Water Quality Best Management Practices Series



Conservation Crop Rotation

What is Conservation Crop Rotation?

Conservation Crop Rotation is a best management practice (BMP) where various crops are grown on the same piece of land in a planned sequence. The sequence may involve growing high residue-producing crops such as corn or wheat in rotation with low residue-producing crops such as vegetables or soybeans. The rotation can also involve growing forage crops in rotation with various field crops.

What are the benefits of this practice?

- · Reduces sheet and rill erosion and soil erosion from wind
- Maintains or improves soil organic matter content, soil tilth and soil condition
- Manages the balance of plant nutrients
- · Improves water-use efficiency
- Manages saline seeps
- Manages plant pests (weeds, insects and diseases)
- Provides food and cover for wildlife and food for domestic livestock



Where can this practice be applied?

This BMP can be applied to facilitate renovation or re-establishment of perennial vegetation, not to range and pasture land, or other land uses where crops are grown occasionally.



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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Natural Resources Conservation Service
Rural Development
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