEM TYPE:	Development Code Amendment
APPLICANT:	Evan Berrett - Assistant to the City Administrator

ACTION ITEM:

Yes

PUBLIC HEARING:

Yes

PREPARED BY:

Evan Berrett, Admin

BACKGROUND:

Utah has been in a state of severe drought for the past two years, straining water resources. When the state is not in a drought period, water resources will still be strained due to limited sourcing and high growth. The Cedar Valley does not provide annual runoff or surface water sources. Underground aquifers provide reliable sources of water, if they are able to adequately replenish over time. Eagle Mountain is also at risk of enhanced water restrictions due to Utah’s “Doctrine of Prior Appropriation” which essentially means that those of earlier and consistent water acquisition has rights to water before those who acquire rights to water later.

Eagle Mountain City is projected to continue to grow substantially over the next 40 years, potentially tripling in that time. A recently completed wastewater re-use study conducted by Barr Engineering showed that if all re-use strategies are implemented, Eagle Mountain would still be unable to meet the water demand 40 years from now. Therefore, the City must consider other means of reducing water depletion to enhance overall water supply.

Currently, every single-family residential lot is allocated 0.9 acre/feet of water. The typical Eagle Mountain resident fills their lot primarily with turf grass. Given Eagle Mountain’s abnormally high median household size of over 4.3 persons per household, having plenty of turf space is expected. A recently completed analysis of water use behaviors in Eagle Mountain by Utah State University showed that the actual average water use equated to about 0.65 acre/feet of water per year. The analysis also showed that despite using less water than allocated, residents are applying twice as much water as needed on their lawns. Several agencies, universities, and other reliable sources have identified irrigation of turf grass as the largest use of water and the biggest opportunity for reducing overall water depletion.

Several agencies now provide rebate programs to encourage homeowners to examine their front and side yards as opportunities to eliminate turf grass. The general reasoning for this is that front and side yards are commonly landscaped with turf grass and yet rarely used for activities, only for aesthetics. Eagle Mountain City residents are currently eligible to use rebates from the Central Utah Water Conservancy District (CUWCD) for making changes to their park strips or front and side yards. Residents will lose access to these rebates at the end of 2022 if Eagle Mountain City does not enhance its landscaping solutions.

Many residents have expressed through social media and other communications channels an interest in removing their lawns in favor of landscape that is easier to manage and uses less water. Several properties can be seen throughout Eagle Mountain who have either already undergone conversions or are in the process. These conversions are seen at properties both large and small but have mixed results. In some cases, conversions were made that included introducing materials or using methods that violate existing Eagle Mountain city code. Other conversions were successful to begin with but either made some errors that affect the overall effect or did not adequately design and install a landscape that would reduce the maintenance and have consequently seen massive growth of weeds or other issues.

Residents who have made conversions to their landscapes did so before the landscaping was put in, or only when they had the sufficient money on hand to make it possible. Despite the available rebates, a complete Localscapes conversion of the front and side yards can still cost the average family \$1,500 - \$2,000 based on analysis done on current Eagle Mountain properties.

Home builders and developers have expressed interest in and started making changes towards more water efficient landscapes. Again, the results have been inconsistent, often only partially successful, and at times actually creating greater inefficiency. Developers have also expressed concerns with the increased costs of landscaping enhancements. It is simply cheaper to install turf grass rather than localscape or xeriscape landscaping. Eagle Mountain City staff have determined that opportunity exists to reduce the water rights allocations per lot to reduce costs to developers.

Furthermore, although residential irrigation is a significant majority of the water use in the city, Eagle Mountain residents have repeatedly felt some

contradiction or hypocrisy in messaging due to commercial, institutional, or other property types having grass in areas that are unnecessary. The City of Las Vegas, Nevada recently enacted a ban of non-functional turf, or in other words, turf that serves no other purpose than to add to aesthetics of a property. Eagle Mountain City has non-functional turf in many neighborhoods, commercial developments, on city property, and so forth.

ITEMS FOR CONSIDERATION:

REQUIRED FINDINGS:

Development Code Amendments are legislative decisions and are considered valid if reasonably debatable and not illegal.

RECOMMENDATION:

The Central Utah Water Conservancy District in conjunction with the Jordan Valley Water Conservancy District has developed and distributed a recommended draft water efficiency standard for cities to adopt. This standard primarily impacts front and side yard water efficiency measures in new home construction projects. Localscapes, the practice of using highly water efficient and functional landscape designs comprised of native vegetation is the focus of the standard. Several cities including Herriman, South Jordan, Bluffdale, and Salt Lake City have already adopted this standard and in some cases word for word.

Eagle Mountain City staff reviewed the draft standard and found that while everything would indeed promote the ideal use of front yard and side yard spaces while maximizing water efficiency, there were some aspects that would be too burdensome to enforce, are unnecessarily specific or prohibitive, and also lacked some needed direction in other areas of concern. Consequently, Eagle Mountain City staff made several modifications to the draft standard and those modifications are seen in the draft code being shared with you.

Indoor Fixture Requirements: The standard requires water sense labelled plumbing fixtures in new homes. This requirement will result in no change for most builders as many are already installing Water Sense labelled fixtures.

Smart Irrigation Controller: All new homes will need to have a smart

irrigation controller installed. Again, most new homes are already being outfitted with these controllers already.

Prohibition of Non-Functional Turf: Similar to Las Vegas, NV, non-functional turf would be prohibited. Staff and City Council will need to expand on current efforts to reduce non-functional turf during plat and site plan reviews.

Grass in Park Strips and on Slopes: Grass would be prohibited in park strips and on slopes greater than 25%. Park strips would still be required to have some plants, trees, etc. Lawns are also to be free of obstructions. For example, trees should not be planted in the middle of a grass area due to that tree either leading to obstruction of irrigation or adapting with over-irrigation to compensate.

Limit of Grass in Front & Side Yards: Front and side yards would be limited to 35% of the total landscaped area. Properties that have back yards that are half the size of the combined square footage of the front and side yards or smaller would be permitted to have 50% of the front or side yards be lawn with the expectation that their front or side yards are providing activity areas that the back yard might not be able to.

Irrigation Design: Irrigation must be appropriate for the type of landscape, irrigation types will be on separate valves, and so forth. This is an element that city staff are working to expand our capability to monitor.

50% Plant Cover and use of Mulch: Per Localscape design principles, we are not aiming for zeroscape wherein residents would be simply converting to a sheet of gravel that could lead to weed management issues and potentially negative impacts on property values. 50% plant cover promotes the use of other mulches that, when properly installed, keep properties weed free and add a positive impact to the neighborhood.

Commercial and other Properties: Lawn space limited to 20% of the total landscaped area.

Eagle Mountain's draft code strips away much of the Localscapes requirements from the CUWCD provided standard. These requirements, while positive, would be overly burdensome to residents and limit their use and design of their landscapes too much. The draft code also modifies some of the standard to apply to the entire property when logical. Additionally, Eagle Mountain would be unique in Utah by prohibiting non-functional turf, and making exceptions for properties that are designed with smaller back yards.

City staff believes that this draft code would be an effective way to reduce the overall water demand from new residential properties over the next 40 years. Enforcement apparatuses are being explored and we hope to assist residents any way possible to ensure they are successful with conversions. We also anticipate builders being satisfied with a potential reduction in the water rights allocation per property. Given the current water use data of properties, and the reduced water use these standards would promote, we believe that we can reduce the water rights allocation per property from 0.9 acre/feet to 0.75 acre/feet, saving developers about \$2,700 per property. Those savings more than makeup the cost of installing landscapes that meet this standard instead of using turf grass throughout.

ATTACHMENTS:

[07122022_WaterEfficientLandscapeStandards](#)