

For More Information ...

Websites

Building and Plumbing Codes
rld@state.nm.us
(NM Regulation & Licensing Dept.)

Gray Water Use
www.nmenv.state.nm.us

www.watercasa.org

Rainwater Harvesting
www.twdb.state.tx.us

www.arcsa-usa.org

Water Conservation
www.ose.state.nm.us

www.owue.water.ca.gov

www.waterwiser.org

www.h2ouse.org

Water Quality
www.nmenv.state.nm.us

Water Rights
www.ose.state.nm.us

Phone Numbers

New Mexico Construction Industries Division
(505) 827-7030

New Mexico Environment Department

NMED Ground Water Quality Bureau (505) 827-2900
(for discharge of more than 2,000 gallons per day)

NMED Field Operations
(for discharge of less than 2,000 gallons per day)

District 1

Albuquerque (505) 841-9450
Farmington (505) 327-9851
Gallup (505) 722-4160
Grants (505) 287-8845
Los Lunas (505) 841-5280
Rio Rancho (505) 892-4483
Socorro (505) 835-1287

District 2

Santa Fe (505) 827-1840
Española (505) 753-7256
Las Vegas (505) 425-6764
Raton (505) 445-3621
Taos (505) 758-8808

District 3

Las Cruces (505) 524-6300
Alamogordo (505) 437-7115
Deming (505) 546-7559
Silver City (505) 388-1934

District 4

Roswell (505) 624-6046
Carlsbad (505) 885-9023
Clovis (505) 762-3728
Hobbs (505) 393-4302
Ruidoso (505) 258-3272
Tucumcari (505) 461-1671

New Mexico Office of the State Engineer

Santa Fe (505) 827-6120
Albuquerque (505) 764-3888
Roswell (505) 622-6521
Deming (505) 546-2851
Las Cruces (505) 524-6161
Aztec (505) 334-9481, ext. 261

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For more information or for additional copies of this brochure, contact:

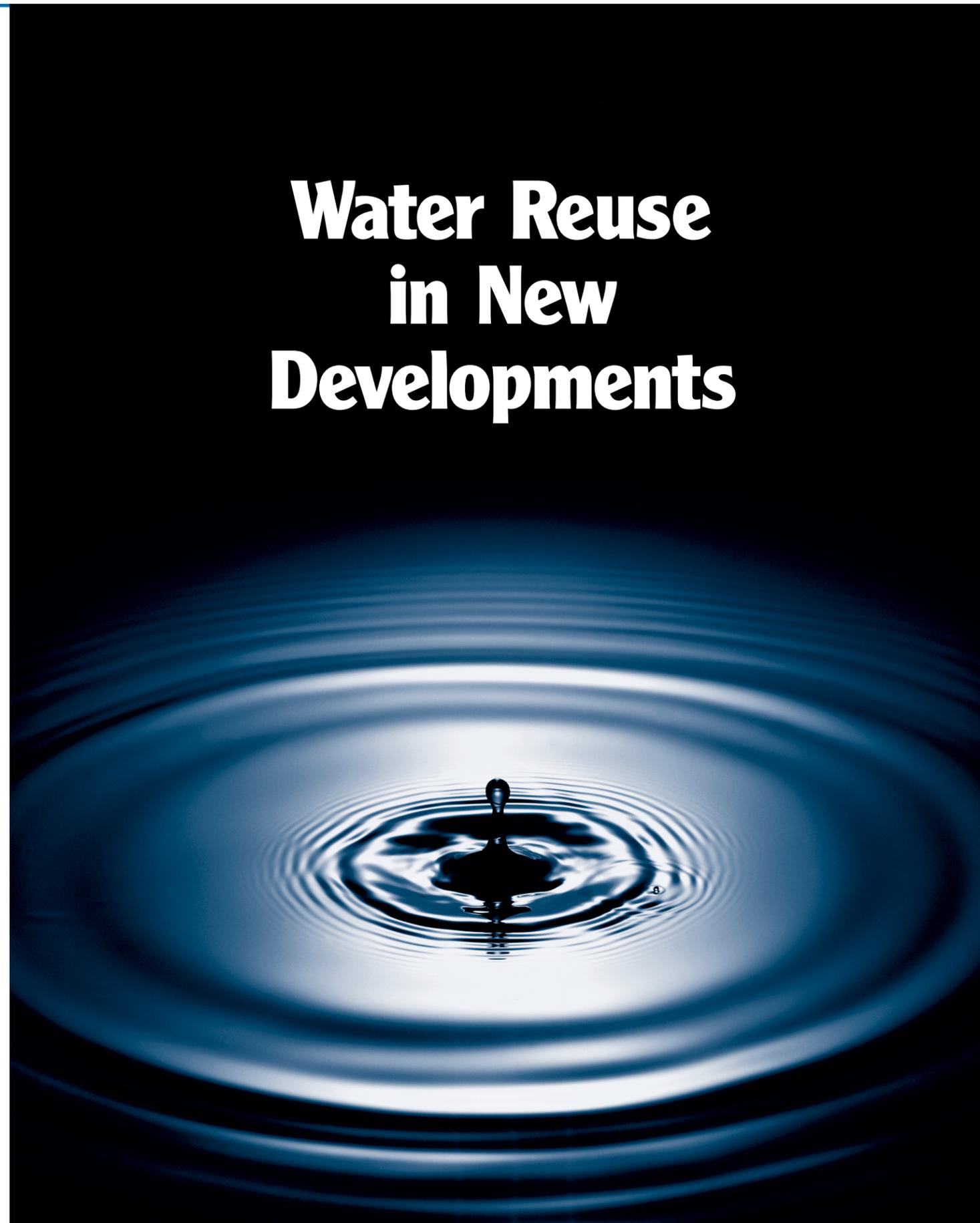
The New Mexico Office of the State Engineer

P.O. Box 25102 • Santa Fe, NM 87504-5102

1-800-WATER-NM; www.ose.state.nm.us



Water Reuse in New Developments



Introduction

This brochure provides information about the use of harvested rainwater and the reuse of wastewater to offset the use of potable water supplies in subdivisions and commercial developments. It is intended to provide basic regulatory requirements and contact information to builders, developers, local governmental officials, and others. However, the information in this brochure does not apply to single-family residences.

Alternate Water Sources

There are four sources of water that may be used to offset the use of potable water supplies:

- **Harvested Rainwater** – water collected from hard surfaces such as roofs, patios, and parking lots
- **Gray Water** – wastewater from bathtubs, showers, washbasins, or clothes washing machines
- **Black Water** – wastewater from toilets, urinals, kitchen sinks, dishwashers or laundry water from the washing of material soiled with human excreta, such as diapers
- **Reclaimed Water** – any type of water that has undergone tertiary treatment

Benefits of Harvested Rainwater & Reuse of Wastewater

There are many benefits to using non-potable water for specific jobs and functions.

Using harvested rainwater and reused wastewater:

- Provides an additional source of water for landscape

irrigation. If treated properly, harvested rainwater and reused wastewater are suitable for some indoor uses, such as toilet flushing, fire protection, and indoor plant irrigation.

- Reduces water demands on municipal water systems, which would otherwise need to provide potable water for these purposes.
- Benefits homeowners, business owners, and facility managers by reducing the amount of money they pay for municipally supplied potable water and by providing a secondary supply of water that is dependable and accessible even during most drought restrictions.
- Reduces water rights that need to be purchased. Because water reuse systems furnish water for certain needs that have traditionally been supplied by fresh water, developers who incorporate water reuse into their projects are able to purchase fewer water rights.
- Offers low-cost water alternatives. Depending upon the complexity of the water reuse system and the cost of potable water, the costs of reuse options can be paid back in a relatively short period of time.

Working With Regulatory Agencies

Depending upon the type of water used and location (indoors or outdoors), a project manager may need to obtain permits or approvals from certain state and local governmental agencies in order to reuse



water. Following is a list of the appropriate agencies and descriptions of the types of uses that they regulate.

New Mexico Environment Department (NMED) –

Regulates all uses of gray water and black water to ensure protection of public health and water quality. (*Use of harvested rainwater does not require NMED regulation.*) Different regulations will apply depending on the volume, measured in gallons per day (gpd), discharged to a single lot. The gray water guide and permit applications described below are posted on the NMED web page at www.nmenv.state.nm.us.

Less Than 250 gpd of Gray Water – A permit is not required to apply less than 250 gpd of private residential gray water for the resident's household gardening, composting or landscape irrigation, as long as the gray water is applied in accordance with certain requirements outlined in the *NMED Gray Water Irrigation Guide*.

Greater Than 250 gpd of Gray Water, But Less Than 2,000 gpd of Total Combined Gray Water and Black Water – A Liquid Waste Permit issued by the NMED Field Operations Division is required if more than 250 gpd of gray water will be applied and the combined volume of gray water and black

water discharged to a single lot is less than 2,000 gpd. Permits may be obtained from the nearest NMED field office, which are listed elsewhere in this brochure.

Greater Than 250 gpd of Gray Water, AND More Than 2,000 gpd of Total Combined Gray Water and Black Water – A Discharge Permit issued by the NMED Ground Water Quality Bureau is required if more than 250 gpd of gray water will be applied and the combined volume of gray water and black water discharged is more than 2,000 gpd. Submit a *Notice of Intent to Discharge* to the NMED Ground Water Quality Bureau describing the proposed project. If NMED determines that a Discharge Permit is required, an *Application for Discharge Permit* must be completed and submitted.

New Mexico Construction Industries Division (NMCID) –

The Uniform Plumbing Code, as promulgated by the New Mexico Construction Industries Division or the local building jurisdiction, provides for two specific types of water reuse.

Appendix G: Gray Water Systems for Single Family Dwellings

- No special approval from NMCID is required for gray water systems. They are installed using the standard plumbing and mechanical permits. They must conform to the provisions of Appendix G. Gray water is for use outside the building; indoor use is prohibited unless the water is reclaimed according to Appendix J.



Appendix J: Reclaimed Water Systems for Non-Residential Buildings

- Reclaimed water is wastewater from a building that has undergone tertiary treatment and is returned to the building for reuse. Reclaimed water may be used in the building only for the flushing of toilets, urinals, and trap primers. Other indoor uses of reclaimed water would require a variance.
- Reclaimed water systems are intended for use only in non-residential applications due to the need for water treatment. Reclaimed water is not approved for use in individual residences. However, housing developments that want to build water treatment plants for water reuse can apply for a code variance. Variances would be considered on a case-by-case basis under the provisions for alternate materials and methods.

New Mexico Office of the State Engineer (NMOSE) –

If the proposal involves a project for which a water right will be issued by the New Mexico Office of the State Engineer (NMOSE), the project manager should meet with NMOSE to discuss whether the water reuse project would affect the water right.

City & County Agencies –

Reuse proposals must be presented to local governmental agencies to ensure compliance with local zoning ordinances.

Requirements for Use of Harvested Rainwater

- For indoor use, harvested rainwater shall meet the standards of reclaimed water required by the New Mexico Construction Industries Division and will require a variance from

Appendix J if used for residential application.

- There are currently no state government requirements for outdoor use; however, local ordinances might apply.
- Developers should check with the New Mexico Office of the State Engineer for any new requirements regarding rainwater harvesting, as that agency is in the process of developing a rainwater harvesting policy.

Requirements for Use of Gray Water

- For indoor use: gray water shall meet the standards of reclaimed water required by the NMCID and will require a variance from Appendix J for residential application; a Liquid Waste Permit or Discharge Permit is required by NMED.
- For outdoor use: gray water discharges less than 250 gpd to a single lot and in conformance with the *NMED Gray Water Guide* do not require a permit from NMED. A Liquid Waste Permit or Discharge Permit is required by NMED for discharges of gray water that are more than 250 gpd.

Requirements for Use of Black Water

- For indoor use: black water shall meet the standards of reclaimed water required by the NMCID and will require a variance from Appendix J for residential application. A Liquid Waste Permit or Discharge Permit is required by NMED.
- For outdoor use: a Liquid Waste Permit or Discharge Permit is required by NMED for all black water discharges.