

City of San Marcos

Rainwater Harvesting System Guidelines

Notification requirements

A person who intends to connect a rainwater harvesting system to the City of San Marcos water system must provide written notification of that intention to the San Marcos Water Department. Notification may be provided via mail or email to the following address:

San Marcos Utilities Conservation Department
630 East Hopkins
San Marcos, TX 78666
jdelacruz3@sanmarcostx.gov

Licensing requirements

Any person who connects a rainwater harvesting system to the City potable water supply must be a master plumber or journeyman plumber licensed by the Texas State Board of Plumbing Examiners. If the rainwater harvesting system is to be used for potable purposes, the system must be installed and maintained by a master plumber or journeyman plumber licensed by the Texas State Board of Plumbing Examiners and who has been endorsed as a Water Supply Protection Specialist. A property owner is not required to be licensed if he or she is installing a rainwater harvesting system on premises owned and occupied by the person as the person's home, and if the rainwater harvesting system is not being connected to the potable water system or used for potable purposes.

Permit requirements

Permits are required if the rainwater harvesting system meets one or more of the following criteria:

- 1) If the system will be plumbed to receive makeup water from a potable water source, or will be plumbed into the irrigation system or household water system, or will use high-pressure gravity flow or a pump to distribute the rainwater, a plumbing permit is required.
- 2) If electrical components such as pumps are hard-wired into the electrical system, or additional circuits or wiring are added, an electric permit is required.

Adequate plans and specifications, as determined by the chief building official, must accompany each application for a permit. Additional permits may be required. To determine if additional permits are needed, please contact the Permit Center at 512-805-2630

Backflow protection requirements

Use of alternative water sources on premises connected to the City water system presents the potential for contamination of the potable water supply if backflow occurs. Use of alternative water sources (such as rainwater) on properties connected to the City potable water supply may require installation of a reduced pressure zone (RPZ) backflow assembly at the potable water meter. RPZ backflow assemblies must be tested upon installation and annually by a certified Backflow Protection Assembly Tester (BPAT), and the test results must be provided to the City of San Marcos backflow department within 10 working days.

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If the City potable water system will provide makeup supply to the rainwater system, it may be connected only to the rainwater storage tank and not to the plumbing of a structure. A backflow prevention assembly or an air gap must be installed at the rainwater storage tank to ensure a physical separation between the rainwater system and the public water system.

Premises with rainwater systems may be subject to inspection by City personnel for potential contamination and backflow hazards.

Construction, installation and maintenance standards

All rainwater harvesting systems shall be constructed, installed and maintained in accordance with state and federal laws, City of San Marcos building codes, and manufacturer specifications. Rainwater harvesting systems must be maintained as follows:

- 1) May not create a public health hazard or nuisance to the general public;
- 2) Must be maintained as needed to keep system functioning as designed;
- 3) Must prevent accumulation of unwholesome, stagnant or offensive water;
- 4) Must prevent the attraction and breeding of mosquitoes and other pests;
- 5) May not be used for storage of anything other than water or for any purpose other than its intended purpose as a rainwater harvesting system.

Storage tank standards

All tanks and barrels, regardless of size, must meet the following minimum tank standards:

- 1) Must be covered and vents screened to discourage mosquito breeding;
- 2) Must be opaque, either upon purchase or painted later, to prevent algae growth;
- 3) Must never have been used to store hazardous materials;
- 4) Must be accessible for cleaning and repair;
- 5) Access openings in excess of 12 inches in diameter must be secured to prevent unintended entry and tampering;
- 6) Must have an overflow discharge port that directs flow away from foundations and other structures;
- 7) Must be placed on a stable, level surface that is capable of holding the maximum possible weight when full;
- 8) Must be labeled "Rainwater – Do Not Drink" or "Nonpotable Water – Do Not Drink" or similar phrasing that clearly indicates the water is not suitable for human consumption.

Rebates and incentives

Section 151.355 of the Texas tax Code exempts rainwater harvesting equipment and supplies from state sales tax. To claim this exemption, the purchaser must furnish a Texas Sales and Use Tax Resale/Exemption Certification, Form 01-339, to the supplier of the equipment at the time of purchase. The form is available at <https://comptroller.texas.gov/taxes/sales/forms/index.php>.

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Hays County residents may be eligible to receive property tax exemptions for all or part of the assessed value of a property on which water conservation initiatives, such as rainwater systems, have been implemented. To claim this exemption the resident must submit the Water Conservation Initiative Application Form 50-270 to the Central Appraisal District. For more information, contact the Hays County Development Services Department at 512-393-2150.

The City of San Marcos offers rebates for purchase of rain barrels and rainwater harvesting systems. To qualify, you must be a City of San Marcos water customer. The rebate amount for rainwater harvesting systems is based on storage volume - \$0.50 per gallon for non-pressurized systems and \$1.00 per gallon for pressurized systems, not to exceed 50% of the system cost. For more information, visit the conservation website at www.sanmarcostx.gov/conserve or call 512-393-8310.

Exemption from drought rules

Use of alternative water sources such as rainwater may be exempt from City of San Marcos drought regulations. Properties on which rainwater systems are supplemented with or receive makeup water from the City potable water supply will be assumed to be using City potable water and will be subject to the drought rules. For more information on drought restrictions go to www.sanmarcostx.gov/drought.

Resources

San Marcos City Code Chapter 86, Article 9, Cross Connection Control and Backflow Prevention

San Marcos City Code Section 14.126, Landscape Irrigation Systems

San Marcos City Code Chapter 86, Article 2, Division 2, Conservation

Texas Administrative Code Section 290.44(j), Water Distribution

Texas Health and Safety Code, Section 341.02, Standards for Harvested Rainwater

Texas Property Code, Section 202.007, Certain Restrictive Covenants Prohibited

Texas Manual on Rainwater Harvesting

http://www.twdb.texas.gov/publications/brochures/conservation/doc/RainwaterHarvestingManual_3rdedition.pdf

Harvesting, Storing and Treating Rainwater for Domestic Indoor Use

http://rainwaterharvesting.tamu.edu/files/2011/05/gi-366_2021994.pdf

Texas Water Development Board Rainwater Harvesting FAQs

<http://www.twdb.texas.gov/innovativewater/rainwater/faq.asp>

Rainwater Harvesting Potential and Guidelines for Texas

<http://www.twdb.texas.gov/innovativewater/rainwater/doc/RainwaterCommitteeFinalReport.pdf>