

This revised analysis replaces the analysis dated 10-24-95.



**House
Legislative
Analysis
Section**

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CRANBERRY FARM EXEMPTION

House Bill 4966 as introduced
Revised First Analysis (11-1-95)

Sponsor: Rep. Carl Gnodtke
Committee: Conservation, Environment
and Great Lakes

THE APPARENT PROBLEM:

The cranberry fruit is native to the acid bogs of the northeastern U.S. and southern Canada, where the plants root in the bogs' surface layers. Cultivated cranberries thrive best on swamp land of muck or peat where a layer of sandy soil has been laid over the organic layer. The layer of sandy soil provides drainage so that the plants do not perish due to root rot. Cranberry growing also requires a reliable supply of fresh water. Indeed, it is said that the cranberry grower makes more extensive use of water as a management tool than any other producer of agricultural crops. Fresh water has to be supplied three or four times per week by supplemental irrigation, since cranberries have a very shallow root system. The beds are flooded before harvesting so that the berries come off the vine, float on the water, and are scooped up into trucks. The beds also are flooded in November or December, and the water allowed to freeze, since, according to horticulturalists, the perennial plants need a protective layer of ice during winter months as shelter from the wind, sun, and cold. Cranberry beds also require an additional layer of sand every three to four years to encourage rooting and to reduce disease problems by covering old plant material.

Michigan's wetlands provide a natural setting for cranberry production. In fact, a prosperous commercial cranberry industry flourished in southwest Michigan from the mid-1800s until the 1920s, when economic conditions and an increase in production in Massachusetts and Wisconsin caused it to decline. Agricultural interests would like to see a return of cranberry farming to Michigan. In the past few years, the Wetland Protection Program, within the Department of Natural Resources (DNR) (now part of the Department of Environmental Quality [DEQ]), has received two permit applications to establish cranberry beds on wetlands. One application was approved. The other, an application for a permit to produce cranberries on a wetland that had formerly been mined for peat, was denied on the grounds that the proposed construction would permanently alter the wetland and that it would adversely impact adjacent state-owned

wetlands. The DNR's denial was appealed by the cranberry company, Huggett Sod Farm, Incorporated. The Circuit Court for the County of Cheboygan found in favor of the cranberry company, and issued an opinion concluding, in part, that the cranberry company's proposed establishment of cranberry beds is an exempt activity, similar to the cultivation of other crops, under the Wetland Protection part of the Natural Resources and Environmental Protection Act (formerly Public Act 203 of 1979, the Goemaere-Anderson Wetland Protection Act). Although the court opinion indicates that no permit is necessary for cranberry farming, it is suggested that language specifically excluding cranberry farming from wetland permit requirements be instituted in statute.

THE CONTENT OF THE BILL:

Certain activities, such as fishing, swimming, and farming, are currently excluded from the wetland permit requirements of the Natural Resources and Environmental Protection Act. House Bill 4966 would amend the act to extend the list of activities allowed without a permit to include the preparation of land for cranberry farming and the production and harvesting of cranberries.

MCL 324.30305

FISCAL IMPLICATIONS:

According to a preliminary analysis by the Department of Agriculture, the provisions of the bill would have a minimal impact on state funds. (9-11-95)

ARGUMENTS:

For:

The bill would provide important clarification of the existing agricultural exemption in Part 303 of the Natural Resources and Environmental Protection Act (formerly Public Act 203 of 1979, the Goemaere-

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Anderson Wetland Protection Act), which specifies that certain activities, including farming, are allowed in a wetland without a permit. And, as affirmed in a recent circuit court opinion (Huggett v. Michigan Department of Natural Resources), cranberries are an agricultural commodity. The cultivation, irrigation, and other activities necessary to establish cranberry beds are similar to the cultivation procedures for other crops. As is true for blueberries -- of which Michigan is one of the country's leading producers -- the three necessary elements for successful cranberry production are water, clean sand, and acid soils. All of these elements are abundant in Michigan. In addition, several fruit processing plants are already located in the state, as are the fruit crops necessary for juice blends.

Establishing a thriving cranberry industry would also provide significant economic benefits to Michigan. Since cranberry growing is a labor-intensive industry, more jobs would be created in rural areas. In fact, in support of the state's interest in establishing cranberry production, the Department of Commerce has, in the past, provided approximately \$500,000 in Research Excellence funds to Western Michigan University to develop and promote cranberry production. In addition, the Department of Agriculture has committed \$150,000 to support research on the subject at Michigan State University that would specifically address water quality concerns. Further, according to a report issued by a 1994 Conference on Efficient, Economical and Environmentally Sensitive Cranberry Production, the nutritional benefits of cranberries have gained recent recognition with the American public, due to an increasing emphasis on healthy foods and a shift from the public perception of cranberries as a seasonal food (the traditional cranberry sauce at Christmas and Thanksgiving) toward cranberry juice products. Consequently, according to the report, the demand for cranberries has outstripped the supply.

Response:

Dredging and excavation activities in U.S. waters, including wetlands, are regulated under Section 404 of the federal Clean Water Act (CWA), and in most states a permit must be obtained for all dredging and filling activities from the U.S. Army Corps of Engineers, which administers a permit program under the oversight of the Environmental Protection Agency (EPA). Michigan, however, is one of two states (the other is New Jersey) which has been given approval by the Environmental Protection Agency (EPA) to administer its own Section 404 permit program, and a single permit issued by the state serves to authorize an activity under both federal and state law. Michigan's authority to administer this program is bound by certain conditions: the permit requirements it imposes may not be less stringent than federal requirements, although

they may be more stringent. In any case, the EPA retains oversight over Michigan's enforcement program.

In the case of Huggett v. Michigan Department of Natural Resources, construction of the proposed cranberry beds involves discharges of dredged material into the wetlands. The attorney general has informed Mr. Huggett that his proposed cranberry farming operations do not comply with federal CWA regulations, and that work at the farm should not proceed unless he obtains the appropriate permit from the U.S. Army Corps of Engineers. Otherwise, the attorney general letter warns, the EPA will consider the work to be in violation of the CWA, and could initiate enforcement action against Mr. Huggett, including civil and criminal sanctions. Of greater concern, however, is the fact that excluding cranberry bed construction from wetland permit requirements would render Michigan's program inconsistent with the requirements of the CWA. CWA regulations specify that the EPA may withdraw program approval from a state in situations where a state court has limited the state's authority. Consequently, the Department of Environmental Quality (DEQ) could conceivably lose its authority to administer its own Section 404 program.

Against:

Allowing cranberry farming in Michigan's wetlands could result in the loss of a unique type of wetland, such as a peat bog, since the activities involved -- dredging and grading -- are much more destructive than those of traditional farming operations such as plowing. For example, before cranberry beds can be planted, existing vegetation must be removed, the ground levelled, and three to four inches of sand applied; and to supply the needed water, ditches have to be constructed, irrigation pipe laid, and reservoirs made. Also, pesticides and other chemicals are added to the water, thus altering unprotected aquifers. In addition, all of these activities would have an impact on lands adjacent to wetlands, and, in any case, need to be carefully monitored so that potential adverse impacts can be identified. Under the provisions of the bill, however, this type of construction would not be subjected to the DEQ's permit review process, and could permanently alter a wetland.

Response:

It is not clear that application of pesticides and chemicals in wetlands would affect groundwater and aquifers. In "Studies on the Flow of Water on Peat Bogs in Massachusetts," by Karl H. Deubert and John S. Norton, the authors assert that peat bogs are located on top of an impervious layer, which makes it possible to flood cranberry bogs for prolonged periods of time, and which separates cranberry bogs from the groundwater. With respect to concerns over pesticides,

a Michigan State University Extension program horticulturalist reports that, in recognition of the fact that it operates in environmentally sensitive areas, the cranberry industry has adopted some of the more stringent pesticide regulations in the country. The horticulturalist's report also states that the organic layer underneath the sand in a cranberry bed stops any downward movement of pesticides; and that cranberries are not heavy fertilizer users, preferring ammonia forms of nitrogen rather than nitrate, and thus minimizing the addition of nitrates to the environment. The horticulturalist also states that most cranberry farms are large operations in which the farmer owns large amounts of the land surrounding the wetland in which the cranberries are farmed, thus creating a nature preserve and reducing concerns regarding the impact of the cranberry bog establishment on adjacent lands.

The Michigan Environmental Council (an environmental organization whose members include the Sierra Club, Michigan Audubon Society, and Clean Water Action, among others) opposes the bill. (10-31-95)

Against:

Wetlands are critical to wildlife and water ecosystems. They support a vast range of plants and wildlife, including endangered species, and they aid in the natural purification of water supplies. In addition, they act as natural buffer zones to reduce undesirable erosion and flooding, and they provide unique scenic and recreational areas. Prior to the enactment of Public Act 203 of 1979, the Goemaere-Anderson Wetland Protection Act, half of all Michigan's wetlands were lost to various types of development. Since then, the state has steadfastly worked to preserve those that remain. Consequently, conservationists object to giving cranberry farmers *carte blanche* permission to establish their industry on the state's remaining wetlands. One solution to the problem, it is argued, would be to restrict development of the industry in such a way so that its activities would be centered in one large wetland area, rather than scattered piecemeal throughout the state's wetlands.

POSITIONS:

Representatives of the cranberry industry and the following agencies testified before the House Conservation, Environment and Great Lakes Committee in support of the bill. (10-17-95)

*The Department of Agriculture

*The Michigan State University Extension program

The Department of Environmental Quality has no position on the bill. (10-18-95)

A representative of the Michigan United Conservation Club (MUCC) testified before the committee in opposition to the bill. (10-17-95)

■ This analysis was prepared by nonpartisan House staff for use by House members in their deliberations, and does not constitute an official statement of legislative intent.