

Final Report

Interagency Agreements No. 515793 and 562790

"Florida Parishes Animal Wastes Management Project"

(Phase I and Phase II)

The Tangipahoa River watershed was one of the first watersheds targeted for inclusion in Louisiana's Nonpoint Source Management Program. The Tangipahoa River originates in Mississippi. In Louisiana, it flows for 79 miles through Tangipahoa Parish before entering into Lake Ponchartrain and is listed as one of Louisiana's Natural and Scenic Rivers. The River drains a majority of Tangipahoa Parish as well as surrounding Parishes generally referred to as the Florida Parishes. There is much plant diversity and wildlife habitat along the river with the Natural Heritage data base indicating that there are several plant and animal species found in and along the river that are considered protected, rare, endangered and threatened species. There are both highly developed areas and undeveloped areas along the banks of the river. In the past, this river provided excellent fishing and canoeing but due to water quality problems, all water-based recreational uses of the Tangipahoa River have decreased.

According to the 1996 Water Quality Inventory Report, the Tangipahoa River is not meeting standards for primary contact uses and is only partially meeting secondary contact recreation uses due to bacteria contamination. Other suspected causes of water quality impairment are ammonia, nutrients, organic enrichment, low dissolved oxygen, and suspended solids. Some of the suspected sources of the water quality problems are minor industrial and municipal point sources, package plants, stormwater/sewer overflow, specialty crop production, pastureland, confined animal feeding operations, animal holding/management areas, forest management, land development, urban runoff/storm sewers, wastewater land disposal, septic tanks and natural resources.

In 1988, a health advisory warning residents along the Tangipahoa River of the potential hazard for primary and secondary contact recreation in the river was issued by the Louisiana Department of Environmental Quality and the Department of Health and Hospitals (DHH). This advisory covers the length of the Tangipahoa River from the Louisiana/Mississippi state line all the way south to Lake Ponchartrain. Several management strategies have been implemented to address both point and nonpoint sources problems that were identified within the watershed as contributing to water quality improvements. These management strategies were implemented with the primary goals of reducing the level of bacterial contamination and improving water quality within the river.

Several sources of contributors who discharge fecal coliform into the river have been targeted. The LDEQ Surveillance Section issued compliance orders to municipal treatment plants in the area to reduce the level of fecal coliform being discharged.

Another source targeted as a major contributor to the fecal coliform standards violation was dairy operations, of which there are over 250 within Tangipahoa Parish itself. Prior to the first phase of this project, many dairies were inspected by an interagency task force to determine what types of management systems could be installed to reduce the discharge of fecal coliform into the river. LDEQ decided to address this problem in two ways. First was a permit based on LAC 33:IX.301.J.3 *Case-by-case Designation of Concentrated Animal Feeding Operations*, and second was to install USDA, NRCS approved "No discharge systems". These systems are designed to hold wastewater from dairy barns and holding lots in earthen lagoons. In the lagoons, solids settle out while the liquid waste is used for irrigation.

The dairy industry in the Florida Parishes has received much attention since the early 90's. The focus has been on the wastes going into waterways if improperly contained or handled. The issue has received multi-agency attention from several state agencies including the Department of Agriculture and Forestry, the Department of Health and Hospitals, and the Department of Environmental Quality. Federal partnership led by the U.S. Department of Agriculture has been a vital part of the picture. Local governmental bodies led by the local Soil & Water Districts have been the agencies actually delivering the assistance to the individual dairymen on a farm by farm basis. A summary of some of the work done in the project is in the following narrative.

In 1991 the Louisiana legislature passed Act 12 which provided the ability to provide state assistance to the local dairymen in the Florida Parishes. In April of 1992 an interagency agreement between DEQ and LDAF was signed and it provided \$237,807 for cost-share assistance to be provided for addressing the wastes issue through the construction of lagoons. A maximum of \$2,500 per lagoon was available in the state program and this was in addition to federal assistance through NRCS. An additional \$250,000 was added to this program by the legislature in 1993. These funds were utilized in lagoon construction through late 1998 when they were all expended. Dairymen received dollars for a total of 220 lagoons during this period. These were all done with assistance by the Soil & Water Districts and the NRCS along with DEQ and LDAF.

During the period since 1991 there have been six other interagency agreements between DEQ and LDAF to assist in this program. These have been between the Office of Soil & Water in the Department of Agriculture and DEQ. All have been funded with 319 funds and have been the instruments to provide technical assistance to the farmers. A total of \$237,500 has been dedicated to this effort through these agreements.

LDEQ and cooperating agencies initially noted two areas that needed additional attention and could be addressed in this project. First, renewed emphasis needed to be placed on remaining dairymen for their obligation to participate in the cost-share program to have animal waste systems installed. Second, additional emphasis needed to be placed on the maintenance aspects of the animal waste systems that have been installed.

Initial inspection results indicated that many of the dairy operators do not follow the ten-year operational plan that they signed after lagoon construction. The NRCS and the

LDAF Office of Soil and Water Conservation have addressed this issue by conducting inspections of animal waste management systems. Dairy owners obligated themselves, through the NRCS, to operate their lagoons according to a ten-year operating agreement. The local conservation district office has authority to inspect animal waste management systems to determine compliance with the agreement. A checklist was formulated and used in a maintenance inspection program. Over 68 operating lagoons were revisited and inspected to assure proper operation. With inspectors working out in the field, dairymen are reminded that they have a responsibility to maintain the animal waste management system at their dairies.

Through this agreement the following accomplishments have been documented and reported to DEQ through the quarterly reports:

(a) Assistance in planning of dairy lagoons	85
(b) Assistance in survey or design work	77
(c) Assistance in construction of lagoons	81
(d) Assistance in operations of lagoons	154
(e) Inspections of lagoons	62

The copies of the inspections of the lagoons during this period are attached. These have served to greatly enhance the benefits derived from the work in the Basin.