

THE SOCIO-ECONOMIC AND ENVIRONMENTAL BENEFITS OF ACHIEVING A RAMSAR LISTING FOR LOUISIANA'S LAKE MARTIN AND CYPRESS ISLAND PRESERVE

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INTRODUCTION

The Convention on Wetlands of International Importance especially as Waterfowl Habitat is "an intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources" (Ramsar Convention, 2004). The Convention on Wetlands, which is now commonly referred to as Ramsar or Ramsar Convention, was signed in Ramsar, Iran in 1971. The United States ratified the Ramsar Convention in 1986, and proceeded to nominate 19 sites. Presently there are only two sites in Louisiana, the state with the largest extension of wetlands in the contiguous U.S.A. These two sites, Cathahoula Lake listed in 1991, and Caddo Lake listed in 1993, account for only 0.74% of the total national Ramsar acreage. Louisiana contains an estimated 30% of coastal wetlands for the lower 48 states which translates to only 0.07% designated as Ramsar sites. As wetlands in Louisiana are being lost at the highest rate nationally (approx. 25 km² per year), it becomes critical to bring to bear any and all of the tools to favor conservation and restoration. Ramsar sites are considered a viable conservation alternative since they provide social, economic, and environmental benefits.

To qualify for listing as a Ramsar site a site needs to meet at least one of eight criteria. Of these, the two most applicable to Lake Martin are: (a) the wetland must support plant and/or animal species at a critical stage in their life cycle and, (b) the wetland should regularly support 20,000 or more water birds. Lake Martin and the Cypress Island Preserve, which covers an estimated 8,097 ha, near Lafayette, in south-central Louisiana, are home to a rookery of over 20,000 pairs of nesting birds each year, making it an ideal Ramsar Site. Our research shows the components needed to propose Lake Martin and Cypress Island Preserve as a Ramsar site. We examined the social, economic, and ecological benefits for the local and international communities.

BACKGROUND

The mission of Ramsar is "the conservation and wise use of all wetlands through local, regional and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world" (Ramsar Convention, 2001). There are currently 144 countries, or Contracting Parties to the Ramsar Convention, with 1421 wetland sites worldwide, totaling 123.9 million hectares, designated for inclusion in the Ramsar List of Wetlands of International Importance. Under the Ramsar Convention wetlands have a broad definition: "areas of marsh, fen, peatland or water, whether natural

or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres" (Ramsar Convention, 1994).

Lake Martin is a man-made lake. It was created in the early 1950s by the construction of a levee surrounding approximately 309 hectares of which nearly 81 hectares are open water. Originally the levee was constructed to preserve the natural lowland area for recreational purposes, including hunting and fishing (Boustany, 1998). For nearly 30 years Lake Martin was managed by the St. Martin-Lafayette Game and Fish Preserve Commission. In 1982 the commission was abolished and management of Lake Martin was transferred to the Louisiana Department of Wildlife and Fisheries. This administrative transfer resulted in the loss of local responsibility to the lake; consequently, the lake was neglected and abused (Cutrera, 2001, Executive Summary). In 1991, the Lake Martin Advisory Council (LMAC) was created by the St. Martin Parish Police Jury to assist in advising on the clean-up and development of Lake Martin into an outdoor recreation area.

In 1992, The Nature Conservancy (TNC) of Louisiana was granted a 1,052 hectare as a donation from Texaco, Inc. that included Lake Martin and Cypress Island Preserve. In March 2001 Texaco, Inc. further donated an additional 2,428 hectares of Cypress Island thereby making TNC a "significant and vested steward of Lake Martin and its environs" (Cutrera, 2001, Executive Summary).

BIOLOGICAL IMPORTANCE

Around the time that TNC became involved in the Lake Martin area a wading-bird rookery developed in the southern third of Lake Martin. This rookery grew to approximately 20,000 to 30,000 pairs of nesting birds that included almost 200 species of birds. Herons, ibises, and roseate spoonbills are common sight among the Lake Martin denizens. According to information provided by a Louisiana Department of Wildlife Commission employee to the state's Wildlife and Fisheries Commission, Louisiana is home to 75% of the nation's Little Blue herons, 60% of the nation's Great Egrets, 44% of the nation's White Ibises, and 22% of the nation's Roseate Spoonbills (Cutrera, 2001, IV-13).

Other species in Lake Martin further increase its biodiversity. It has been reported that the lake is also an alligator nesting area. Although there has not been an official census the Louisiana Department of Wildlife and Fisheries estimates that there are approximately 1,500 alligators calling Lake Martin home (Cutrera, 2001, IV-15). Fish species harvested in Lake Martin include yellow bass, striped bass, largemouth bass, bluegill, red-ear sunfish, warmouth, white crappie and black crappie (Cutrera, Jr. 2001).

OBJECTIVES AND GOALS

Identifying actions and behaviors needed to conserve wetlands in Louisiana is the main goal of this research. Achieving a Ramsar designation for Lake Martin and Cypress Island Preserve is a secondary goal. Identifying the socio-economic and ecological

benefits and hindrances of a designation are objectives that will be met on the way to achieving these goals.

METHODS

The Ramsar Convention put forth a series of norms and requirements to have a site nominated. These groups of requirements form the basis to initiate the nomination process. Specifically, to nominate a site a completed Information Sheet on Ramsar Wetlands (RIS) and letters of support from all landowners, the state wildlife or natural resource agency, and a member of Congress for Louisiana must be submitted to the Ramsar Bureau. The RIS requires detailed site-specific information including: a description of the principal ecological characteristics and importance of the wetland, justification of each criterion, biogeographic region, physical features of the site and catchment areas, wetland type, general ecological features, noteworthy flora and fauna, social and cultural values, land tenure and ownership within the proposed Ramsar site and in the surrounding area, current land use, factors adversely affecting the site's ecological character, conservation measure taken, conservation measures proposed but not implemented, current scientific research and facilities, current conservation education, current recreation and tourism, jurisdiction, and management authority.

Our sociological research was based in the Realism ideology and methodology. Methodological triangulation was used to collect different types of information and to verify that the data collected is accurate. Several venues were utilized to fulfill the Ramsar requirements. An extensive literature search has been initiated to identify local species, geographic range and perhaps more importantly, the possibility that some concerns might be endemic to the region. A series of interviews with officials from The Nature Conservancy and diverse State agencies, such as, Louisiana Fish and Wildlife and the Dept. of Natural Resources provided information critical to assess the local ecological characteristics and to reconstitute the historical environmental status of the site.

To assess the local, regional and state economic and cultural importance of the site, primary data was collected by personal in-depth interviews with members of the Lake Martin Advisory Council, local landowners, and other community members. The basis of the interviews was to examine learn, acknowledge, and answer the community concerns in regards to a Ramsar designation for Lake Martin and Cypress Island Preserve.

Economic valuation can be defined as “the attempt to assign quantitative and monetary values to goods and services provided by environmental resources or systems, whether or not market prices are available to assist us” (Lambert 2003). When market prices are not available, the value is established by the willingness to pay for the good or service, whether or not payment is made. The Contingent Valuation Method and the Travel Cost Method were employed to establish the economic value of Lake Martin and Cypress Island Preserve.

RESULTS

The present research continues as efforts to present a complete nomination application to Ramsar is expected in early 2006. Several economic and ecological indicators have shown a positive response by the local community to continue this effort. Overall, there seems to be substantiated circumstances and ecological characteristics that indicate that Lake Martin and Cypress Island Preserve will be the next Louisiana Ramsar Site.

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