

The following is a summary information taken from existing documents and telephone conversations regarding cost associated with creating new agricultural land as a mitigation measure for agricultural lands taken out of production as part of the CALFED Program.

The majority of the agricultural lands that would be taken out of agricultural use would be located in the Delta area and would be primarily converted to wetlands or habitat as part of the Ecosystem Restoration Program. The existing land within the Delta is already allocated to uses such as agriculture, recreation, urban, or is held by federal, state or local governments. A CALFED GIS layer shows the current land distribution within the Delta. There is no "raw" or vacant land within the Delta that could be purchased and converted to agricultural uses. In fact the trend is for agricultural lands to be converted to either urban uses or for ecosystem restoration. The 1994 and 1996 Farmland Conversion Reports provide information regarding the amount of agricultural land being converted to other uses. The latest information that will be part of the 1998 Report is currently available on the California Conservation Department's website. Because there is no "raw" land available, any land converted to agriculture would have to occur outside of the Delta, primarily in either the Sacramento and San Joaquin valleys. It would not be possible to acquire lands of the same quality as located in the delta, as available land would consist mainly of poorer quality soils and tend to be located along the edges of the valleys or in the foothills areas. Prime farmland is already under cultivation. Essentially, it would not be possible to grow the same crops that are currently being grown in the Delta or achieve the same production on an acre for acre basis.

A literature search was conducted by Jim Rich of DWR and he noted that, "It was frustrating to see how few of the articles contained specific cost information." Jim Plumb and Jim Crean of the USDA State Farm Services and Helen Flach of USDA-NRCS all said that they had no existing information regarding developing agricultural land from "raw" land. These individuals mentioned that they felt there was no land available within the Delta for conversion to agricultural purposes. They noted the following items that they felt would make this approach unfeasible on any kind of a large scale and cost prohibitive at a small scale. They also felt that if this approach were viable, that individuals would currently be developing new agriculture land and that is not happening.

Land prices run between \$1200 - \$2500 for acres already in some type of agricultural use or that can be readily put back into agricultural use if currently idle. Non-agricultural land located in areas that are not affected by urban expansion are running between \$300 - \$500 per acre.

If surface water needed to be provided to a site, the cost of building the infrastructure for delivery would be prohibitive, especially if it was necessary to access smaller, individual areas versus one large system that provided for a continuous land in one general area. There were no figures available for a per acre average cost if a water project were to be built.

Wells can be drilled at an average cost of \$2000, but then pumps and delivery systems would also be required with annual electric and maintenance costs. In addition systems would have to be put in place on the cultivated acres for irrigation purposes. Irrigation system set up can run from \$400 - \$750 per acre.

If a surface water system were to be built, there is no excess water available. Water would have to be purchased on the open market through the water transfer process. Cost per acre foot run from a low of \$140 to well over \$1000, with an average being in the high 200's to mid 400's.

Marginal farmland generally is being converted to vineyards or orchards, not row or vegetable type crops.

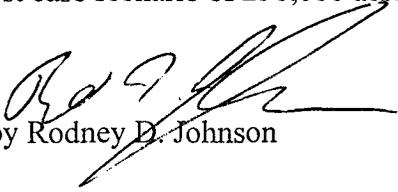
It is noted that in most cases marginal land would require fertilizer supplement in order to sustain crop growth. This would be an annual cost.

Environmental rules currently prohibit the ability of many sites to be converted to productive farmland.

Drainage could be a significant problem on many sites.

The University of California Cooperative Extension contained some base costs, but most did not include the costs of the land purchase, any costs for surface water, etc. These per acre costs ranged from a low of \$321 for establishing an alfalfa farm, \$832 for a tomato farm, \$3,635 for an almond orchard and \$8,539 for a lemon orchard.

By adding in the land purchase price, cost for water and delivery systems, etc; an average cost of \$3000 per acre would still not produce agricultural land that would provide the same outputs as the prime farm land in the Delta. Using a base cost of \$3000 per acre with a worst case scenario of 250,000 acres would result in a cost of \$750 million dollars.


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