



STAFF REPORT

Meeting Type: Board of Directors
Title: New Development Turf Limits
From: Paul Sellier, Director of Water Resources
Through: Ben Horenstein, General Manager
Meeting Date: August 6, 2024

BS *B*

TYPE OF ACTION: Action X Information Review and Refer

RECOMMENDATION: Receive staff presentation on limiting turf for newly constructed single family homes

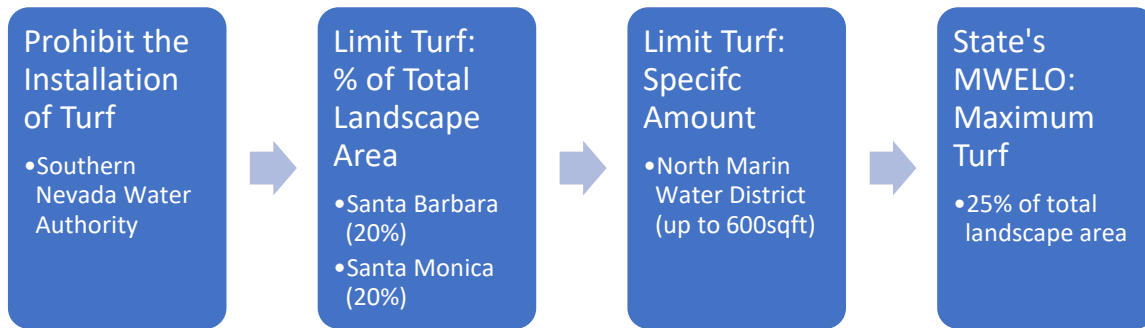
SUMMARY: Following extensive discussions on how best to improve the Graywater Ordinance while aligning with its original intent to minimize outdoor water use, Staff developed a proposed recommendation to limit turf installations for newly constructed single-family homes.

DISCUSSION: A Board Workshop was held on May 1, 2024 focused on the Water Efficiency Master Plan. The Master Plan contained proposed policy changes to the Graywater Ordinance that were discussed with the Board, which led to proposed policy revisions. Following the Workshop, at the May 15, 2024 Communications and Water Efficiency Committee meeting, staff presented an updated draft policy incorporating input provided at the Workshop. This presentation proposed repealing and replacing the Graywater Ordinance with a landscape requirement to install either: low water use landscaping or a graywater system. When available, use of recycled water is a District requirement, so it was removed from the options. Staff has continued to evaluate the draft policy to ensure that each option provided in the proposed policy would result in similar water savings to the existing requirements.

Recognizing the opportunity to build water efficiency into the landscape when it is first installed, on July 16, 2024, staff presented a further revised policy to take the place of the current Graywater Ordinance. The proposed policy is a limit on the amount of turf that may be installed with the construction of any new single family home, which will ensure new landscapes require less water than the current regulations allow. In order to understand better how turf limits in new single family development could be applied within the district, staff evaluated how other agencies address this issue and reviewed recent development applications submitted to the District to develop the recommended limits.

Review of Other Jurisdiction's Turf Limits

Staff reviewed various methodologies implemented by other agencies to limit turf installations in new construction. The range is as follows:



Some agencies also combine the turf limit as a percent and set a specific maximum amount of turf that can be installed. For example: Aurora, CO allows 45% of the yard's area or 500 sqft, whichever is smaller; and Washington County Water Conservancy District (Washington) allows 8% of any residential lot, or 2,500 sqft, whichever is less. Washington also allows lots less than 7,500 sqft to install up to 600 square feet of lawn. This option seems to work well when there is a significant range in lots size within the community.

Marin Water New Single-Family Connection Statistics

Staff reviewed new single family service connections for the past 2 years (2022 and 2023). There were approximately 15 new single-family connections each year with lot sizes ranging from 565 sqft – 20,773 sqft, with an average lot size of 7,145 sqft. To further understand the potential impact of a new turf limit, staff reviewed 16 plan details to determine the type of landscapes being installed. Only 25% of sites installed a high water use lawn (4 sites), the range in lawn size was 261 sqft – 628 sqft and the % of the landscape installed as lawn ranged from 7%- 10%. However 38% of sites reviewed installed artificial turf with overhead spray and another 25% installed a lawn alternative (no mow, native grasses, etc) also with overhead spray.

A summary of the 16 sample new single-family landscape site data is as follows:

	# Sites	Range (sqft)	Avg (sqft)	Range (%)	Avg (%)
High Water Use Turf	4	261 – 628	529	7% – 10%	11%
Moderate Water Use Turf/ Turf Alternative	4	1,430 – 6,156	2,791	13% – 55%	42%
Artificial Turf	6	300 – 3,820	1,781	6% - 33%	19%
No Turf	3	NA	NA	NA	NA

Note: One site installed artificial turf and a turf alternative

Of the five largest sites in the sample, 20,000 sqft-11,000 sqft total landscape area, two sites installed artificial turf with overhead spray, 3,800 sqft and 900 sqft, respectively, two sites installed native grasses with overhead spray, 1600 sqft and 4,000 sqft respectively and one site did not install any turf.

Overhead spray was installed in options normally associated with water savings options such as artificial turf and turf alternatives. Considering this sample data and the installation of overhead spray in areas of artificial turf and turf alternatives/moderate water use turf, staff developed a combination approach to limit turf areas to 10% of the total landscape area not to exceed 1,000 square feet for newly constructed single-family homes effective January 1, 2025. This new requirement would require lawn alternatives (no mow, native grasses, etc) and artificial turf to be subject to the limits, if overhead spray is installed with the project.

Water Savings

If the staff recommendation of limiting turf area to 10% of the total landscape area, not to exceed 1,000 sqft, and requiring compliance with the turf limits for moderate and artificial turf installations utilizing overhead spray were implemented, based on the sites reviewed water use would be reduced by ~67%. The table below shows where the savings would occur.

	Sample Sites (sqft)	Turf Limits (sqft)		Sample Sites Water Use (AF/yr)	Turf Limits Water Use (AF/yr)
High Water Use Turf	2,116	1,773		5	4
Moderate Water Use Turf / Turf Alternative	11,163	2,528		22	5
Artificial Turf	10,687	3,593		13	4
TOTAL WATER USE				40	13

Recommendation

Based on the range of landscape areas in recent landscape plan reviews, which is reflective of the range of sites within the district, staff recommends limiting turf area to 10% of the total landscape area, not to exceed 1,000 sqft, and requiring compliance with these turf limits for moderate/turf alternatives and artificial turf installations utilizing overhead spray. This new requirement would repeal and replace the Graywater Ordinance.

The current Graywater Ordinance provisions applicable to ‘significant remodels’ would also be repealed. Effective immediately, all rehabilitated landscapes that are subject to the District’s Landscape Plan Review Requirement must comply with the State standard of no more than 25% turf grass.

Based on direction from the Board, staff will prepare the necessary ordinance to implement these changes and will bring this to a future bi-monthly Board meeting for the Board to consider approval.

ENVIRONMENTAL REVIEW: Not Applicable.

FISCAL IMPACT: None.

ATTACHMENT(S): None.