

June 3rd : Water Conservation in the Yard

Water Cycle with *Kevin Hobbs*, *NM Bureau of Geology & Mineral Resources*

Irrigation & Water Harvesting Methods with *Kevin Lombard, Lynda Garvin & Sara Moran, NMSU CES*



**Water Conservation: Home, Yard,
Farm & Ranch**

Low-Pressure Drip Irrigation for Small Plots and Urban Landscapes

RR-773

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Authors: Respectively, College Professor (contact: NMSU Agricultural Science Center at Farmington, P.O. Box 1018, Farmington, NM 87499; phone: 505-960-7757; fax: 505-960-5246; dsmeal@nmsu.edu); Assistant Professor; Research Specialist; Professor; and College Professor, all of the Agricultural Science Center at Farmington, New Mexico State University. (Print Friendly PDF)

Water purveyors in the western U.S. are developing many new water conservation programs that include incentives to help conserve water. Many cities in New Mexico (NM) have implemented inclining block water rate structures in which the price of water increases as usage increases. Other measures taken to help curb outdoor domestic water use include water audits, rebates for removal of turfgrass, and building codes (San Antonio, TX) that require rainwater catchment systems. In response to these water conservation programs, low-pressure drip irrigation is becoming popular for irrigating small farm plots, vegetable gardens, and urban landscapes. This publication applies small volumes of water and can operate under low pressure. It can be used to irrigate plants by gravity from elevated rainwater catchment systems. This publication was developed while conducting low-pressure drip irrigation research at the Agricultural Science Center at Farmington (ASCF).

Each foot of elevation change is equal to 0.433 PSI of water pressure.

Drip Irrigation Components

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Pipes and emitters

Drip Irrigation

- Advantages

- Water deliver directly to plants
- Less weeds
- Can fertilize directly into water
- Can automate

- Disadvantages

- Can be expensive
- Must filter water
- Must have a backflow preventer on domestic water
- Plastics (where does it all go?)
- Learning curve/can be more complex

Outflow after filter
to fields



Large Filter



Small Filter



Main Intake



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Specialty Crops Under Drip Irrigation





Sand Media Filters





- ## Sand media filter
- Clean silica sand
 - Good for large systems
 - Automated backflush systems to clean filters
 - \$\$\$

Automated backflush system



ure.

Screen type filter

- Filters by screening out debris
- Must clean frequently
- Screen mesh size matters
- \$



Screen-type filter



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MADE IN THE U.S.A.

MANTIS
MANTIS
MANTIS

WARNING
READ THE INSTRUCTIONS CAREFULLY BEFORE USING THIS MOWER.
PROPER OPERATION OF THE MOWER REQUIRES PROPER
CUTTING AND PROPER MAINTENANCE OF THE CUTTING DECK.
CLEAN THE MOWER AND MAKE A SAFE, PROTECTIVE
INSTRUCTIONS FOR THE USER AND OWNER OF THE MOWER.

Mesh filter

Disc filter

- \$\$



Drip irrigation indicating use of recycled water







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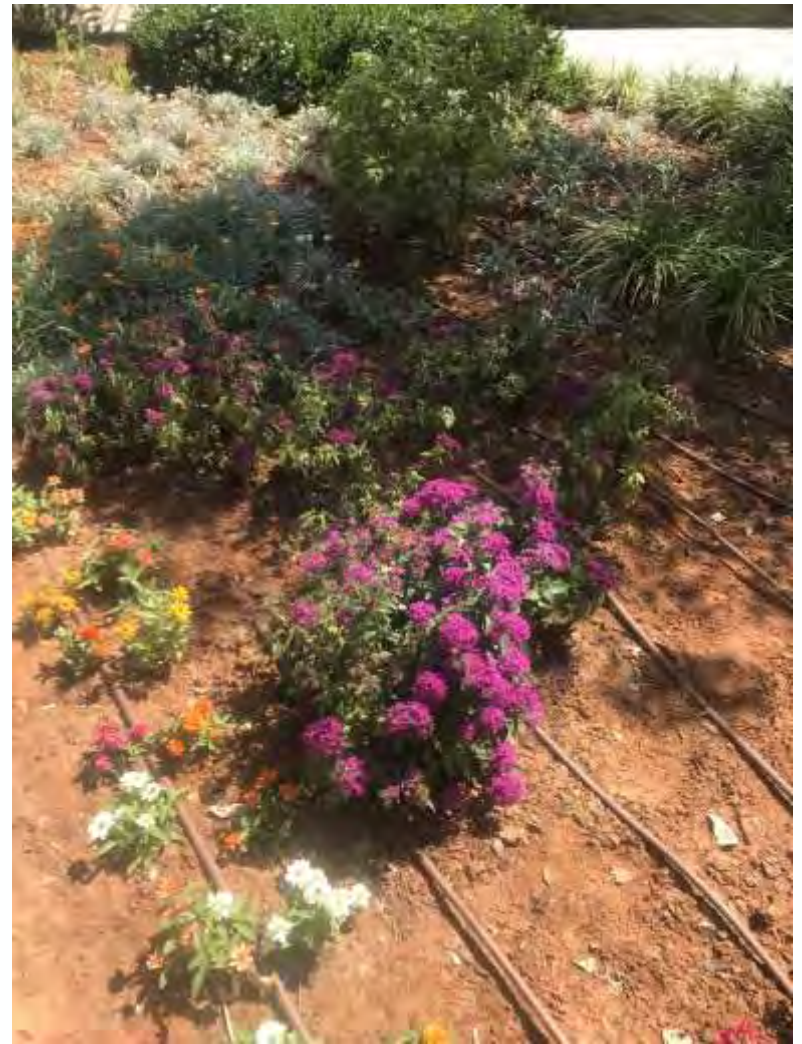
Rain water
harvesting/drip
irrigation/drought
tolerant trees



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Specialty Crops Under Drip Irrigation: Convert to drip EQIP (USDA/NRCS)



Specialty Crops Under Drip Irrigation: Convert to drip EQIP



Hops under drip

A photograph of a hop farm. The image shows several long, straight rows of hop plants. Each plant is supported by a vertical trellis system, with the hop cones and leaves hanging down. The plants are lush green and appear to be in full growth. A dirt path runs through the center of the rows, leading towards the horizon. The sky is clear and blue. The overall scene is well-maintained and organized.

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YouTube: Xericenter

<https://www.youtube.com/user/xericenter>

The image shows a screenshot of the YouTube channel page for 'xericenter'. The channel has 845 subscribers. The main banner features a close-up of purple flowers. Below the banner, the channel name 'xericenter' and subscriber count are displayed. A red 'SUBSCRIBE' button is visible. The navigation menu includes HOME, VIDEOS, PLAYLISTS, CHANNELS, DISCUSSION, and ABOUT. The 'Uploads' section shows a row of six video thumbnails with titles and view counts. The 'Created playlists' section shows two playlist thumbnails.

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xericenter
845 subscribers

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Darr's Picks for the Low & Medium Irrigation Zones...
7:02
7.1K views · 10 years ago

No-irrigation Zone, NMSU ASC Farmington Xeric...
9:29
2.2K views · 10 years ago

Introduction to the Xeric Plant Demonstration...
3:18
768 views · 10 years ago

High-irrigation Zone, NMSU ASC Farmington Xeric...
7:42
167 views · 10 years ago

How to Set Up Your Drip Irrigation Systems, NMSU...
5:19
796 views · 10 years ago

How to Use Evergreens in Your Garden, El Paso...
4:24
3.2K views · 10 years ago

Created playlists

Southwest 1

5

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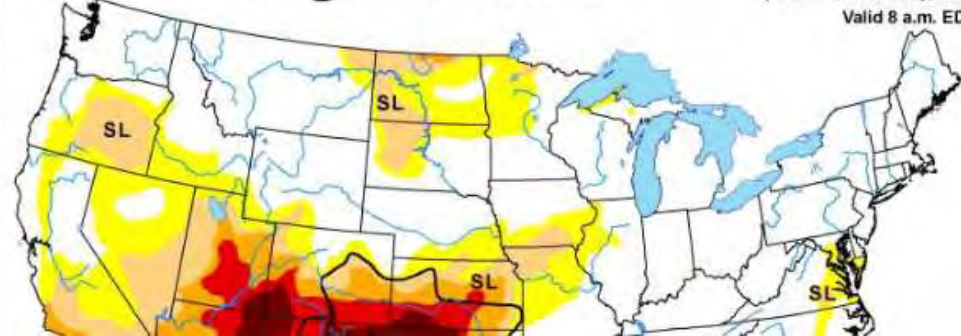


U.S. Drought Monitor

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**NEXT WEEK: JUNE 10th: Water-wise
Vegetables and Soil Health**

Soil Health *with Casey Holland, Chispas
Farms*

Water-wise Veggies with Stephanie Walker,
NMSU CES



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