

RAINWATER INCENTIVIZATION AND EDUCATION PLAN

CITY OF WOODCREEK - WATER TASK FORCE (2024)

Purpose:

Create a comprehensive plan to implement city-wide programs to educate residents and promote rainwater harvesting in the City of Woodcreek.

Summary:

Installation of Rainwater Collection on City of Woodcreek Facilities

The Woodcreek Water Task Force recommends that the City Council pursue the installation of rainwater collection on all existing city-owned structures and that The Triangle be used for an educational purpose with installation of a rainwater collection tank with infographic that explains the benefits and uses of rainwater collection. The infographic will also illustrate the formula for calculating rainwater collection

roof area (sq. ft.) X rainfall (inches) X 0.623 = rain collected (gallons).

This set up will help demonstrate practical applications and raise awareness about sustainable water practices.

Furthermore, the City should seek advantageous partnerships with local companies for the installation of such projects and commit no more than \$50,000 to said projects.

Current locations for considerations:

Site One: City Hall and adjacent shed to provide water for the Woodcreek Community Garden and other City Hall landscaping or plants.

Site Two: The gazebo at The Triangle for landscape watering and educational opportunity.

This installation was recommended in the original Cypress Creek Watershed Protection plan and aligns with valley-wide efforts to reduce our collective use of groundwater, specifically for non-potable uses.

Rain Water Harvesting at City Hall Installation and maintenance	Woodcreek	Decrease TSS, Improved Water Conservation	2	Installation \$30,000 Maintenance \$6,000/year	\$36,000
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Screenshot: Cypress Creek Watershed Protection Plan

<https://www.cypresscreekproject.net/watershed-committee#:~:text=What%20is%20the%20cypress%20creek%20watershed%20protection%20plan%3F,and%20other%20water%20quality%20pollutants.>

Rain Barrel Giveaway Program

The Woodcreek Water Task Force recommends that the City accept the offer of a partnership between the Hill Country Alliance and Aqua Texas for a residential rainwater barrel give-a-way program. The task force finds that barrels to “get residents started” should be in the “100-1,000 gallon “range and ideally no city funds should be utilized to purchase these barrels.

It is essential that this program has a heavy educational component to ensure residents understand that this collection is meant to serve existing landscaping or potted plant use and not to incentivize the creation of new water draws.

Benefits of residential small-scale residential rainwater collection:

- One inch of rain collected on a 1,000 square foot roof will produce at least 623 gallons (with proper 6in gutters)
Formula: ___ inches of rain X ___ sq ft of roof X ___ .623 gal/sq ft
- Reduces stormwater runoff
- Better for your plants and landscaping than treated city water
- Simple technology that is easy to maintain
- Solution to on-site drainage issues
- Is a visual cue for conservation efforts
- Reduces impervious coverage impact by capturing rainwater and slowing releasing rather than the sheet flow and run off that occurs during a typical rainfall.

Additionally, we recommend installation assistance or a follow-up program to ensure residents are successfully able to utilize the barrel. The focus should be on simple systems that do not require a complicated pump or filter set up.

Rainwater Collection System Installation Credit Back Program

The Woodcreek Water Task Force finds it relevant for the City of Woodcreek to offer an incentivization program mirror state and county efforts to encourage property owners to reduce reliance on groundwater as the state faces major water shortages across a significant portion of the groundwater management districts.

To start, a \$250 credit back with receipt submission and waiver of all permit and installation fees is recommended, and correspondingly Council should consider setting up a fund for this incentivization initiative.

City of Woodcreek Code Updates

The Water Task Force asks that Council consider amending code under Water Quality and Land Usage to incentivize and prioritize the conservation and protection of groundwater while simultaneously focusing on the reduction of reliance on groundwater for both potable and non-potable uses.

Summary of specific components to consider (more in-depth information provided in the “Recommendation to Council” document):

New building requirements for rainwater collection

An impervious coverage credit back

Waiving of permit, inspection and other city fees for subdivisions which require rainwater collection.

Removing lot-line restrictions for the placement of tanks

Require rainwater collection for pool installation (Rimrock example)

Conclusion:

As we remain in critical drought status, the Woodcreek Water Task Force finds it imperative the City Council take direct action to reduce reliance on groundwater on both city-owned and residential properties. It is strongly recommended that the City Council of Woodcreek implement all components of this Rainwater Plan and follow additional suggestions in the Recommendation to Council as drafted by this Task Force. It is in the best interests for the health and safety of all residents that the Woodcreek City Council work to conserve and protect our groundwater; thereby promoting rainwater collection as an alternative source of water to ensure the longevity of this community.

NOTE to STAFF:

Rainy Day Systems Tony Magaña GM 512-376-0097 (could be a good source for residential inspections) Tony@RainyDaySystems.com -