

# Surface and Subsurface Irrigation



## What is surface and subsurface irrigation?

This best management practice (BMP) is a system in which all necessary water control structures have been installed for the efficient distribution of water by surface means, such as furrows, borders, contour levees, or contour ditches; or by subsurface means.

## What are the benefits of this practice?

- Efficiently conveys and distributes irrigation water to the surface point of application without causing excessive water loss, erosion or water quality impairment
- Applies chemicals and/or nutrients as part of an irrigation system

## Where can this practice be applied?

- During the planning and design of an irrigation water distribution system or a chemical and/or nutrient application system
- To areas that are suitable for irrigation with water of suitable quality for the purpose intended
- To areas where water supplies are sufficient in quantity and quality to make irrigation practical for the crops to be grown and the application methods to be used



## 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

#### Serving Hidalgo County, Texas

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#### Serving all counties

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