



## Where Farming Stops, Problems Keep Growing

Thousands of acres once in irrigated farms have lain idle for years in several parts of Arizona.

The cost of farming most of these fields has outstripped the value of the crops they once produced. Other fields have been sold for their water rights, then left dry. Thousands more acres now being farmed will be taken out of production in coming years, says a new report by the University of Arizona College of Agriculture.

Dust and weeds blow from the land onto neighbors' farms. The dust sometimes blinds motorists on nearby highways or causes illness. The families that used to farm the idled acres must find new ways or new places to make a living. Loss of their farm income weakens local economies.

About 200,000 to 230,000 acres of farmland have been retired since the late 1960s in Pinal, Cochise, Maricopa and Pima counties, says the new report on retired farmland. That estimate does not include the large amount of farmland that has been urbanized, or land idled just for 1983's federal crop-cutback programs.

Photograph: Tumbleweed takes over an unused ditch and field. (Photo by Ted Bundy.)

By the year 2020, the total will reach about 340,000 acres as additional farmland is retired due to high production costs, purchase of land for water rights, and the effects of the 1980 Arizona Groundwater Management Act, the report predicts.

"Of course, water not used for farming these lands will be conserved for other purposes, but the negative effects of land retirement are real," said the report's co-author, Frank Gregg. He is director of the UA School of Renewable Natural Resources and former head of the U.S. Bureau of Land Management. Research assistants Joan M. Meitl and Pamela L. Hathaway co-authored the study.

### **Arizona Problem**

"If this rate of farmland retirement were occurring nationally, Congress would be bristling with bills to help ease the resulting problems," Gregg said. "But the problem is most acute in Arizona, and no special help from the federal government seems likely."

The authors' estimate for farmland already idle, based on reports from county agricultural agents and other sources, is as much land as a strip about three miles wide from Phoenix to Tucson. Farmers still harvest five to six times that much crop acreage in Arizona, counting acres that yield two crops a year as two acres.

The report considers several possible uses for the idled land, such as tree farming, grazing, wildlife habitat, fish farming and alternative crops. It concludes that some of the alternatives will be practical for specific tracts of land, but that, in most areas with retired farmland, the alternatives are not economical for large acreage.

For example, Gregg said, "In Cochise County, with higher elevation and more rainfall than other agricultural areas, investments in range reseeding may prove attractive if you can get federal cost-sharing help to bear some of the initial costs."

Economics will limit landowners' incentive to try alternative uses that would control problems of dust, erosion and weeds, the report says. It recommends that local Natural Resource Conservation Districts, strengthened by new laws, take the lead in managing problems created by farmland retirement.

Much of the idle land is in small parcels, says the report. Pinal County has about 120,000 acres of it near Casa Grande and Eloy and scattered in the western part of the county. Some acres that were abandoned 30 years ago still lack the plant growth of the nearby desert. Most of the 40,000 to 80,000 acres retired from farming in Cochise County are in the Kansas Settlement, Bowie and San Simon areas. Much of this has been idle less than five years. Maricopa County has about 20,000 acres of idled farmland unlikely to be urbanized. It is concentrated in Rainbow and Harquahala valleys. Pima County's share, about 17,000 acres, includes 13,000 purchased by the City of Tucson for water rights. Most of the county's retired farmland is in Avra Valley or near Green Valley.

### **Cost Sharing**

"The private market isn't going to solve the problem, even with the government cost-sharing programs that are available now," said Gregg. People who quit farming because they are going broke have neither the

means nor the incentive to invest in controlling erosion or weeds, he explained.

For example, the U.S. Agricultural Stabilization and Conservation Service designated \$160,000 for cost-sharing to grow cover crops on idle land that causes dust problems for Interstate 10 traffic near Casa Grande. Not one owner of land along the highway chose to participate, an A.S.C.S. administrator told a symposium that was part of the retired farmland study.

In a recent seven-year period, 23 dust-related traffic accidents involving 88 vehicles and several deaths occurred in the Casa Grande-Eloy area, mostly on I-10. Dust from idle farmland also aggravates asthma, bronchitis and emphysema, and can carry spores of valley fever fungus.

Weeds are costly, too. Tucson spends about \$90,000 annually to manage the city's Avra Valley farmland, with tumbleweed control as the primary expense, says the report. At a meeting about forming a weed control district around Willcox, Cochise County farmer Wayne Peterson said, "Our land values are already lower because of the tumbleweeds all over, so the cost of being in a district is not really a big factor." Other farmers there described fields where the first 30 crop rows were not harvested because of blown-in weeds.

Gregg said, "It's clear that if the state does not want to see this retired farmland subject to erosion and weed production, then the state is going to have to intervene very substantially, and frankly I find that hard to foresee, given all the other financial burdens the state faces."

Instead, the report recommends that the Natural Resource Conservation Districts already operating throughout the state be strengthened to manage land that owners have given up on. The boards "are administered by local councils and have ready access to all relevant federal and state agencies," says the report. On behalf of the community, the districts might be able to participate in cost-sharing with federal agencies to reduce the nuisances created by idle land. They might, for example, pay costs of establishing a lasting cover crop on land being retired while the irrigation system still works.

"Local people through local institutions, with the right kind of enabling legislation and some financial help from federal or state sources, will be able to handle the worst problems where they occur," said Gregg.

Separate from the public nuisance problem of retired farmland is the loss of potential productivity from the land. In some cases these factors overlap, such as where a cover crop of range grass that reduces dust and weeds is also managed for livestock grazing.

The UA report recommends that legal issues about use of collected runoff water and policies about private fees for hunting be resolved to make those uses more practical for some land. It also suggests studies of plant species suitable for stabilizing land while providing firewood. Few fields, though, will ever be as productive as when they were farmed.