

WATER ISSUES FOR BEEF CATTLE PRODUCERS

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FRAMING THE ISSUES

A cattle rancher in Pasco County is convinced that pumping from nearby well-fields of the West Coast Regional Water Supply Authority has caused lakes and ponds on his property to dry up, thus depriving his cattle of their traditional source of drinking water (Koenig, 1986). He must now apply to the Southwest Florida Water Management District for permits to drill wells and to use the water from those wells for his cattle.

A cattle feedlot operator in north-central Florida is required to comply with a consent order negotiated with the Florida Department of Environmental Regulation. The consent order spells out measures intended to reduce nitrate contamination of groundwater from the feedlot operation. It also requires the owner to replace contaminated wells on neighboring properties.

A cattle rancher in the Kissimmee River valley worries about the outcome of a current legal/bureaucratic dispute over the definition of the ordinary high water line, which includes a dispute over who has the authority to define the ordinary high water line (Bush, 1989). Depending on the outcome of the dispute, this rancher and others like him, may discover that they do not in fact own land to which they thought they held title.

Although the Florida beef cattle industry has historically been a low-impact, low-intensity user of land and water resources, the times may have begun to catch up with beef cattle producers. Florida's rapid population growth has generated concern over water quality, competing demand for water resources, and indirectly, intensified the debate over title to low-lying lands near natural watercourses. These and other similar issues are of sufficient importance to warrant a closer look.

WATER REGULATIONS

Department of Environmental Regulation

The Florida Department of Environmental Regulation was created by the Florida Environmental Reorganization Act of 1975, and charged with the authority and responsibility for administering the state's growing body of environmental protection programs. Much of the statutory basis for environmental programs was already on the books at the time, under the Florida Air and Water Pollution Control Act. Codified as Chapter 403 Florida Statutes, Florida's environmental statute directs the DER to, among many other things, "establish a permit system whereby a permit may be required for the operation, construction, or expansion of any installation that may be a source of air or water pollution..." (Florida Statutes, Chapter 403, Section 403.061). DER rules on permitting are published in Chapter 17-4, Florida Administrative Code.

The DER has adopted numerical or descriptive standards that limit the amounts of pollutants allowed in state waters. These standards are based upon the quality of water

believed to be necessary to support the designated use of the particular water bodies. In that context, all surface waters of the state have been classified according to five use categories, the most sensitive (for toxics) being Class I, Potable Water Supplies, and the least sensitive being Class V, Navigation, Utility and Industrial Use (Chapter 17-3.041, Florida Administrative Code). Technology based effluent limitations have also been adopted, as have certain minimum criteria "freeforms," stipulating substances that are banned outright. Water quality standards adopted by DER are published in Chapter 17-3, Florida Administrative Code.

Pursuant to authority granted by earlier safe drinking water legislation, the DER adopted administrative rules in 1982 classifying groundwater sources, with a "G-1" category designating current sources of public drinking water supply, high recharge areas, single source aquifers in limited areas or aquifers set aside for future public water supply. The rule establishes minimum water quality criteria designed to prevent the introduction of dangerous toxic and carcinogenic materials to water supplies.

The state legislature passed the Water Quality Assurance Act of 1983 in order to fill some gaps in statutory authority and program funding needed to fully implement and enforce a comprehensive groundwater protection program. Among other things, the act established a statewide groundwater monitoring network, established a well-field contamination prevention program, directed that all artesian free-flowing wells be plugged by 1995, and created a regulatory program for above and below-ground fuel storage tanks (designed to reduce the threat of groundwater contamination from leaking tanks).

The Warren S. Henderson Wetlands Protection Act of 1984 consolidated in Chapter 403 the regulatory power of DER over all dredging and filling activities using a single set of criteria regardless of whether the waters in question are navigable or non-navigable. The value of wetlands systems to the protection of fish, wildlife and endangered species, was specifically introduced as a consideration in permitting dredge and fill activity. DER rules specifically pertaining to dredge and fill are found in Chapter 17-12, Florida Administrative Code.

DER has a "stormwater rule" (Chapter 17-25, Florida Administrative Code) which reflects an attempt to get a regulatory handle on sources of water pollution that result from runoff associated with heavy rainfall. Specific provision is made in 17-25 for considering "best management practices" in a number of manuals incorporated by reference into the stormwater rule.

Water Management Districts

The 1972 Water Resources Act and subsequent legislation established the administrative framework to manage all waters of the state. An amendment to the state's constitution provided a basis for legislating ad valorem taxation authority to fund water resource management. Statewide authority for various environmentally related programs, including management of water resources, was vested in the Florida Department of Environmental Regulation. The agency was directed to develop, with five water management districts created by the Act, a State Water Use Plan. It was clearly stated in the legislation that powers to manage water would be delegated "to the greatest extent practicable" to the water management districts. The water management legislation is codified at Chapter 373, Florida Statutes. Legislative intent was to provide for continuity

of water management policy statewide, with regional implementation taking into account the variability of water resources over the state.

Five water management districts were formed, encompassing the entire state. Each covers one or more drainage basins. Two of the districts formed under special acts, the Central and Southern Florida Flood Control District (1949) and the Southwest Florida Water Management District (1961), were continued under the Water Resources Act of 1972 with some changes in their boundaries and in their names. The five districts are: 1) South Florida Water Management District (West Palm Beach), 2) Southwest Florida Water Management District (Brooksville), 3) St. Johns River Water Management District (Palatka), 4) Suwannee River Water Management District (Live Oak) and 5) Northwest Florida Water Management District (Havana).

Each district is controlled by a governing board of nine members who reside within the district and are appointed by the governor to serve four year terms. The districts have several sources of funding, the most important of which is ad valorem taxes on lands within the district (subject to a constitutionally imposed millage cap which, for the Northwest Florida Water Management District, is only 0.05 mils).

As a means of implementing the water management provisions in the Act, the water management districts are required to administer a permitting program regulating a) consumptive use of water, b) the construction, repair or abandonment of water wells and c) the management and storage of surface waters.

The water management districts, in carrying out the statutorily mandated regulatory programs, are, like the DER, governed by provisions of the Administrative Procedures Act, codified at Chapter 120, Florida Statutes. Accordingly, the individual districts develop and publish comprehensive and detailed rules by which they administer the regulatory programs mandated in Chapter 373, the water management section of Florida Statutes. These rules are Published in the Florida Administrative Code along with the rules of all other regulatory agencies of the State of Florida. The rules of the water management districts are grouped together in Chapter 40 of the Florida Administrative Code.

As they develop rules in Chapter 40 of the F.A.C., the districts are identified by a letter suffix with Chapters 40A, 40B, 40C, 40D and 40E containing rules of the Northwest, Suwannee, St. Johns, Southwest, and South districts, respectively. Subchapters of 40A---E are numbered to codify rules covering major district functions and that number code is common to all the districts. The individual rules by which each district operates vary between districts. The following is a list of Chapter 40 subchapters and the functions they cover.

40-1

General and procedural - sets forth the administrative authority, policy and procedures by which the district operates. Includes contracting, interagency agreements, permitting, rulemaking and other administrative functions.

40-2

Permitting Water Use - sets forth requirements to obtain a water use permit and the conditions for issuance, denial, modification, etc. of permits. Under subsections 40-20 and

40-21, rules for general water use permits and water use restrictions under water shortage are set forth. 40-22 is used to cover water shortage plans for specific regions of a district.

40-3

Regulation of Wells - controls permitting for well construction, registration of well drillers, construction standards and permit fees. Subsection 40-30 is used to cover general permits for wells.

40-4

Management and Storage of Surface Waters - sets forth rules applied to surface water management systems, wetlands protection and stormwater control. Subsections 40-40, 40-41, 40-42, and 40-44 are used by some districts for rules specific to general permits, regional situations, stormwater discharge and agricultural and forestry water management practices.

40-5

Artificial Recharge - governs permitting requirements for projects involving the introduction of water into any underground formations. This includes disposal of water containing wastes and injection of stormwater for storage and later recovery. Septic tanks are exempt from this rule.

40-6

Works of the District - sets forth permit requirements to connect to, alter, construct in or across, or otherwise make use of any "work of the district". Works of the districts include streams, lakes and other natural water bodies; reservoirs, impoundments, land or facilities owned by the districts.

40-7

Water Levels and Rates of Flow - sets forth operating levels and schedules for controlled water bodies, minimum stage and flow requirements restricting consumptive use withdrawal and flood warning levels.

40-8

Land Acquisition - governs the procedures by which land is acquired, either by district funds or by money from the "Water Management Land Trust Fund" (Save Our Rivers Program). Also covers land trades or disposal. Some districts may develop land management policy within this subsection.

Most of the district functions can affect agriculture because these agencies are required to protect and manage all waters of the state; and these waters fall upon and flow on and under agricultural lands, in addition to being vital to sustain crops and livestock. The affect of any particular district program on an agricultural enterprise cannot be determined without examining the pertinent rules of the district and conferring with district staff. The same must be said of DER rules and programs.

Water Regulation Issues For Beef Producers

Potential issues for beef producers in regard to water quality regulations stem from the fact that runoff from heavy rains can flush heavy phosphorous loadings from animal waste (cow manure) into watercourses and lakes. Dairy farms north of Lake Okeechobee have been at the center of a high-visibility regulatory controversy for several years. Environmentalists, the water management district and the DER, have been concerned about eutrophication of the lake, and attribute much of the problem to increased phosphorous levels in the lake. Much of the phosphorous, in turn, is traced to the dairies. The regulatory structure for controlling water pollution was not well-adapted to non-point sources such as run-off from dairy lots. The DER responded by adopting a specific "dairy rule" which currently applies to dairies in the Taylor Creek, Nubbin Slough drainage areas. The dairy rule mandates the adoption of specific "best management practices" by the dairy operations in the area. The rule does not, at this time, stipulate that water quality standards must be achieved. Adoption of the required management practices constitutes compliance.

However, the South Florida Water Management District has recently adopted a plan for improving water quality in Lake Okeechobee that would establish water quality standards for the watercourses involved and would require the dairies to do whatever is necessary in order to achieve those standards. Spokespersons for agricultural interests have emphasized the need to recognize that water quality in any stream will fluctuate drastically depending upon storm events, season, and temporary changes in agricultural operations. They argue that regulatory programs must take into account the fact that control of contaminants from large surface areas is tenuous at best and may not be manageable in the short term without imposing ruinous costs on producers.

The DER program for regulating "wastewater facilities" requires such facilities to monitor their discharges in order to be sure that quality standards in receiving waters are not violated. In those instances where wastewater discharges were not anticipated, the DER enforces water quality standards by corrective action. As in the feedlot example, the DER negotiates a consent order stipulating corrective measures, monitoring, and such other actions as may be deemed necessary to rectify a problem of water contamination.

Cattle ranchers may face challenges to their attempts to get consumptive use permits for watering livestock and for irrigating pastures. The water management districts may require clear documentation of the quantities of water needed for those purposes.

On the other hand, cattle ranchers may have reason to wonder if water supply development for urban populations will compete directly with agriculture. Such concerns are sometimes overblown for dramatic effect. In some instances, the issue may be valid.

DEFINING ORDINARY HIGH WATER LINE

The February 1989 issue of Florida Agriculture included an informative article entitled "Where Do You Draw the Line?" (Bush). The issue is two-fold: 1) How do we determine where the ordinary high water line is? and 2) Who is legally authorized to decide on the definition of the ordinary high water line? The issue is important because in Florida, the ordinary high water line (OHWL) is the boundary between privately-owned riparian uplands and state-owned sovereignty lands beneath non-tidal navigable waters, according to a 1977 report to the Florida Department of Natural Resources. Last year, the Board of Professional Land Surveyors invoked its authority to "set the minimum technical standards for surveying" and adopted a rule for determining the ordinary high water line for lakes and rivers in Florida. The surveyors' ordinary high water line is based on a definition provided by the U. S. Supreme Court in 1851:

"This line is to be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual and so long continued in all ordinary years, as to mark upon the soil of the bed a character distinct from that of the banks, in respect to vegetation, as well as in respect to the nature of the soil itself." (Howard vs. Ingersoll).

The Florida Department of Natural Resources; however, was also developing rules to define the OHWL. Its definition would apparently put the OHWL higher (landward) of the line proposed by the surveyors. Thus, the DNR definition would encompass low-lying areas and wetlands adjacent to watercourses as a part of the state-owned sovereignty lands. The DNR also insists that the Board of Professional Land Surveyors is not authorized by law to define the OHWL.

The Governor and Cabinet sit as the Board of Trustees of the Internal Improvement Trust Fund, and are responsible for all state lands and works with the DNR to carry out this function. The trustees appealed the surveyors' rule to the Division of Administrative Hearings. The trustees challenge the surveyors' authority to write a rule defining how to determine the ordinary high water line, and contend the rule does not reflect case law in determining where the ordinary high water line belongs. The hearing officer has not, at this writing, rendered a decision.

Apparently, many landowners along navigable watercourses thought they had clear title to land, that the DNR claims, has always been a part of the sovereignty state lands. The effect of a ruling in favor of the trustees and the DNR would, in the view of these landowners, divest them of property that they thought they owned. On the other hand, spokespersons for the trustees insist that the OHWL has not been in doubt until recently when the surveyors stepped in.

This issue could be important for some beef producers by virtue of their status as landowners. Some people have urged the legislature to pass a bill providing a statutory clarification of authority for deciding the issue or for defining the OHWL.

COMMENTARY

Nothing definitive can be said about the implications of water issues for the beef cattle industry over the next decade. If I had to predict, however, I would predict a trend toward more stringent requirements for operations that pose possibilities for contaminating groundwater or surfacewater. For a variety of reasons, we live in a time when people are increasingly concerned about all manner of threats to public health and to the environment. Many of these people know very little about beef cattle producers or the beef industry. Most of them feel no need to learn. Urban populations are growing, and urban delegations in the legislature increasingly control public policy.

These considerations indicate a need for agricultural interests of all kinds to educate, communicate and persuade. At the same time, it will be important for agricultural interests to have credibility with those whom they wish to influence. Credibility comes with knowledge, integrity and demonstrated efforts to "do the right thing."

LITERATURE CITED

Bush, Rick. "Where Do You Draw the Line?" Florida Agriculture. Vol. 48, No. 2. February 1, 1989.

Koenig, John. "Fighting Gets Fierce As Water Wars Spill Into the Courts." Florida Trend. October 1986. P. 101-110.