

## **What to Do about the Mississippi Delta?**

In 1985, the Mississippi Legislature passed a progressive state water law, recognized as a model statute for eastern states that allocate water based on regulated riparian rights. Although the legislation has served the state of Mississippi well over the past 25 years, implementation of some of the more stringent water management provisions allowed under the statute has been limited. However, with the recognition of notable water level declines in some areas of the state, it appears a more robust management approach may be necessary to ensure the sustainability of regional water resources.

The Mississippi Delta, the principal agricultural area of the state, is dependent on its water resources to irrigate crops and grow channel catfish. Over 55% of the total volume of water used in Mississippi is pumped in the Delta region, most of which is withdrawn from the approximately 15,000 large-capacity wells using the Mississippi River Valley alluvial aquifer (MRVA). The cumulative effect of this pumping over the past 20 years has led to significant localized water level declines in the alluvial aquifer that are of a growing concern.

Discussions are being held between the Mississippi Department of Environmental Quality and the Delta's Yazoo Mississippi Joint Water Management District with the goal of adopting new management approaches that will result in achieving a sustainable yield for the MRVA. The implementation of water conservation practices on irrigated acreage holds some promise to reduce the volume of water being pumped, if additional funding sources can be identified. Also, under consideration are significant changes in the issuance of withdrawal permits for irrigation and fish culture as well as the metering of wells. The designation of water use warning and/or water use caution areas, allowed under state law, may be explored in the future should an even stronger management approach prove necessary.

Presenter and author:

Jamie Crawford

[jamie\\_crawford@deq.state.ms.us](mailto:jamie_crawford@deq.state.ms.us)

MS DEQ -- Office of Land and Water Resources