

IMPACT OF THE GROUNDWATER MANAGEMENT ACT  
ON ARIZONA GROWERS

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Summary

The greatest impact of the Groundwater Management Act will be felt in the Active Management Areas of Maricopa and Pinal Counties. Even there, however, the new law probably won't have much early, significant effect on efficient irrigators who have been measuring and managing water carefully. Cost of pumping is likely to be a more important consideration. In the long run, both the law and costs will be important.

Areas. There are three categories of areas in the State -- Undesignated, Irrigation Non-Expansion Areas, and Active Management Areas. Those who pump groundwater in undesignated areas need only comply with the Well Registration and Notice of Intention To Drill. They are allowed to withdraw and use water for reasonable and beneficial use. Well registration applies to all areas.

Irrigation Non-Expansion Areas. Growers in Irrigation Non-Expansion Areas must also install water measuring devices and report annual pumpage to the Department of Water Resources. The two Initial Irrigation Non-Expansion Areas are the former Douglas Basin and Joseph City Critical Groundwater Areas. Irrigation of new land was already prohibited in these areas; an additional feature of the law, however, is that no more acres can be irrigated in any one year than the maximum number irrigated in any one year between 1975 and 1980.

Active Management Areas. There are four initial Active Management Areas -- Phoenix, Tucson, Pinal, and Prescott. Boundaries of the AMA's are shown on maps available from the Department of Water Resources. Most of the provisions of the law are concerned with the Active Management Areas.

Grandfathered Rights. One of the first concerns of water users in Active Management Areas will be to establish Grandfathered Rights for land irrigated sometime between 1975 and 1980. The Department of Water Resources will mail the necessary information to all land owners of record.

Water Duty. In Active Management Areas, acre-feet per acre will be limited by the Water Duty which will be established by the Department of Water Resources with the involvement of the water user. The law prescribes 10-year management periods with progressive interpretations of water duty. For the first period, extending until 1990, *"The irrigation water duty shall be calculated as the quantity of water reasonably required to irrigate crops historically grown in a farm unit and shall assume conservation methods being used in the state which would be reasonable for the farm unit including lined ditches, pump-back systems, land leveling, and efficient application practices but not including a change from flood to drip irrigation or sprinkler irrigation."* This, of course, does not preclude the use of these methods.

Water Measurement. Some growers regard the water measurement requirement for Active Management Areas and Irrigation Non-Expansion Areas as a major problem. It is true that there will be some difficulties; water measurement devices will have to be selected for the particular site conditions, purchased, installed, and maintained. This need not be a major expense or effort in relation to other farm operations and expenses.

In the Active Management Areas, accurate water measurement is very important to growers because it is the means for determining the amount of water pumped in relation to the water duty. Also, water measurement can be a very important aid to irrigation water management and maintenance of pumping plant efficiency.

Economics of Pumping. Many cost-conscious growers have already adopted conservation practices specified for the first management period. They have done so because of the high cost of pumping. It may well be that future pumping costs will limit the amount of water applied more than the legal requirements of water duty.