



Micro-irrigation Systems

What is Micro-irrigation?

Micro-irrigation is a trickle irrigation system in which all necessary components have been installed for efficient application of irrigation water directly to the root zone of plants by means of emitters, orifices or porous tubing.

What are the benefits of this practice?

This best management practice (BMP) efficiently and uniformly applies irrigation water and maintains soil moisture for optimum plant growth. It can be used to apply chemicals directly to the plant root zone.



Where can this practice be applied?

- On sites where a Micro-irrigation System has been determined to be the most desirable method of irrigation and where the soils and topography are suitable for irrigation and proposed plants
- On orchard and row crops, windbreaks, greenhouse crops and residential and commercial landscape systems
- On steep slopes where other methods would cause excessive erosion or on areas where other application devices interfere with cultural operations



Agriculture in the Arroyo Colorado Watershed

The Arroyo Colorado Watershed is 706 square miles and runs from McAllen to the Lower Laguna Madre. The water body is impaired for dissolved oxygen, bacteria and legacy pollutants. In 2007, local stakeholders developed and published *A Watershed Protection Plan for the Arroyo Colorado Phase I* that identifies strategies to address water quality issues. The plan is currently being implemented throughout the watershed.

Agricultural production comprises almost half of the land within the Arroyo Colorado Watershed. A goal of the watershed protection plan is to have best management practices implemented on half of the irrigated agricultural lands by 2015. Runoff from these agricultural lands carries nutrients and sediments, which contribute to the above impairments in the Arroyo Colorado.

Be a part of conserving this precious natural resource by adopting a BMP and lessen the impacts of agriculture on water quality.

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What can you do and who should you contact?

The Texas State Soil and Water Conservation Board (TSSWCB) and the USDA Natural Resources Conservation Service (NRCS) have multiple programs that offer technical and financial assistance to agricultural producers to implement BMPs on their farm.

Environmental Quality Incentives Program (EQIP), offered by NRCS, is an annual program with specific time frames and registration periods.

TSSWCB offers assistance through its Water Quality Management Plan (WQMP) Program. A WQMP is a voluntary site-specific plan developed by local Soil and Water Conservation Districts for producers that includes land and production practices as well as management measures. Both WQMPs and EQIP are designed to reduce nonpoint source pollution and provide cost share assistance.

If you have questions, you may also contact the Texas AgriLife Extension Service agent for your county.

Contacts

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