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The Atchafalaya Basin proposal for nomination to the World Heritage Site list

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THE ATCHAFALAYA BASIN PROPOSAL FOR NOMINATION TO THE WORLD
HERITAGE SITE LIST

A Thesis

Submitted to the Graduate Faculty of
The Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Master of Landscape Architecture

in

The School of Landscape Architecture

by

Mitchell Coffman

B.A. Louisiana State University 1987

December, 2004

Dedication

I dedicate this research paper and nomination project to my parents Vernon and Mattie Coffman as well as to my siblings, who no doubt saved my life. My sisters deserve a great deal of credit for their contributions not only to this thesis paper but also to most of my design projects. I affectionately thank them all for supporting me throughout my academic pursuits. Thank you to my entire family for the continued rehabilitation and prayers during my multi-year battle with the West Nile Virus, including West Nile Viral encephalitis, West Nile Viral meningitis, poliomyelitis and clostridium difficile.

Acknowledgements

Thank you to my committee members for advising, supporting and motivating me throughout the process of preparing and finalizing this thesis. Professor Joseph Popadic of the LSU School of Landscape Architecture and committee chair was most helpful and especially supportive of my research and thesis preparation, presentation and revisions. Thank you also to Professor Sadik Artunc of the Landscape Architecture department for his guidance throughout my academic journey.

Professor Michael W. Wascom of the LSU School of Environmental Studies, my Environmental Studies thesis committee chair and my primary professor deserves a great deal of thanks for his contribution to my educational aspirations. Dr. Margaret Reams, of the School of Environmental Studies and Dr. Ralph Portier, Director of the School of Environmental Studies were extremely helpful to me throughout the thesis preparation and especially throughout my academic career.

Preface

In September 2001, Louisiana State University Landscape Architecture students unveiled a plan to promote heritage tourism in the thirteen parishes comprising the *Atchafalaya Heritage Trace*.¹ The Atchafalaya Heritage Trace Commission requested the study in support of the commission's effort to gain federal designation of an *Atchafalaya Natural Heritage Area*. I participated in the research project as a student in the Master of Landscape Architecture program.

Professor Sadik C. Artunc, in conjunction with a preexisting management plan guided the class in this regional planning project. The class set out to identify, enhance, develop and conserve the natural and cultural significance of the 13 parishes that comprise the Atchafalaya Trace.² This regional planning exercise paralleled research in my second major field of study in graduate school, environmental planning and management.

As a candidate for a dual degree, Master of Landscape Architecture and Master of Science in Environmental Studies, my interest in pursuing a regional planning thesis topic that might focus upon heritage landscapes narrowed with the advice of Professor Michael Wascom of the LSU Environmental Studies Department. The study of international environmental treaties in Professor Wascom's International Environmental Law Colloquium included discussion of the 1972 Convention Concerning the Protection of the World Cultural and Natural Heritage. This treaty seeks to protect heritage landscapes across the world in a globally cooperative manner.

¹ Louisiana State University, *LSU Students Come Together for Atchafalaya Trace Project*, Baton Rouge, LA: online <http://www.lsu.edu/highlights/302/302trace.htm>, (January 23, 2002), viewed March 2002.

² Louisiana State University, School of Landscape Architecture, Graduate Studies, *The Atchafalaya Trace: Regional Development Recommendations for Heritage Tourism*, Baton Rouge, LA: (May 2002).

Table of Contents

Dedication	ii
Acknowledgements	iii
Preface.....	iv
List of Figures.....	vi
Abstract.....	viii
Introduction.....	1
Scope	3
Review of Literature	4
Cultural and Natural Landscape Overview	5
World Heritage Convention	10
Methodology	18
Nomination Criteria	18
National, State, and International Designation	21
Atchafalaya Trace Heritage Area	24
The Atchafalaya Basin Program	26
Atchafalaya Basin Nomination Inventory	27
Cultural Criteria (iii) and Natural Criteria (ii), (iii), (iv) of the Basin	36
Comparative Plans	57
Conclusion	61
References.....	64
Vita	72

List of Figures

Figure 1. World Heritage Sites in the U.S., UNESCO.....	11
Figure 2. Atchafalaya Heritage Trace, Louisiana Dept. of Culture, Recreation and Tourism	27
Figure 3. Cypress-Tupelo Swamp.....	28
Figure 4. Atchafalaya Basin, Atchafalaya Basin Program.....	29
Figure 5. I-10 Federal Highway Across the Atchafalaya Basin.....	30
Figure 6. Official Louisiana DOTD Map	30
Figure 7. Atchafalaya River, U.S. Army Corps of Engineers	31
Figure 8. Old River Water Control Lock, U.S. Army Corps of Engineers	32
Figure 9. Atchafalaya Basin Floodway System, Atchafalaya Basin Program	32
Figure 10. Atchafalaya Wildlife Refuge, Louisiana Dept. of Wildlife and Fisheries	34
Figure 11. Bayou Teche National Wildlife Refuge, U.S. Fish and Wildlife	35
Figure 12. Poverty Point, Department of Culture, Recreation and Tourism.....	36
Figure 13. Central Amazon Conservation Complex, Adapted from World Heritage Journal	36
Figure 14. Black Bear Corridor in a Multi Site Complex, Dept. of Wildlife and Fisheries	37
Figure 15. Poverty Point Mound, Louisiana State Parks	39
Figure 16. Plaquemine Mound, ULL PMAP	40
Figure 17. Portrayal of 1755 Decree, Nelson Surette Galleries.....	41
Figure 18. Acadian Memorial in St. Martinville, Longfellow State Park.....	41
Figure 19. Acadian Deportation Routes, adapted from Canadian Geographic Magazine	42
Figure 20. Acadian Creole Cottage ca. 1800	43
Figure 21. Acadian Architecture in New Construction 2004.....	44
Figure 22. Percent Claiming Cajun French Ancestry, Atlas LSU.....	44

Figure 23. Official Flag of Acadiana, CODOFIL	45
Figure 24. Louisiana Satellite Image, Atlas LSU	46
Figure 25. Mississippi River Formation of Louisiana Geology, NOAA	47
Figure 26. Generalized Geology, Louisiana Geological Survey.....	48
Figure 27. Atchafalaya Delta Formation, Atlas LSU	49
Figure 28. Atchafalaya Wetland Loss Trends, National Wetland Research Center	50
Figure 29. Audubon's Louisiana Heron, Audubon Gallery.....	51
Figure 30. Cypress-Tupelo Swamp and Spanish Moss, Louisiana Tourism Department.....	52
Figure 31. George Rodrigue's Blue Dog Oak Trees, Rodrigue Gallery	53
Figure 32. Ivory Billed Woodpecker, National Geographic	54
Figure 33. Eagle Nest in Atchafalaya Basin, Vernon Wright LSU	54
Figure 34. 1999 Eagle Population, Vernon Wright LSU	55
Figure 35. Louisiana Black Bear Research, LSU AgCenter.....	56
Figure 36. 2000 Black Bear Habitat, Dept. of Wildlife and Fisheries.....	57
Figure 37. Poverty Point, Louisiana State Parks.....	58
Figure 38. Poverty Point Mounds, Firespeaker Photos	59
Figure 39. Florida and Everglades National Park Map, GORP.....	60

Abstract

The Atchafalaya Basin in the Southern United States is a cultural, environmental, historical and natural land region of such universal importance, designation as a World Heritage Site is appropriate. This thesis provides a justification for this designation through compliance with cultural and natural criteria detailed in the Convention Concerning the Protection of the World Cultural and Natural Heritage of 1972. The treaty, also known as the World Heritage Convention (WHC) promotes natural and cultural landscape preservation on an international level. This thesis lists the cultural and natural arguments for nominating the Atchafalaya Basin to the World Heritage Site list.

National, regional and local heritage preservation movements have a strong foundation of support from landscape architects and planners. The environmental science community has an equally dedicated base working on behalf of the natural preservation movement. In recent years, the two studies have commingled their efforts to preserve the great cultural and natural landscapes of the world. The resulting preservation of culture and nature provides protection for the world's most biologically diverse ecosystems and geomorphic phenomena while recognizing man's historic and physical influence upon the land.

Introduction

Preservation of local, state and national landscapes and monuments is an established ideal with a well- documented history of scholarly research supporting the effort. Environmental planners and landscape professionals were early influences in the history of these preservation movements. Today, the disciplines and professions of landscape arts and sciences unite in a cohesive effort to preserve cultural and natural landscapes representing the unique heritage of diverse peoples, communities and ecosystems.

The World Heritage Convention of 1972 establishes criteria for determining candidates eligible for World Heritage Site designation as outstanding global cultural and natural landscapes. This international treaty outlines specific cultural and natural elements necessary for a proposed site to qualify for listing on the World Heritage Site roster.

International designation of the Atchafalaya Basin to the World Heritage Site list ensures a historically complete public effort to preserve, conserve, use, manage and enjoy a healthy Atchafalaya Basin. Regional and federal efforts to preserve the landscape of the Atchafalaya Basin are currently underway.

This thesis project investigates the history of the World Heritage Convention while detailing the criteria within required for gaining World Heritage Site designation. This thesis project also discusses two issues often associated with World Heritage designation; land rights and tourism impacts.

The historical significance of the Atchafalaya Basin is undeniably strong. Pre-Columbian Indians, Native Americans, African-Americans, French and Acadians settled in the basin. These inhabitants, most notably the Acadians, successfully established a unique cultural heritage in and around the basin that is worthy of international preservation.

Existing basin management programs conserve, protect, restore and use the cultural and natural resources of the landscape while promoting the unique qualities associated with the region. One such state program, the Atchafalaya Heritage Trace focuses upon the preservation and promotion of the varied cultures of past basin inhabitants and current residents living in the

13 parishes that comprise the basin. The Atchafalaya Heritage Trace Commission, which oversees the trace heritage program, is seeking federal designation of the Atchafalaya Basin as a National Heritage Area based upon the unique culture and diverse ecosystems existing in the region.

Land management plans, such as the state's Atchafalaya Basin Program focus upon conservation and restoration of traditional use areas within the basin and associated delta. Other programs, federal and state, supervise conservation of the natural resources and diverse ecosystems within the basin.

Federal wildlife refuges in the region protect thousands of species of flora and fauna. Endangered species, such as the Louisiana Black Bear (*Ursus americanus luteolus*) as well as the Bald Eagle (*Haliaeetus leucocephalus*) live in the Atchafalaya Basin.

The Atchafalaya Basin merits international protection, preservation and conservation because the region is an outstanding landscape of great global importance. The inhabitants of the region established a distinct culture based upon a specific heritage in a unique landscape.

The Atchafalaya River, Atchafalaya Basin and associated floodways host some of the world's most significant archaeological, geographic and environmentally rich habitats. The Atchafalaya Basin is one of the world's more diverse freshwater ecosystems. The region is teeming with scientific research and management programs focused upon preserving, conserving, enhancing, recognizing and developing the cultural and natural exceptionality of the Atchafalaya Basin.

The World Heritage Convention of 1972 protects the world's most outstanding cultural and natural landscapes, such as the Atchafalaya Basin. International designation of the Atchafalaya Basin as a World Heritage Site will provide additional support to the state of Louisiana's ongoing efforts to conserve and promote the basin area.

Scope

The scope of this thesis explores the concepts of natural and cultural preservation with the focus upon the nomination of the Atchafalaya Basin as a World Heritage Site. This thesis will review the current literature available, searching for issues, policies, laws, positions, opinions, facts and descriptions pertaining to natural and cultural preservation, the World Heritage Convention and the Atchafalaya Basin's natural and cultural elements. Fulfilling the existing nomination methodology required by the World Heritage Convention justifies the position put forth in this thesis.

The Atchafalaya Basin is an appropriate site to classify as a heritage landscape. Existing management plans protecting the area conserve, preserve, honor and utilize this natural landscape. In support of these principles and in adherence to the World Heritage Convention criteria, this thesis emphasizes the outstanding universal importance of the Atchafalaya Basin to the world. Additionally, this thesis represents an initial application, justification and nomination dossier proposing the landmass of South Louisiana known as the Atchafalaya Basin for inclusion upon the roster of World Heritage Sites as outlined by the World Heritage Convention of 1972.

Review of Literature

When researching aspects of the landscape, the literary and scientific information available is as immense as the global landscape. Broadly speaking, landscapes are different for different people.¹

Processing a landscape scene is an individual experience. Some individuals see specific elements of a stretch of land, yet others see a conglomeration of pieces forming the whole.² Some individuals may also be indifferent towards their surrounding landscape. Each of these views, and many more, are part of the personal experience of landscape interpretation.

The study of individual and collective human interaction within a landscape establishes a recorded history that defines distinct cultures. Historical evidence of planning, management and use of the land provide planners and designers insight into cultures and environments unique to human existence.

Research of the landscape and associated environmental topics is a broad area for study. Artistic and scientific possibilities for landscape study are unlimited. Considering this, the literary sources for discovery in this thesis project focus upon natural and cultural archeological and ecological conservation, preservation and protection. Analysis of past and present preservation initiatives for monuments, buildings, cultures, communities and entire landmasses provides insight to understanding heritage preservation in America and the world. Conservation matters involving wildlife, plants, aquatic environments, terrestrial and geographic features also lend an understanding of management approaches of the landscape.

¹ D.W. Meinig, "The Beholding Eye, Ten Versions of the Same Scene", *Landscape Architecture*, Louisville, KY: (January 1976), p. 47.

² Marvin Mikesell, "Landscape," *International Encyclopedia of the Social Sciences* 8 (Crowell-Collier and Macmillan, 1968), p. 575-580.

Cultural and Natural Landscape Overview

Landscape Architect Charles A. Birnbaum once observed that “Landscapes ... help us understand ourselves as individuals, communities and as a nation.”³ Birnbaum said, “Their ongoing preservation can yield ... above all, a sense of place or identity for future generations.”⁴

Birnbaum implies that future generations might use cultural landscape interpretation to actually define the very existence of humans within a landscape. This philosophical statement illustrates the need for historical preservation of natural and cultural landscapes. In fact, Birnbaum believes preservation “...is incumbent upon society.”⁵

Natural landscapes have ecological systems providing habitat for wildlife, retaining biodiversity, purifying air and water and providing a place for recreation.⁶ *Natural landscapes* also exist as “areas whose character is the result of the action and interaction of natural and/or human factors.”⁷ Such definitions are accepted and expected elements of categorization, but not limiting factors of landscape definitions.

American scholars are broadening their perception of the term *natural landscape* and thus transforming the overall connotation of the term *landscape*. Definitions and categories are shifting to include preservation of urban and rural communities and their representative land use. Traditional elements of geography, wildlife, flora and ecosystems remain accepted components of the *natural landscape* definition.

Yale Professor of Architecture and Urbanism Dolores Hayden attributes the shift to, “...vibrant new scholarship which has nurtured a broader approach to preservation, one more attuned to the unique complexities of places as cultural resources, be they urban,

³ Charles A Birnbaum, *Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes*, Preservation Brief 36, National Park Service, Preservation Assistance Division, Washington, DC: (1994).

⁴ Birnbaum. p. 7.

⁵ Birnbaum. p. 7.

⁶ Conservation Study Institute, *a Handbook for Managers of Cultural Landscapes with Natural Resource Value: An Overview of Cultural Landscape Preservation*, (Woodstock: VT, 2004).

⁷ European Landscape Convention, *Explanatory Report*, Council of Europe, Florence, Italy. (February 2000).

suburban, or rural, built or natural, evolved or designed.”⁸ This synthesis of natural conservation and heritage preservation offers one the opportunity to study the complete history of a site.

In 1925 noted American cultural geographer Carl Sauer, introduced the term *cultural landscape* into the preservation vernacular in a speech given to fellow geographers.⁹ Sauer believes that the term *cultural landscape* describes “a natural landscape with evidence of a multi-level use of the land and water communities of the region.”¹⁰

Archeologists agree that a site’s natural qualities and land use history often define diverse communities and cultures. “We use the archaeological record to enhance the visitors’ experience. We help to create opportunities for visitors to form intellectual and emotional connections to the meanings and significance of archeological information and the people and events that created them.”¹¹ A *cultural landscape* can depict a historical flow chart revealing geomorphic, anthropologic, scientific, historic, untold and yet unknown information about the human view of the landscape.

The Harvard Institute for Cultural Landscape Studies suggests the term “cultural landscape is used to mean a way of seeing landscapes that emphasize the interaction between human beings and nature over time.”¹² The National Park Service (NPS) defines a cultural landscape as, “a geographic area (including both cultural and natural resources

⁸ Dolores Hayden, *Foreword*, Arnold R., Alanen and Robert Z. Melnick, Eds. *Preserving Cultural Landscapes in America*, (Baltimore: Johns Hopkins University Press, 2000), p. vii.

⁹ Alice E. Ingerson, Associate Director of the Institute for Cultural Landscape Studies, Landscape Institute, Arnold Arboretum of Harvard University, Cronkhite Graduate Center, *Changing Approaches to Cultural Landscapes*, Cambridge, MA: (June 29, 2000), online <http://www.icls.harvard.edu/language/whatare.html>, viewed Jan. 2004.

¹⁰ Ingerson, viewed June 2004.

¹¹ John H. Jameson, Jr., Public Archeologist, National Park Service, “Archaeology on the Inspirational Highway”, Proceedings of the 9th Annual Meeting of the European Association of Archeologists, St. Petersburg, Russia: September 2003.

¹² Alice E. Ingerson, Associate Director of the Institute for Cultural Landscape Studies, Landscape Institute, Arnold Arboretum of Harvard University, Cronkhite Graduate Center, *Changing Approaches to Cultural Landscapes*, Cambridge, MA: (June 29, 2000), online <http://www.icls.harvard.edu/language/whatare.html>, viewed Jan. 2004.

and the wildlife or domestic animals therein), associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values.”¹³

Noted cultural landscape expert, Robert Z. Melnick, Dean of the School of Architecture at the University of Oregon said, “Cultural landscapes are often (but not always) part of wilderness areas.”¹⁴ He nostalgically suggests these landscapes live with us forever, “whether manifested in faint traces of former trappers and homesteaders, in current policies that protect and preserve wild areas, or in the photographs, postcards and books that we use to preserve our memories of wilderness.”¹⁵

Literal application of Melnick’s poetic standard to the Atchafalaya Basin qualifies the region for cultural landscape status. The region’s history of trapping, settlement, homesteading as well as the current effort to implement national heritage status qualifies the basin as a cultural landscape. Nonetheless, as a scientist, researcher and architect, Melnick believes that a scholarly approach is best when studying, documenting and interpreting cultural landscapes.¹⁶

In fact, professional and scholarly landscape architects in America were influential catalysts in establishing the early movement of cultural landscape preservation. The American Society of Landscape Architects (ASLA) spurred discussion of the issue when, in 1976, editor of the Professional Journal *Landscape Architecture*, Grady Clay published several articles that featured various cultural landscape preservation efforts in the United States.¹⁷

In one of his commentaries Clay said, “There is no doubt, however-as articles in this issue make clear-that landscape archaeology, as we call it, is an expanding science.”¹⁸ His call for unification of science and art in the study of landscape heritage preservation

¹³ National Park Service, Heritage Preservation Services Historic Landscape Initiative, *The Secretary of the Interior's Standards for the Treatment of Historic Properties, with Guidelines for the Treatment of Cultural Landscapes*. Washington, D.C.: (1996).

¹⁴ Arnold R Alanen and Robert Z. Melnick, *Preserving Cultural Landscapes in America*, (Baltimore, MD: Johns Hopkins University Press, 2000). p. 7.

¹⁵ Alanen and Melnick, p. 3.

¹⁶ Alanen and Melnick, p. 7.

¹⁷ Alanen and Melnick, p. 8.

¹⁸ Grady Clay, Ed., *Landscape Architecture*, “Whose Time is This Place?” Denver, CO: (May 1976), p. 217.

was an indicative mark in the merging paths of the environmental science and landscape preservation disciplines.

The earliest idea of combining conservation of cultural properties with those of nature originated from naturalists, historic preservationists, planners, artists, architects and landscape architects. These professions continue to influence policy by exploring the relationship between people, the land and the built environment. “Local community planners are becoming increasingly knowledgeable about historic preservation. Strengthening ties between local planning and local preservation programs can greatly benefit both.”¹⁹

Looting of Native American communities in the early southwest gave rise to a category of protected areas that looked beyond the natural landscape or wildlife.²⁰ The Antiquities Act of 1906 protected features of historic and scientific interest on public lands through national monument designation. Following that, the Historic Sites Act of 1935 and the National Historic Preservation Act of 1966 (NHPA) strengthened the foundation of current preservation policy in the United States. “Passage of the NHPA in 1966 was a watershed event. It marked a fundamental shift in how Americans, and the Federal Government, regarded the role of historic preservation. Before 1966, historic preservation was mainly understood in one-dimensional terms.”²¹

President Lyndon B. Johnson called for a World Heritage Trust in 1965 to stimulate centralization and international co-operation for the protection of the world’s superb natural landscapes. This call was a precursor to international preservation efforts. In 1968, the World Conservation Union (IUCN) developed similar proposals addressing the

¹⁹ Susan L. Henry Renaud, “Preservation Planning: Ensuring a Future for Our Past”, *CRM: The Journal of Heritage Stewardship*, National Park Service, Washington, D.C.: Issue 7, (2000) online <http://crm.cr.nps.gov/archive/23-07/23-07-1.pdf>, viewed June 2004.

²⁰ John H. Jameson, Jr., Public Archeologist for the National Park Service, “Archaeology on the Inspirational Highway”, Proceedings of the 9th Annual Meeting of the European Association of Archeologists, St. Petersburg, Russia: (September 2003).

²¹ The National Historic Preservation Program: Overview Advisory Council on Historic Preservation, Washington D.C.: (April 26, 2002), online <http://www.achp.gov/overview.html>, viewed July 2004.

preservation issue on a global scale.²² The IUCN presented the proposals to the 1972 United Nations Conference on Human Environment in Stockholm.

The Stockholm Conference stands as one of the significant events in international cultural landscape preservation history. The document declared, "...the need for a common outlook and for common principles to inspire and guide the peoples of the world in the preservation and enhancement of the human environment."²³

Before the conference, matters of the environment, including cultural and natural preservation, were solely matters of national interest. The resulting declaration for global environmental consciousness paved the way for a cooperative approach to international preservation. Secretary General of the Conference, Maurice Strong said, "We have taken the first steps on a new journey of hope for the future of mankind."²⁴

In the United States, the National Park Service (NPS) recognized cultural landscapes as a specific resource type in 1981. That year the NPS published the first outline of criteria for identifying and defining cultural landscapes entitled, *Cultural Landscapes: Rural Historic Districts in the National Park System*.²⁵

Government policies make up the legal and governmental outline of historic preservation in the United States. These policies protect our most treasured public lands and monuments from destruction while preserving the history of the associated culture at the site. Senior Resource Planner of the NPS, Susan L. Henry Renaud, summarized these policies of cultural landscape preservation as, "planning that we do to help us identify, evaluate, protect and manage historic and cultural resources, such as historic

²² Jim Thorsell and Todd Sigaty, *Human Use of World Heritage Natural Sites - A Global Overview, Working Paper # 4*, Natural Heritage Program IUCN, (Switzerland: September 1998).

²³ Declaration of the United Nations Conference on the Human Environment, The United Nations Conference on the Human Environment, (Stockholm: June 1972), par. 1.

²⁴ Dermot A. O'Sullivan, "U.N. Conference: Idealism Has Its Day" *Environmental Science and Technology Journal*, Vol. 6, No. 8, August 1972. p. 682.

²⁵ Arnold R. Alanen and Robert Z. Melnick, *Preserving Cultural Landscapes in America*, (Baltimore, MD: Johns Hopkins University Press, 2000), p. 7.

buildings and structures, historic districts, historic and cultural landscapes, prehistoric and historic archeological sites, and other physical places of importance.”²⁶

World Heritage Convention

The General Conference of the United Nations Education Scientific and Cultural Organization (UNESCO) adopted the Convention Concerning the Protection of World Cultural and Natural Heritage on November 16, 1972. The United States was the first signatory to the treaty. This internationally recognized treaty, which is the most widely recognized treaty in existence, universally legitimizes the concept of environmental protection for natural, cultural and heritage landscapes. The World Heritage Committee governs the Convention. “The primary mission of the Convention is to identify and protect the world's natural and cultural heritage considered to be of ‘*outstanding universal value*’.”²⁷

The resulting and current World Heritage Site program offers this formal recognition of outstanding universal value while providing environmental protection through international co-operation. The World Heritage Convention considers these landscapes to be of such universal importance to the natural and cultural heritage of humanity that each and many potential others are worthy of international environmental planning and management through international cooperation and international protection.²⁸

Examples of current World Heritage Sites in the United States include the Florida Everglades, Yellowstone, the Great Smokey Mountains, Carlsbad Caverns and the Grand Canyon. Other locations, such as Louisiana’s Poverty Point and Texas’s Big Bend National Park are tentative nominees to the World Heritage Site program. National parks, national heritage areas, state parks and wildlife refuges are acceptable examples of potential sites.

²⁶ Susan L. Henry Renaud, Heritage Preservation Services, National Park Service, “Preservation Planning: Ensuring a Future for Our Past”, *CRM: The Journal of Heritage Stewardship*, National Park Service Washington, D.C.: Issue 7, (2000) online <http://crm.cr.nps.gov/archive/23-07/23-07-1.pdf>, viewed June 2004.

²⁷ Dr. Natarajan Ishwaran, Chief, Natural Heritage Section, World Heritage Centre UNESCO Paris, online <http://www.iucn.org/themes/wcpa/wheritage/wheritageindex.htm>, viewed July 2004.

³⁰ “A Brief Look at the Convention, How Does It Work?” *The World Heritage Review*, UNESCO Publishing, (Paris: June 2000) online <http://www.unesco.org/whc/4conves.htm>, viewed August 2003.



Figure 1. World Heritage Sites in the U.S., UNESCO

Detractors of World Heritage designation often cite land rights concerns as the major drawback to participation in the international treaty. Nationalists, opponents of the United Nations (U.N.), and other interested parties initiated a lobbying campaign to limit U.N. interference in private property issues. In 1996, the U.S. Congress debated House Resolution 3752, which called for strengthening American sovereignty and autonomy over publicly held lands. Testimony from NPS officials and the Clinton Administration allayed fears of any perceived notion of the loss of sovereignty over American lands, ultimately delaying passage of the resolution. Nevertheless, in 1999 the U.S. Senate conducted a similar hearing to evaluate the sovereignty issue in a proposed law, Senate Bill 510, the American Lands Sovereignty Protection Act.

Senator Daniel Akaka of Hawaii said, “This legislation, which appears to arise from the assumption that the World Heritage program undermines the sovereignty of the United States and adversely impacts the value of properties surrounding these areas.”²⁹ Senator Akaka dismissed these sovereignty concerns saying, “The designations do not

²⁹ U.S. Congress, Statement of Senator Daniel K. Akaka, Member Subcommittee on Forests and Public Land Management, *Hearing on S. 510, The American Lands Sovereignty Protection Act*, Washington D.C.: (1999).

surrender any sovereignty of the United States, and they do not carry with them any land use regulation or land use decision making authority of any kind.”³⁰

Additionally, The U.S. Department of State, the National Park Service, the National Trust for Historic Preservation and even several presidential administrations reminded lawmakers that under the terms of the World Heritage Convention, management and “sovereignty over the sites remain with the country where the site is located.”³¹ The protection of land rights for Americans is a sensitive issue and remains an issue of contention for some nationalists.

UNESCO, the NPS and the World Heritage Committee are quick to refer to the text of the treaty as the legal authority on the question. Article Six of the Convention ensures sovereignty to the State Party, stating,

Article Six: Whilst fully respecting the sovereignty of the States on whose territory the cultural and natural heritage mentioned is situated, and without prejudice to property right provided by national legislation, the States Parties to this Convention recognize that such heritage constitutes a world heritage for whose protection it is the duty of the international community as a whole to co-operate.³²

The recent ratification of the World Heritage Convention by the countries of Saint Vincent, the Grenadines and Lesotho in the year 2003 increases the total number of signatories to the treaty to 177, with only 18 countries yet to ratify the treaty. To date, the 1972 Convention Concerning the Protection of the World Cultural and Natural Heritage protects 788 sites of outstanding universal value in 129 States Parties, including 611

³⁰ Sen. Akaka, par. 12.

³¹ Lois McHugh, *World Heritage Convention and U.S. National Parks*, Congressional Research Service Foreign Affairs, Defense and Trade Division, Washington D.C.: Doc. 96-395. (July 17, 2000).

³² Article six, *Convention Concerning the Protection of the World Cultural and Natural Heritage of 1972*, UNESCO Publishing, Paris: (1972 version) online http://whc.unesco.org/world_he.htm - Article6, viewed March 2004.

cultural and 154 natural sites, and 23 mixed sites.³³ The 21-member World Heritage Committee inscribed 34 new properties during the 2004 session.³⁴

Under the terms of the World Heritage Convention, each nation submits a tentative list of properties intended for nomination for inscription to the World Heritage list. These site submissions contain descriptions of the site and collective inventory detailing the cultural and natural elements of the nominated properties.

The International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) finalizes reviews of the nominated sites. The International Council on Monuments and Sites (ICOMOS) reviews cultural sites. The World Conservation Union (IUCN) reviews natural sites. The World Heritage Committee uses these organizational reviews of tentative list nominees to evaluate the outstanding universal value of each property.³⁵

Communities, states and even nations proclaim benefits from World Heritage Site designation. Preservationists and heritage supporters believe designation serves as a catalyst to raising government, scientific, academic and citizen awareness for the importance of heritage preservation.

World Heritage Site inscription opens the way for financial assistance from a variety of government levels, non-governmental organizations (NGO's), businesses, volunteers or similar sources involved in heritage promotion and conservation projects. Economic development of the surrounding locale is another incentive to obtain the acceptance of these groups. Additionally, financial assistance and expert advice is available from the World Heritage Committee's, World Heritage Fund. Promotional activities advocating preservation of the site and assistance with development of educational materials heralding the site are available.

³³ UNESCO, "New Sites to be Added to World Heritage List", *The World Heritage Review*, UNESCO Publishing, Paris: (June 2000) online http://whc.unesco.org/pg.cfm?cid=82&id_news=6322, viewed May 2004.

³⁴ *13 More properties Added to World Heritage List at 2004 Committee Session*, UNESCO Conference, China: (July 2004) online http://whc.unesco.org/pg.cfm?cid=82&id_news=66 Posted: 02 Jul 2004, viewed July 2004.

³⁵ National Park Service, *The U.S. Tentative List of World Heritage Sites*, Washington D.C.: online <http://www.cr.nps.gov/worldheritage/tentlist.htm>, viewed May 2004.

UNESCO claims participation in the heritage program elicits education opportunities that in turn invoke participation in preservation of the site. In UNESCO's terms,

Each person visiting a protected area is a potential disseminator of information on the area's importance, as well as a defender of its integrity. Moreover, each visitor, as a tourist, contributes financially to the improvement of the quality of life of the people living there. With this in mind, we should consider the creation of eco-tourism programs specifically aimed at these parks, and try to find better ways of making their importance and qualities known.³⁶

Tourism opportunities have potential to detract from and even damage World Heritage Sites. "Crowds at the Pyramids of the Giza Plateau, a World Heritage site, led to the eventual closing of the entry shafts."³⁷ However, community activities and uses in World Heritage Sites are common. Management plans often accept a wide range of uses for visitors and landowners. Opponents of increased tourism fear increased numbers of people bring an unnecessary adverse impact to the landscape. Opponents also cite concern for loss of local identities and values.³⁸

The United Nations Environmental Programme (UNEP) considered negative impacts of tourism on cultural sites in a recent study. The 2001 report lists several concerns and issues affecting World Heritage Sites with tourism driven economies.

Increased tourism presents opportunities for:³⁹

- (i) Commodification: Tourism can turn local cultures into commodities when religious rituals, traditional ethnic rites and festivals are reduced and sanitized to conform to tourist expectations

³⁶ Jose Pedro De Oliveira, Architect, Professor University of Sao Paulo, "Protecting the Amazon", World Heritage, Ediciones Publishing, Madrid, Spain: (January 2004) No. 34, p. 21.

³⁷ Lauri Hafvenstein and Brian Handwerk "World Heritage Status a Mixed Boon," National Geographic News (Washington, D.C.: February 3, 2003).

³⁸ UNESCO, *Operational Guidelines for the Implementation of the World Heritage Convention*, World Heritage Centre, UNESCO Publishing, Paris: (July 2002).

³⁹ United Nations Environment Programme, UNEP, Negative Socio-Cultural Impacts from Tourism, (October 9, 2001) online <http://www.unep.org/pc/tourism/sust-tourism/soc-drawbacks.htm>, viewed May 2004.

resulting in what has been called reconstructed ethnicity.

- (ii) Standardization: Destinations risk standardization in the process of satisfying tourists' desires for familiar facilities.
- (iii) Loss of authenticity and staged authenticity: Adapting cultural expressions and manifestations to the tastes of tourists or even performing shows as if they were real life constitute staged authenticity.
- (iv) Adaptation to tourist demands: Desire for souvenirs, arts, crafts and cultural manifestations, and in many tourist destinations, results in craftsmen making changes in design of their products to bring them more in line with the new customers' tastes.

Tourists can also have an adverse impact on the natural landscape of World Heritage Sites. UNEP identifies three tourist related threats to the natural landscape in the 2001 report, *Negative Socio-Cultural Impacts from Tourism*.

UNEP's tourism threats to natural landscapes:⁴⁰

- (i) Resource use conflicts: such as competition between tourism and local populations for the use of prime resources like water and energy because of scarce supply.
- (ii) Cultural deterioration: damage to cultural resources may arise from vandalism, littering, pilferage and illegal removal of cultural heritage items.
- (iii) Conflicts with traditional land-uses: especially in intensely exploited areas such as coastal zones, which are popular for their beaches and islands.
- (iv) Conflicts arise when the choice has to be made between development of the land for tourist facilities or infrastructure and local traditional land-use.

⁴⁰ United Nations Environment Programme, UNEP, *Negative Socio-Cultural Impacts from Tourism*, (October 9, 2001) online <http://www.uneptie.org/pc/tourism/sust-tourism/soc-drawbacks.htm>, viewed May 2004.

UNEP does support UNESCO's belief that increased tourism brings positive benefits to areas. The 2001 report stated, "Tourism can contribute to positive developments, not just negative impacts. Potential to promote social development through employment creation, income redistribution and poverty alleviation exists."⁴¹ Proper planning and management ensures a healthy balance of visitors resulting in a healthy site with a healthy economy.

Charles Fryling, Professor of Landscape Architecture at Louisiana State University and a member of the Atchafalaya Trace Commission expressed a desire for a balanced approach to the conundrum of preservation and promotion. He intimates that tourism could act as a means to some greater end.

Referring to Louisiana's plan for the national designation of an Atchafalaya Heritage Area, Fryling said, "Tourism is a carrot in all this (heritage promotion)."⁴² He continued, "Our hope is that the Cajuns' embrace of opportunities focused on their heritage will spur support for the more-ambitious basin improvements." Professor Fryling says, "It's a difficult matter because while we're talking potential, a lot of people around the basin are skeptical about mass tourism."⁴³

Regardless, state programs highlighting culture and eco-tourism movements have widespread support in Louisiana. The residents of the state are generally well informed as to the economic impact these programs have upon the local economy. Tourism in Louisiana generates \$9 billion dollars annually to the economy of the state.⁴⁴ Activities such as hiking, bird watching, photography and camping contribute \$220 million annually to the Louisiana economy.⁴⁵

⁴¹ Negative Socio-Cultural Impacts from Tourism, par. 12.

⁴² Herb Hiller, "Boosting Cajun Culture: Efforts Are Under Way to Reinforce the Heritage of Louisiana's Cajun Country, an Area Accentuated by Good Music, Good Food and Good Times." *St. Petersburg Times*, FL: (July 20, 2003).

⁴³ Herb Hiller, par. 3.

⁴⁴ "The Economic Impact of Travel on Louisiana 2002, A Study Prepared for the Louisiana Office of Tourism", Research Department of the Travel Industry Association of America Washington, D.C.: (January 2004).

⁴⁵ P.D. Coreil, "Wetlands Functions and Values in Louisiana" Baton Rouge: Louisiana State University, Cooperative Extension Service, Pub. 2519, (1994), via "Louisiana Coastal Facts" Louisiana Dept. of

UNESCO believes, “the overarching benefit of joining the World Heritage Convention is that of belonging to an international community of appreciation and concern for unique, universally significant properties that embody a world of outstanding examples of cultural diversity and natural wealth.”⁴⁶ Text on the UNESCO web site reads, “the States Parties to the Convention, by joining hands to protect and cherish the world's natural and cultural heritage, express a shared commitment to preserving our legacy for future generations.”⁴⁷

Considering the historical evidence and the economic windfalls tourism and preservation programs bring to the state, residents will likely accept designation of the Atchafalaya Basin as a World Heritage Site. International protection is the next logical step in a complete management plan for the basin.

Natural Resources, online http://www.americaswetland.com/PDFs/dnr_webfactsheet.pdf, viewed June 2004.

⁴⁶ UNESCO, *Benefits to Ratification*, World Heritage Centre, UNESCO Publishing, Paris: online <http://whc.unesco.org/pg.cfm?cid=164>, (June 2000) viewed January 2003.

⁴⁷ *Benefits to Ratification*, par. 5.

Methodology

Nomination Criteria

The Convention Concerning the Protection of the World Cultural and Natural Heritage provides for the preservation of earth's cultural and natural properties deemed to be of outstanding universal value. Articles One⁴⁸ and Two⁴⁹ of the Convention define the outstanding universal value of cultural and natural properties constituting the criteria for inscription.

For consideration of inclusion on the World Heritage Site list, properties must satisfy any one or a combination of six criteria for cultural properties and any combination of four criteria for natural properties. The World Heritage Site list accepts mixed properties possessing both cultural and natural qualities of outstanding value.

The most recent *Operational Guidelines for the Implementation of the World Heritage Convention* details these criteria. The *Operational Guidelines* are the principle management document for the World Heritage Committee. These guidelines spell out the necessary criteria for inscription.

Cultural Heritage:⁵⁰

- (i) Represents a masterpiece of human creative genius, or
- (ii) Exhibits an important interchange of human values over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town planning or landscape design, or
- (iii) Bears a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or has disappeared, or
- (iv) Is an outstanding example of a type of building or architectural or technological ensemble, or landscape which

⁴⁸ Article One, *Convention Concerning the Protection of the World Cultural and Natural Heritage of 1972*, UNESOC Publishing, Paris: (1994) online, http://whc.unesco.org/world_he.htm#Article1, viewed March 2002.

⁴⁹ Article Two, *Convention Concerning the Protection of the World Cultural and Natural Heritage of 1972*, UNESOC Publishing, Paris: (1994) online, http://whc.unesco.org/world_he.htm#Article2, viewed March 2002.

⁵⁰ UNESCO, *Operational Guidelines for the Implementation of the World Heritage Convention*, World Heritage Center, UNESCO Publishing, Paris: (July 2002). p. 6.

illustrates a significant stage or significant stages in human history, or

- (v) Is an outstanding example of a traditional human settlement or land-use which is representative of a culture, especially when it has become vulnerable under the impact of irreversible change, or
- (vi) Is directly or tangibly associated with events or living traditions, with ideas or with beliefs, or with artistic and literary works of outstanding universal significance (a criterion used only in exceptional circumstances, and together with other criteria).

Natural Properties:⁵¹

- (i) Are outstanding examples representing major stages of the earth's history, including the record of life, significant ongoing geological processes in the development of landforms, or significant geomorphic or physiographic features, or
- (ii) Are outstanding examples representing significant ongoing ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals, or
- (iii) Contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance, or
- (iv) Contain the most important and significant natural habitats for in-situ (in the original or correct place built in relation to its surrounding)⁵² conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

The WHC protects only natural sites representing the most important locations for the conservation of biological diversity. According to the Global Convention on Biological Diversity, this means “...the variability among living organisms in terrestrial, marine and other

⁵¹ UNESCO, *Operational Guidelines for the Implementation of the World Heritage Convention*, World Heritage Center, UNESCO Publishing, Paris: (July 2002), p. 7.

⁵² Oxford Advanced Learner's Dictionary, Oxford University Press (London: 2003).

aquatic ecosystems and the ecological complexes of which they are part and includes diversity within species, between species and of ecosystems.”⁵³

The Convention requires that sites nominated on natural criteria have the evidentiary elements outlined above. These sites must represent diverse ecosystems with established cultural sites of integrity. By signing the Convention, each country pledges to conserve not only the World Heritage properties situated on its territory, but also to support preservation of national heritage across all borders.

UNESCO facilitates the nomination and listing of World Heritage Sites. The Convention explicitly defines the mission of the organization in the Operational Guidelines.

World Heritage Mission:⁵⁴

- (i) Encourages countries to sign the 1972 Convention and to ensure the protection of their natural and cultural heritage;
- (ii) Encourages States Parties to the *Convention* to nominate properties within their national territory for inclusion on the World Heritage List;
- (iii) Encourages States Parties to set up reporting systems on the state of conservation of World Heritage properties;
- (iv) Helps States Parties safeguard World Heritage properties by providing technical assistance and professional training;
- (v) Provides emergency assistance for World Heritage properties in immediate danger;
- (vi) Supports States Parties' public awareness-building activities for World Heritage conservation;
- (vii) Encourages participation of the local population in the preservation of their cultural and natural heritage;

⁵³ Article 2, *Convention on Biological Diversity*, Secretariat of the Convention on Biological Diversity, Montreal, Quebec, Canada: (1992).

⁵⁴ The Convention: The World Heritage Convention, UNESCO World Heritage Centre (Paris: 2003)

- (viii) Encourages international co-operation in conservation of cultural and natural heritage.

The WHC requires each site nominated under natural criteria to include the total range of ecologically sensitive landscape portraying the outstanding aesthetic value of the proposed property. The nominated site must also encompass habitats for maintaining the most diverse fauna and flora characteristic of the ecosystem. This concern for including essential areas near or on the proposed site is part of maintaining the entire site's beauty, health and integrity.

Designation guidelines suggest flexible boundaries that are reflective of maintaining the diverse habitats, species, processes or natural phenomena, which provide the grounds for inscription on the World Heritage list. These boundaries may include or overlap other protected landscapes, including national and state parks, heritage sites, wildlife refuges, or other such designations. The WHC requires existing or similarly protected sites to have management plans ensuring legislative, regulatory, institutional or traditional protection.

LSU Landscape Architecture graduate student, Jason R. Watton studied the importance of this spatial relationship on wildlife-inhabited golf courses. Watton said, "Wildlife habitation areas should be as large as possible to inhabit the greatest number and variety of habitat species. This is the most logical, simple and widely accepted spatial characteristic regarding wildlife habitation areas. This relationship was proven by this (Watton's) research study."⁵⁵ The World Heritage Committee reviews all applications based on technical evaluations then meets once a year to examine the nominations.

National, State, and International Designation

Environmental studies of natural landscapes are rooted in American history. From the National Park Service to the U.S. Fish and Wildlife Service, many disciplines of landscape stewardship focus upon preservation, protection, promotion and conservation of our nation's lands. The Department of the Interior (DOI) coordinates these efforts through the eight federal

⁵⁵ Jason R. Watton, "Improving the Design of Golf Course Communities as Wildlife Habitats" Ch. 4, Summary, Conclusions and Guidelines, etd-0411102-155836, LSU, Baton Rouge, LA 2002, p. 61 online <http://etd02.lnx390.lsu.edu/docs/available/etd-0411102-155836/>, viewed June 2004.

agencies empowered to regulate and manage the cultural, terrestrial, aquatic and marine resources of the United States and territories.

U.S. Federal Agencies Administering Land Programs:

- (i) Bureau of Indian Affairs (BIA)
- (ii) Bureau of Land Management (BLM)
- (iii) Bureau of Reclamation
- (iv) Fish & Wildlife Service
- (v) Geological Survey
- (vi) Minerals Management Service
- (vii) National Park Service
- (viii) Surface Mining, Reclamation & Enforcement

Land management programs are not restricted to these agencies. For example, the Department of Agriculture administers the Forest Service, which protects national forest and grasslands as one of the department's missions. Other federal programs and even independent agencies of the government, such as the Advisory Council on Historic Preservation (ACHP), "promote the preservation, enhancement, and productive use of our nation's historic resources."⁵⁶

Conservation, preservation and wise use of the nation's public lands are an established land-planning ideal. In 2003, former Secretary of the Interior, Bruce Babbitt said, "The American people want lands held and managed for clean water, for the protection of endangered species, for abundant wildlife, productive fisheries, open space, for the protection of our heritage, and for the greater glory of God's creation." The U.S. Fish and Wildlife Service's website proudly declares, "National Wildlife Refuges are the only Federal network of lands in the world where wildlife is put first. Refuges provide habitat for waterfowl, migratory songbirds, endangered

⁵⁶ Advisory Council on Historic Preservation, Washington, D.C.: 2004, online <http://www.achp.gov/>, viewed June 2004.

species, and other wildlife and plant resources.”⁵⁷ The mission of these refuges is to administer a national network of lands and waters for the conservation and management of fish, wildlife and plant resources within the United States, “for the benefit of present and future generations of Americans.”⁵⁸

The National Historic Preservation Act of 1966 establishes a program for the preservation of historic properties throughout the nation. The act requires federal agencies to establish programs to identify, evaluate, and nominate historic sites and monuments to the National Register of Historic Places. Most importantly, the act requires the federal agencies to “manage such properties with due consideration for preservation of their cultural values.”⁵⁹ The National Historic Preservation Act subsequently has shaped 23 National Heritage Areas in the United States designated for conservation and celebration of their cultural and natural landscape qualities.

A heritage area is a physical place with a historical biography. The NPS says, “geography is intertwined with the landscape and development on it tell the story.”⁶⁰ These places possess a unique culture and historical identity.⁶¹ The National Park Service summarizes some of the qualities of National Heritage Areas in the agency published 2002 edition, *Cultural Resource Guidelines*.

NPS National Heritage Area Definition:⁶²

A National Heritage Area is a place designated by Congress where natural, cultural, historic and scenic resources combine to form a cohesive, nationally distinctive landscape arising

⁵⁷ “What is a National Wildlife Refuge?” Sam Hamilton, Southeast Regional Director U.S. Fish and Wildlife Service, Atlanta, Georgia: online http://southeast.fws.gov/louisiana_waterfowl_issues/LouisianaOp-Ed.html, viewed June 2004.

⁵⁸ “Welcome to Southeast Louisiana Refuges,” U.S. Fish and Wildlife Service, Atlanta, GA: online <http://southeastlouisiana.fws.gov/>, viewed July 2004.

⁵⁹ 16 U.S.C. 470, NPS-28: *Cultural Resource Management Guidelines*, National Park Service Washington D.C.: (August 2002).

⁶⁰ Judy Hart, “Planning for and Preserving Cultural Resources through National Heritage Areas,” CRM: *The Journal of Heritage Stewardship*, National Park Service, Dept. of the Interior, Washington D.C.: Vol. 23, No. 7., (2000).

⁶¹ Atchafalaya Trace Commission, *What is the Atchafalaya Trace?* Department of Culture, Recreation, & Tourism Baton Rouge, LA: (2002), online http://www.atchafalayatrace.org/what_is_the_trace.htm, viewed January 2003.

⁶² 16 U.S.C. 470, NPS-28.

from patterns of human activity shaped by geography. These patterns make National Heritage Areas representative of the national experience through the physical features that remain and the traditions that have evolved in them. Continued use of National Heritage Areas by people whose traditions helped to shape the landscapes enhances their significance.

In 2003, U.S. Senator Mary Landrieu of Louisiana introduced Senate Bill 323 into the U.S. Congress, to establish the Atchafalaya National Heritage Area in Louisiana. The bill requires developing and implementing a management plan for the protection, development and management of cultural and other resources of the area.⁶³ The legislation also authorizes the appropriation of \$10 million over the next 15 years, for financial assistance to organizational groups.⁶⁴

Tradition, history, geography and culture often evoke pride in one's community. This pride often melds with the physical surroundings of the landscape to establish a cultural identity unique to certain civilizations throughout human existence. When these cultures establish roots on the natural landscape, they become prime candidates for heritage area designation.

In partnership with landowners, local governments, and state and federal agencies, communities across the country are developing heritage areas with the goal of creating a healthy and prosperous community. "Heritage movements make wise use of an area's resources. Opportunities for scenic byways, walking and cycling trails, wild, scenic and recreational rivers, interpretive and educational activities, and historic buildings and districts exist in every heritage site."⁶⁵

Atchafalaya Trace Heritage Area

In 1997, the Louisiana Legislature created the Atchafalaya Trace Commission (ATC) to oversee the planning and implementation of an Atchafalaya Trace Heritage Area. The

⁶³ 108th Congress, 1st Session Senate Bill 323: *To Establish the Atchafalaya National Heritage Area, Louisiana*. Senators Landrieu and Breaux, Washington D.C.: (February 5, 2003).

⁶⁴ Deborah Reis and Peter H. Fontaine, Congressional Budget Office, "Atchafalaya National Heritage Area Act S. 323, as ordered reported by the Senate Committee on Energy and Natural Resources: Washington D.C.: (June 16, 2004).

⁶⁵ National Park Service, *Links to the Past*, Washington, D.C.: online <http://www.cr.nps.gov/landscapes.htm> (2004), viewed May 2004.

codification of the Atchafalaya Heritage Trace idea represents a tremendous commitment to the future of the Atchafalaya Basin and the inhabitants of the area, past and present.

Thirteen parishes of Louisiana encompass the heritage trace area, naturally surrounding the Atchafalaya Basin. The Louisiana Department of Culture, Recreation & Tourism administers the program under the guidance of the Office of the Lieutenant Governor.

Atchafalaya Heritage Trace, RS 25:1222, Senate Bill 112 states:⁶⁶

- (i) The Atchafalaya Basin region is an assemblage of rich and varied resources representing a unique aspect of Louisiana heritage, which can be best managed as such an assemblage through partnerships.
- (ii) The region reflects a complex mixture of people and their origins, traditions, customs, beliefs, and folkways of interest to the state and nation.
- (iii) The region's patterns of natural, scenic and cultural resource features, qualities, processes, uses, values and relationships must be conserved.
- (iv) The Atchafalaya Basin and its adjacent lands and waters offer outstanding recreation opportunities, educational experiences, and potential for scientific research.
- (v) The combination of resource patterns important to the multiple themes of the region must retain their stability, integrity, sustainability, health and attractiveness to be capable of supporting interpretation.
- (vi) The resources represented in the region must continue to be productive and economically viable, consistent with sound ecosystem management policies and practices.
- (vii) The Atchafalaya region enjoys broad support for state and national designation as a heritage area.
- (viii) Principal organizations and individuals, drawn from a broad cross section of constituencies, are willing to develop partnerships to achieve stated goals and realize a vision consistent with establishment of a heritage area.

⁶⁶ RS 25:1222, Senate Bill 112, Sec. 1221, "The Louisiana Atchafalaya Heritage Trace", Baton Rouge, LA: (1997).

- (ix) The heritage area concept enjoys the consent of local governments in the area.

The Atchafalaya Trace Commission established the Atchafalaya Trace Heritage Area in 1998. The Atchafalaya Trace Commission is currently seeking National Heritage Area designation for the Atchafalaya Heritage Trace from the U.S. Congress. The mission statement of the Atchafalaya Trace Heritage Area directs the Commission, “to interpret the relationship of the basin’s culture and environment, to conserve basin resources, and to create new sustainable cultural and eco-tourism activities.”⁶⁷

“The state, in cooperation with the U.S. Army Corps of Engineers, pledged \$250 million over a 15-year period to transform the area into a major national tourism attraction. State leadership, local governments and area businesses are working independently and in combination to develop a sustainable regional economy based on the region’s culture, heritage, nature and people.”⁶⁸

The Atchafalaya Basin Program

A companion state program, the Atchafalaya Basin Program (ABP) conserves and rehabilitates small areas of the basin demonstrating ecosystem deterioration. The Louisiana Legislature created and funded the ABP in 1998. Louisiana’s Department of Natural Resources and the U.S. Army Corps of Engineers direct the Atchafalaya Basin Program.

The Atchafalaya Basin Program works with other basin based programs, including the Atchafalaya Heritage Trace Commission addressing issues of concern to basin residents. The 2003 Atchafalaya Basin Program, Report to the Governor states:

The Atchafalaya Trace Commission will focus primarily on information and communication activities appropriate to culture, recreation and tourism while the Atchafalaya Basin Program focuses on project activity in and around the Basin. The Atchafalaya Trace Commission is pursuing

⁶⁷ Jon G. Donlon and Johnson H. Donlon, *Cypress, An Atchafalaya Basin Saga*, Louisiana Life Magazine, Vol. 15, Issue 1, 2003, p. 57.

⁶⁸ Donlon and Donlon, p. 57.

National Heritage Area designation of the Atchafalaya Basin and the Atchafalaya Basin Program supports those efforts.⁶⁹

The Atchafalaya Heritage Area Advisory Board gathers input from the Atchafalaya Basin Program, Louisiana State Department of Economic Development, U.S. Fish & Wildlife Service, Louisiana Preservation Alliance, Louisiana Cooperative Extension Service, The Sierra Club⁷⁰ and the Louisiana Audubon Council.⁷¹

This broad based support in favor of wise use of the land through stewardship, conservation, preservation, recognition and designation is guiding the way to a national effort recognizing the outstanding value of the basin to America. The combined state, national and NGO effort to obtain federal designation of the Atchafalaya Basin and acceptance of management programs for the Atchafalaya Basin supports further pursuit for international heritage designation.

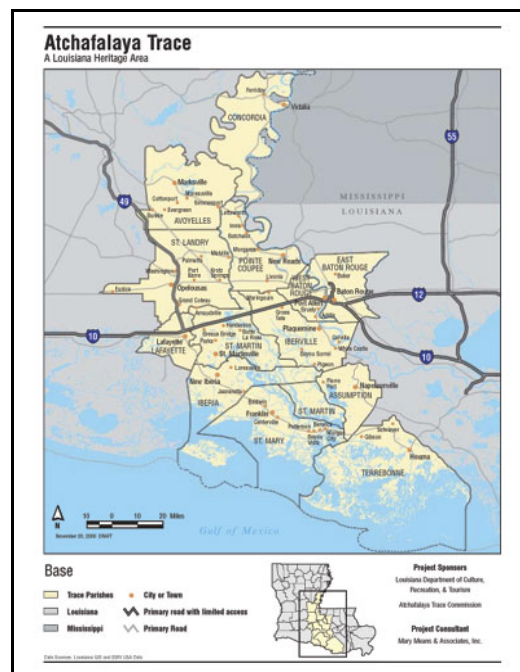


Figure 2. Atchafalaya Heritage Trace, Louisiana Dept. of Culture, Recreation and Tourism

⁶⁹ Atchafalaya Basin Program, *2003 Atchafalaya Basin Program, Report to the Governor*, Louisiana Department of Natural Resources, Baton Rouge, LA: (2003) p. 10.

⁷⁰ The Delta Chapter of the Sierra Club, *Protecting Special Places: The Atchafalaya*, Baton Rouge, LA: (2002) online <http://louisiana.sierraclub.org/atcha.htm>. viewed Feb. 2004.

⁷¹ Atchafalaya Trace Commission *Who's Leading This Effort?* LA Department of Culture, Recreation, & Tourism, Baton Rouge, LA: online http://www.atchafalayaatrace.org/what_is_the_trace.htm, viewed July 2004.

Atchafalaya Basin Nomination Inventory

Louisiana's Atchafalaya Basin is the nation's largest⁷² and most productive⁷³ river-bottomland hardwood swamp in the United States. The Atchafalaya Basin contains vast expanses of these bottomland hardwoods, cypress stands, and moss-lined swamps. The Atchafalaya Basin also contains a unique freshwater network comprised of deep rivers, meandering streams, lazy bayous, natural levees and numerous lakes.



Figure 3. Cypress-Tupelo Swamp

Millions of migratory, predatory, game, wading and songbirds fill the American Bald Cypress trees (*Taxodium distichum* var. *distichum*), Pond Cypress trees (*Taxodium distichum* var. *nutans*), Water Tupelo trees (*Nyssa aquatica*) and many others in the Atchafalaya Basin. “These cypress trees have ruled their watery domain as the lords of southern swamps, sloughs and other wetland areas for millions of years.”⁷⁴

Live Oak (*Quercus virginiana*) trees join the cypress trees in hosting the unique species of epiphytes called Spanish moss (*Tillandsia usneoides*). Inhabitants of the basin once harvested the Cypress trees and even the Spanish moss to provide economic support to the community.

⁷² USGS Fact Sheet FS-019-99, U.S. Geological Survey, Dept. of the Interior Washington D.C.: (1999).

⁷³ Gannett News Service, “Local Music Stars Unite to Celebrate Atchafalaya Basin,” *Lafayette Advertiser*, Lafayette, LA: October 10, 2003, sec. Acadiana.

⁷⁴ Gene McAvoy, Hendry County Extension Service, Florida Dept. of Agriculture, University of Florida, Gainesville, FL: (2004) online http://hendry.ifas.ufl.edu/HCHortNews_Cypress.htm, viewed July 2004.

These treasured commodities, especially the cypress timber was harvested to excess, but today local residents are more likely to photograph these natural wonders more so than harvest.

This basin includes nearly 800,000 acres of hardwoods swamps, lakes and bayous. The Atchafalaya Basin is larger than the vast Okefenokee Swamp of Georgia and Florida.⁷⁵ One-half of the migratory species in the North American flyway use the area each year. The National Audubon Society calls the Basin “an Everglades-scale natural resource that deserves the same national attention to its preservation.”⁷⁶

Cartographer William Darby surveyed Louisiana in 1815. Darby described the Atchafalaya Basin region saying, “the windings and intricate bending of its waterways, the rich green of forest trees rendered venerable by long trains of Spanish moss is a place where imagination fleets back towards the birth of nature, when a new creation started.”⁷⁷



Figure 4. Atchafalaya Basin, Atchafalaya Basin Program

The Atchafalaya Basin and associated floodways range from the northernmost town of Simmesport, Louisiana to Morgan City, Louisiana near the Gulf of Mexico. Federal Interstate

⁷⁵ GORP, *Atchafalaya National Wildlife Refuge -Sherburne Wildlife Management Area*, online http://gorp.away.com/gorp/resource/us_nwr/la_atcha.htm, viewed June 2004.

⁷⁶ National Audubon Society, *Louisiana's Atchafalaya Basin, A Threatened National Treasure*, online <http://www.audubon.org/campaign/wetland/atcha.html>, viewed December 2003.

⁷⁷ William Darby, *A Geographical Description of the State of Louisiana*, (John Melish, Philadelphia, PA: 1816).

Highway 10 laterally crosses the twenty-mile expanse of the basin between the major cities of Baton Rouge, Louisiana and Lafayette, Louisiana.⁷⁸

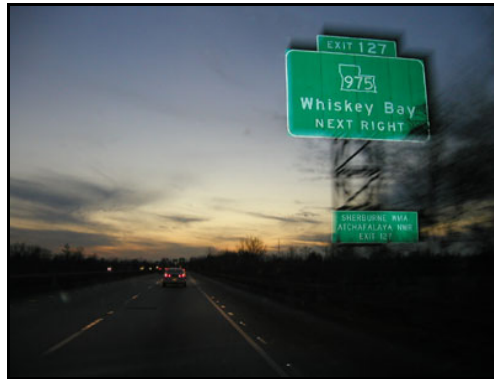


Figure 5. I-10 Federal Highway Across the Atchafalaya Basin

The word Atchafalaya (*uh-CHA-fuh-lei-uh*) originates from the Native American Tribe of Choctaws' familiar term *hacha falaia*, meaning "Long River."^{79, 80} The Long River is the Atchafalaya River. This navigable waterway meanders 170 miles through the 150-mile basin landscape to the Atchafalaya Bay. The Atchafalaya River empties into the Gulf of Mexico where a natural delta is created.

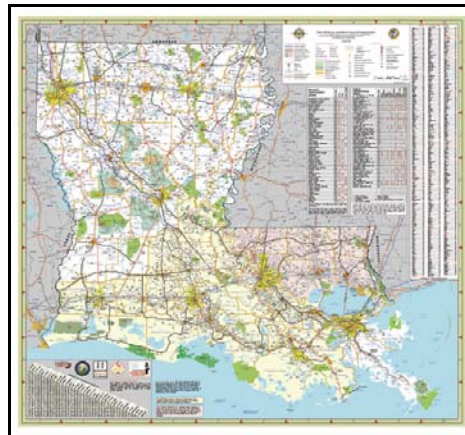


Figure 6. Official Louisiana DOTD Map

⁷⁸ The Gazetteer Online Reference, online <http://reference.allrefer.com/gazetteer/A/A07996-atchafalaya-river.html>, viewed Feb. 2004.

⁷⁹ Macon Fry and Julie Posner, *Cajun Country Guide*, Pelican Publishing Company, Gretna LA: (1992).

⁸⁰ Bridgette Duhon, *Atchafalaya Basin*, Center for Cultural and Eco-Tourism, University of Louisiana Lafayette, online http://ccet.louisiana.edu/04a_Environmental_Tour_Files/Atchafalaya_Basin_Home.html, viewed June 2004.

The Atchafalaya River serves as a major distributor of the Red River and the Mississippi River. The relationship between the Atchafalaya River and Mississippi River is tenuous. The potential of the Atchafalaya River to capture the main flow of the Mississippi River is a real danger.



Figure 7. Atchafalaya River, U.S. Army Corps of Engineers

The Louisiana Geological Survey declares,

If left in its natural state, the Mississippi River would have shifted most of its flow to the Atchafalaya course during the 1950's. Since then, however, the U.S. Army Corps of Engineers has held the Mississippi in its present course so that the United States can continue to use the river for navigation and commerce, to avoid the tremendous cost of moving industrial and other operations that depend on its present location, and to prevent flooding.⁸¹

⁸¹ Louisiana Geological Survey, Louisiana State University Baton Rouge, LA: (2000) online <http://www.lgs.lsu.edu/gengeo.htm> viewed June 2004.

In the 1960's, the U.S. Army Corps of Engineers constructed the Old River Control Structure near Simmesport, Louisiana. This water control structure prevents the Mississippi River from switching course westward through the Atchafalaya Basin.⁸²



Figure 8. Old River Water Control Lock, U.S. Army Corps of Engineers

The water control project is one of the most complex flood systems in the world. The Atchafalaya Floodway is responsible for draining floodwater from as many as 38 of the contiguous United States. The system extends from the Old River Control Structure to the Atchafalaya Bay and includes the three major basin areas, the Morganza Floodway and the East and West Atchafalaya Floodways. Combined these basin's encompass 595,000 acres of the largest contiguous tract of bottomland hardwoods in the United States.⁸³



Figure 9. Atchafalaya Basin Floodway System, Atchafalaya Basin Program

⁸² Louisiana Geographic Information Center, *Interactive Tour of Louisiana*, Louisiana State University, (Baton Rouge LA: 2000), online http://lagic.lsu.edu/SatelliteTour/MorganCity/description_files/slide0003.htm, viewed January 2003.

⁸³ U.S. Army Corps of Engineers, New Orleans District, *Atchafalaya Basin Floodway System*, New Orleans, LA: (2003). p.1.

The Atchafalaya Basin Floodway system is an integral man made engineering element in the Basin. Extensive research on the positive as well as negative effects of the water diversion and control concepts exist. This thesis acknowledges the importance of the Old River Structure to the existence of much of South Louisiana and even the Mississippi River Valley. One might argue that man's construction of this water flow structure and resulting desire to control nature, is in fact a cultural use of the land worthy of heritage preservation. However, discussions of the structure and flood control aspects are not topics for intense research in this particular project and are limited to the former explanation.

In accordance with the World Heritage Convention's criteria requiring potential World Heritage nominees to exist as establish public lands with established management plans, perhaps World Heritage Site designation might take place on one of the eight federal wildlife refuges that exist in southeast Louisiana. Specifically, two refuges provide a representative boundary for the site placement of the proposed Atchafalaya Basin World Heritage site.

Appropriately named, the Atchafalaya National Wildlife Refuge, 15,000 acres, is 30 miles west of Baton Rouge, Louisiana and one mile east of the Atchafalaya River. Established in 1986, the refuge provides for conservation and management of all fish and wildlife within the boundaries of the site. The national symbol of America, the Bald Eagle (*Haliaeetus leucocephalus*) and native species of bear, the Louisiana Black Bear (*Ursus americanus luteolus*), and the American Alligator (*Alligator mississippiensis*) inhabit the range. The federal register of threatened and endangered species includes the Eagle, Bear and the Alligator.⁸⁴

⁸⁴ *Threatened and Endangered Species Listing by State and Territory*, U.S. Fish and Wildlife Service, Washington D.C.: (July 2004), online http://ecos.fws.gov/tess_public/TESSWebpageUsaLists?state=LA, viewed July 2004.

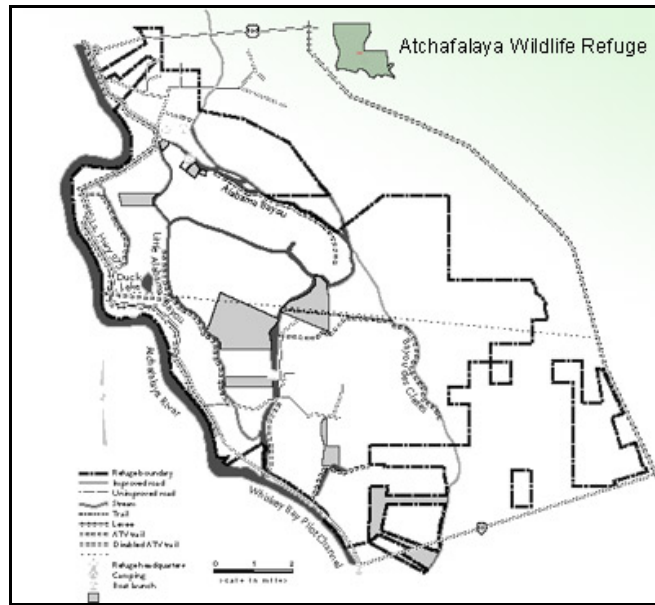


Figure 10. Atchafalaya Wildlife Refuge, Louisiana Dept. of Wildlife and Fisheries

Another suggested location might include the Bayou Teche National Wildlife Refuge. This federal refuge is located in St. Mary Parish, south of Franklin, Louisiana. This refuge contains 9,028 acres on the southern edge of the Atchafalaya Basin. The Louisiana Black Bear (*Ursus americanus luteolus*) is abundant throughout the refuge. Bayou Teche National Wildlife Refuge is the only national wildlife refuge with the specific mission of managing bears.⁸⁵

⁸⁵ *National Wildlife System*, U.S. Fish and Wildlife Service, Washington D.C.: online <http://bayouteche.fws.gov/>, viewed June 2004.

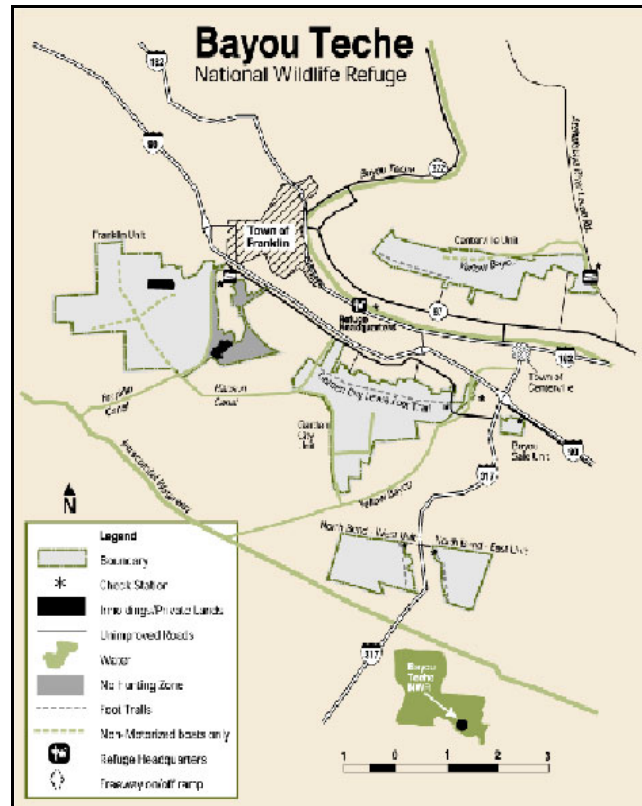


Figure 11. Bayou Teche National Wildlife Refuge, U.S. Fish and Wildlife

These two example refuges would meet the land ownership requirements of the World Heritage Convention and serve as outstanding landscapes for World Heritage Site designation. Each separately and collectively, contain magnificent species of plants and animals. These refuges also protect rare species of animals threatened with extinction. The refuges are also important representations of the natural environment of the Atchafalaya Basin.

A third option can include Poverty Point State Historic Site. This site currently is a tentative nominee to the World Heritage list. A combination World Heritage Site designation in Louisiana including the aforementioned refuges and Poverty Point would protect a large ecological complex with great cultural heritage.

Poverty Point contains earthwork, pottery and remnants of a Native American culture that lived during the first millennia, B.C. The U.S. Department of the Interior designated Poverty Point a National Historic Landmark in 1962.

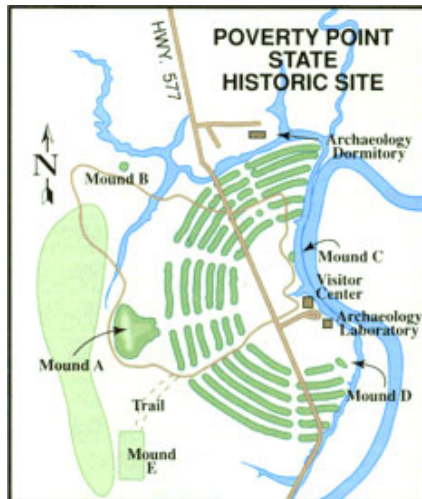


Figure 12. Poverty Point, Department of Culture, Recreation and Tourism

World Heritage designation of a multi park site is not unprecedented. The Amazon Basin World Heritage site is comprised of 3 federal refuges. The World Heritage Committee combined the parks into a single designation to create a central label for multiple sites. This concept of multiple site nomination produced a World Heritage listing for the *Amazon Basin Conservation Complex*.⁸⁶



Figure 13. Central Amazon Conservation Complex, Adapted from World Heritage Journal

This multiple site designation recognized the value of the individual parks as a whole based upon the idea of ecological corridors. These corridors provide ecosystem links throughout a larger landmass. The corridors offer protection for migration patterns as well as provide natural

⁸⁶ Jose Pedro de Oliveira Costa, Architect, University of Sao Paulo "Protecting the Amazon" *World Heritage Review*, January 2004, No.35, p.14.

resources and habitat for animals, fish and birds, dependant upon the greater landscape.

“Conservation biologists long emphasized potential benefits of connecting pieces of habitat with wildlife corridors. Lack of empirical evidence regarding corridors has often stopped land managers and community planners from recommending their use. Now two studies, show that corridors work.”⁸⁷



Figure 14. Black Bear Corridor in a Multi Site Complex, Dept. of Wildlife and Fisheries

Combining the Atchafalaya Refuge, the Bayou Teche Refuge and Poverty Point would result in an ecological corridor traversing the lower portion of the Mississippi River Valley. This corridor would provide a travel and migration corridor for the Louisiana Black Bear, as well as an extensive eco-tourism complex for recreation enthusiasts. The formation of the *Atchafalaya Basin World Heritage Conservation Complex* would undoubtedly represent the most complete attempt at preserving one the world’s great ecosystems.

Cultural Criteria (iii) and Natural Criteria (ii), (iii), (iv) of the Basin

A proposed region such as the Atchafalaya Basin can meet inscription requirements of the World Heritage List as long as that site satisfies one of the guidelines out of the six criteria in the

⁸⁷ “Do Wildlife Corridors Work? Fragments Of Open Landscape”, *Ecological Applications*, Ecological Society of America, June 1999.

natural landscape category. The Atchafalaya Basin may also gain inscription should the region meet at least one of the four criteria of the cultural landscape category.

The Atchafalaya Basin meets the World Heritage Convention's cultural criteria for nomination, specifically item (iii). Item (iii) requires cultural civilizations to:

Bear a unique or at least exceptional testimony to a cultural tradition or to a civilization, which is living or has disappeared.

The inhabitants of the Atchafalaya Basin past and present thrived and hence evolved into definable cultures of record. These settlers established communities in the Basin based upon the natural landscape and available resources of the area. The Acadian culture alone is living testimony to the traditions of a regional civilization that thrives on the natural resources of the Atchafalaya Basin.

Louisiana is a unique region of the United States. The state's cultural heritage dates back to approximately 10,000 B.C., when people first entered this region. One outstanding archaeological significant region of Louisiana is on the World Heritage site tentative nominee list. Poverty Point State Commemorative Area hosts the remains of a Native American Mississippian society (3400 B.C.), in a geographic series of mounds.

The Poverty Point site is a proposed nominee to the World Heritage Site list under culture criteria (iii). This criterion lists Poverty Point as representing an exceptional testimony to a cultural tradition and civilization that has disappeared. Similar Native American mounds also exist in the Atchafalaya Basin near St. Landry, St. Martin and St. Mary Parishes in Louisiana. The Plaquemine culture of Native Americans is most closely associated with these mounds, also dating to the Mississippi period (ca. AD 1100-1700).⁸⁸

⁸⁸ Robert W. Neuman and Nancy W. Hawkins, "Louisiana Prehistory", 2nd ed., Department of Culture, Recreation and Tourism, Louisiana Archeological Survey and Antiquities Commission, Baton Rouge, LA: (May 1993).



Figure 15. Poverty Point Mound, Louisiana State Parks

Native peoples are an established and recognizable culture in the Basin. The Atchafalaya Basin contains several hundred archeologically significant records of early Native American inhabitants.

A tribal population of 4,000 Chitimacha Indians lived in the basin during the European migration to Louisiana.⁸⁹ Historians estimate that more than 15 Chitimacha villages existed in the Atchafalaya Basin since the year 1650.

According to their tribal tradition, four sacred trees surrounding the basin originally defined the boundary of the Chitimacha homeland. The first was at Maringouin, Louisiana; the second southeast of New Orleans; another at the mouth of the Mississippi; and the last a great cypress located in present-day Cypremort Point State Park.⁹⁰ The Chitimacha Indians now reside in Charenton, Louisiana on the edge of the Basin.

Many different native tribes inhabited the basin region. The Attakapas, Tunica-Biloxi, Choctaw, Coushatta and other tribes established communities in and around the basin. Today descendants of these inhabitants live in many parts of South Louisiana. In fact, the federally

⁸⁹ U.S. Army Corps of Engineers, "The Atchafalaya Basin Project" New Orleans, LA: 2000, online <http://www.mvn.usace.army.mil/pao/bro/AtchafalayaBasinProject.pdf>, viewed July 2004.

⁹⁰ Lee Sultzman, *Chitimacha History, Chitimacha Location*, online <http://www.dickshovel.com/chi.html>, viewed March 2004.

recognized tribes of the Attakapa, Choctaw, Chitimacha and Tunica-Biloxi are valuable members of the present day basin community.

Remnants of Native Americans are scattered throughout the basin, often found in mounds rising gently out of the landscape. Currently, the Plaquemine Mounds Archaeological Project (PMAP) administered by the University of Louisiana at Lafayette researches these Indian mound sites.

These historic archaeological sites deserve enhanced protection from an international community of scientists. The official *Louisiana Comprehensive Historic Preservation Plan* considers, “loss of archaeological sites from vandalism, looting, shifting river channels, coastal erosion, subsidence, wave and storm damage”⁹¹ a serious issue threatening significant historical locations. Despite the work of several research groups and institutions, these sites remain at risk for looting.⁹²



Figure 16. Plaquemine Mound, ULL PMAP

Although many cultures call the basin home, the French Acadians have the deepest connection to the landscape. Past generations of Acadian people, as they do today, depended upon the wet and wild Atchafalaya Basin for survival.

⁹¹ *Louisiana Comprehensive Historic Preservation Plan*, Division of Historic Preservation, Office of Cultural Development Baton Rouge, LA: October 2001.

⁹² Mark Rees, Lance Blanchard, & Renee Durio, “Archaeology Field Sites at Three Sites in St. Martin and St. Mary Parishes”, *Louisiana Archaeological Society Newsletter*, (Spring 2004) Vol., 31, No.1 p. 16.

In 1755, the British forcefully exiled French settlers from Acadia, Nova Scotia. *Le Grand Dérangement* also known as *the Great Deportation* scattered Acadian refugees throughout colonial America. Many Acadians made their way to the swamps of southern Louisiana. In December 2003, Governor General Adrienne Clarkson, representing Canada's head of state, declared the Crown's acknowledgement of the event (but without an apology) and designated July 28 as *A Day of Commemoration of the Great Upheaval*.⁹³

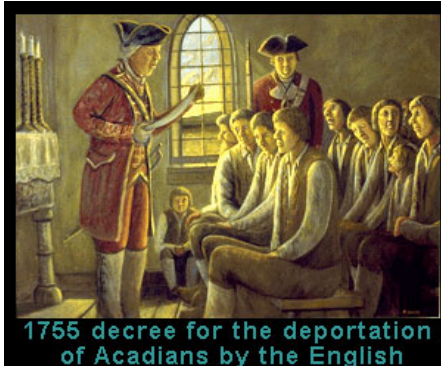


Figure 17. Portrayal of 1755 Decree, Nelson Surette Galleries

In 1847, Henry Wadsworth Longfellow wrote poetically of the Acadian's historic journeys in his prose *Evangeline*. Longfellow immortalized the tragedy of the Acadian exile with a historically accurate portrayal of the suffering of the Acadians. Today, the Longfellow State Park, southwest of the Basin is home to the Acadian memorial located in St. Martinville, Louisiana.



Figure 18. Acadian Memorial in St. Martinville, Longfellow State Park

⁹³ R.A. Leblanc. "Les Migrations Acadiennes," *Cahiers de géographie du Québec*, Montreal, Quebec: (April 1979) vol. 23, no 58, p. 99-124.

Records of Acadian people settling throughout the Atchafalaya Basin date to 1764. Those first arrivals consisted of 20 Acadians. They settled along the Mississippi River around the boundary of St. John and St. James parishes. According to Professor of History at the University of Louisiana at Lafayette Dr. Carl Brasseaux, between the years 1764 and 1788 about 2,500 to 3,000 Acadians arrived in the colony of Louisiana.⁹⁴

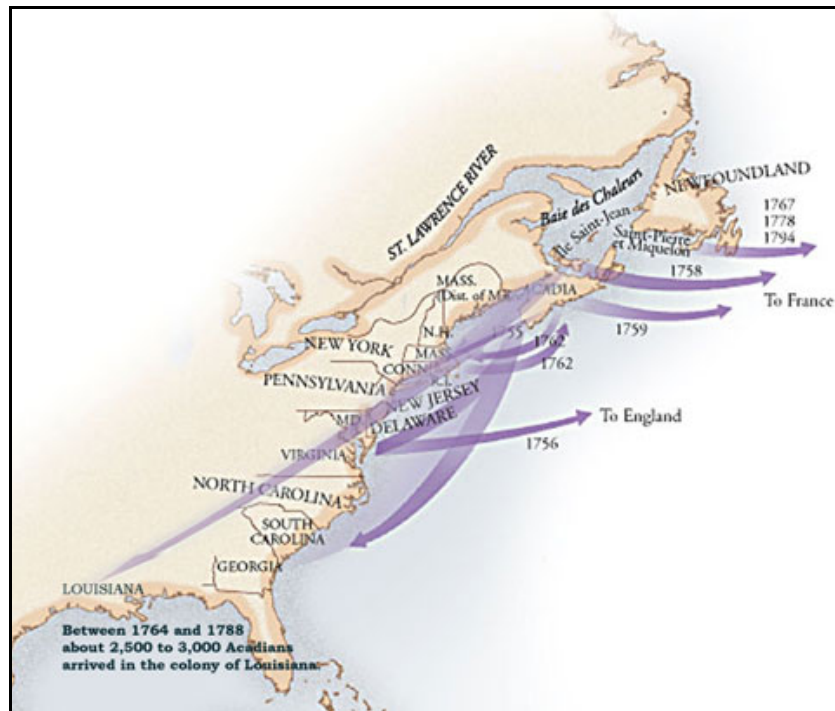


Figure 19. Acadian Deportation Routes, adapted from Canadian Geographic Magazine

These exiles and refugees settled along the Bayou Teche and Bayou Lafourche in the Atchafalaya Basin. In time, more Acadians and French-speaking immigrants settled the basin range. These people established a unique culture where the Acadian language, architecture, customs, religions and traditions thrived in the rich ecosystem of the Atchafalaya Basin. From trappers, farmers, hunters, commercial fishers to musicians, artists and entrepreneurs, scholars and scientists, the Acadian's became an integral part of basin heritage.

The Acadian influence upon the landscape of the basin is most noticeable in their ability to settle a wilderness area previously undeveloped by any immigrant to the United States territory.

⁹⁴ Carl Brasseaux, "Acadian to Cajun: Transformation of a People", 1803-1877, Oxford, MS: (Mississippi University Press, 1992).

The Acadian heritage imprint is recognizable in modern day life. Healthy indications of this culture exist today as part of the landscape of the area. Building styles featuring elevated homes designed to keep the cyclic floods of the basin from inundating living quarters is now incorporated into a distinctive building style. Homes with tall windows and front porches helped cool the home and steep pitched roofs help shed the rains of the swamp.



Figure 20. Acadian Creole Cottage ca. 1800

These architectural elements are part of the results of the Acadian settlement. The architectural vernacular of the 1790's Acadian style cottage is prevalent throughout south Louisiana development.⁹⁵ Newer construction also incorporates this style of architecture in many commercial buildings of Louisiana.

⁹⁵ Glenn R. Conrad and Carl Brasseaux, "Founding of New Acadia," Center for Louisiana Studies USL, History Series #11 "The Cajuns - Essays on Their History and Culture," Hebert Publishing, (Rayne LA: 1983).



Figure 21. Acadian Architecture in New Construction 2004

Acadians continue to live and work within the Atchafalaya Basin of Louisiana and are at the heart of the community. The 1990 United States census revealed that nearly half of the parishes of the state have residents of French or Acadian heritage. In the 2000 census, 88,000 people in Louisiana claimed either Cajun or Acadian heritage, and 111,000 claimed French Canadian heritage.

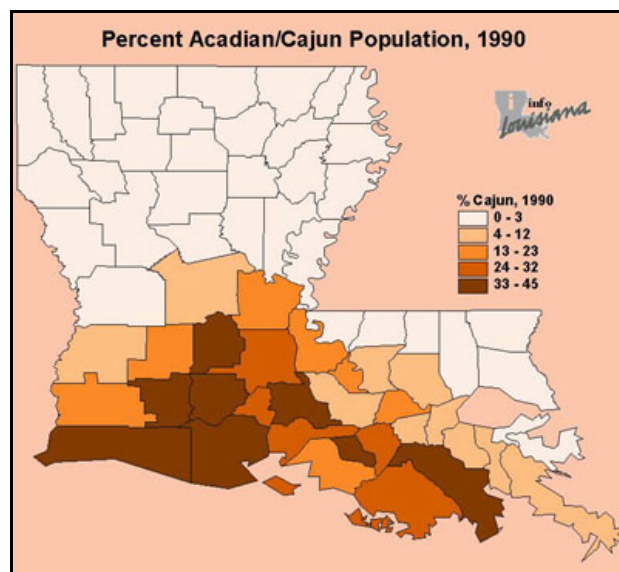


Figure 22. Percent Claiming Cajun French Ancestry, Atlas LSU

In fact, their culture is so prevalent that the state government officially recognizes the seven parishes occupied by these descendants as the region named *Acadiana* in honor of their ancestry. Acadiana even has an officially recognized flag. The Louisiana Legislature made this flag the official flag of the Acadiana area in 1974. The Cajuns are important people that continue to honor their personal heritage as well as that of the natural landscape of the region.



Figure 23. Official Flag of Acadiana, CODOFIL

In August 1994, three hundred thousand Acadians from around the world reunited in southeastern New Brunswick for the first World Congress of Acadians. Five years later, in August of 1999 the World Congress of Acadians convened east of the basin in Lafayette, Louisiana. During August of 2004, over one million Acadians from around the world, including Louisiana, reunited in Nova Scotia for the third World Congress of Acadians.

The deportation of the Acadians is a nationally and internationally recognized historical event of great cultural significance. The Acadians settled and thrived in Louisiana to establish a heritage and culture that is celebrated in many ways. This culture is an exceptional testimony to a cultural tradition and a civilization that deserves international preservation.

The Native American cultures of the Atchafalaya Basin and Poverty Point are documented archaeological science. These cultures, many of them prehistoric, have descendants living throughout Louisiana. These native peoples represent a society of settlers that created intricate communities with advanced talents. World Heritage Site designation for these valuable archaeological mounds and documented cultures will provide needed international protection for these sites.

The Atchafalaya Basin meets the World Heritage Convention's natural criteria for nomination, specifically items (ii), (iii), (iv). Item (ii), requires sites to demonstrate development of terrestrial, freshwater, coastal, marine ecosystems and:

Be an outstanding example representing significant ongoing ecological and biological process in evolution and development of terrestrial, freshwater, coastal, marine ecosystems and communities of plants or animals.

The Atchafalaya Basin first began to form around 900 A.D., when the ancient Mississippi River continually altered course. Much of the landscape of south Louisiana formed during the Holocene epoch (11,000 years ago to present) during the Cenozoic Era.⁹⁶

When ice covering the earth melted, glacial expanses receded leaving deep channels on the landscape. Rivers and waterways formed in the wake of the glacial melt, forming the modern Mississippi River Valley and Delta.



Figure 24. Louisiana Satellite Image, Atlas LSU

“The Mississippi River has had a profound effect on the landforms of coastal Louisiana. The entire area is the product of sediment deposition following the latest rise in sea level about 5,000 years ago.”⁹⁷

⁹⁶ Appendix A, Document #RRP_DPEIS, NOAA, Washington D.C.: online <http://www.darp.noaa.gov/partner/rppp-la/pdf/la2041app.pdf>, viewed July 2004.

The deltas and many associated rivers, like all natural systems, are continually in a state of change, evolving toward a new set of conditions.⁹⁸ The region's plant and animal communities reflect the geomorphic process of the basin.

John McPhee, author of *The Control of Nature* writes,

Southern Louisiana exists in its present form because the Mississippi River has jumped here and there within an arc about two hundred miles wide, like a pianist with one hand frequently and radically changing course, surging over the left or the right bank to go off in utterly new directions. Always it is the river's purpose to get to the Gulf by the shortest and steepest gradient.⁹⁹

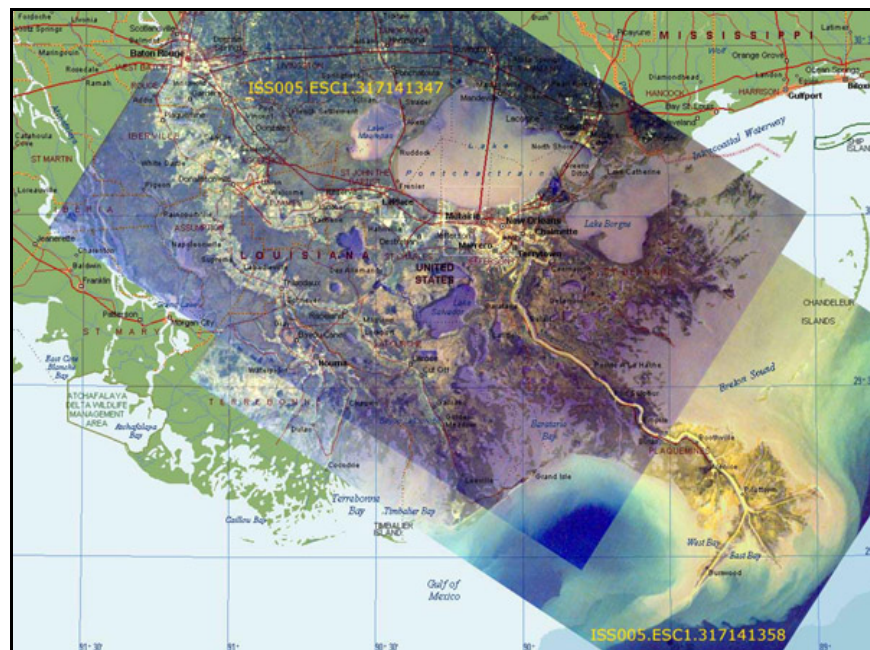


Figure 25. Mississippi River Formation of Louisiana Geology, NOAA

“The Mississippi River Basin drains 41 percent of the contiguous United States and a portion of Canada. The Mississippi River alluvial plain (width of 25 to 90 miles) is comprised of

⁹⁷ NASA, ISS Earthcam, The Mississippi River Delta, Washington, D.C.: <http://www.earthcam.ucsd.edu/public/images/Louisiana.shtml>, viewed June 2004.

⁹⁸ *Louisiana Coastal Wetlands Restoration Plan*, USGS National Wetlands Research Center Lafayette, LA: (November 1993).

⁹⁹ John McPhee, “The Control of Nature,” Farrar Straus & Giroux; 1st ed., (August 16, 1989), p. 5.

numerous landforms, created by successive river course switching.”¹⁰⁰ Natural low, broad levees emerge during random and cyclic flooding of the basins. These levees form along the major river system because of overflow from the Mississippi and Atchafalaya Rivers.

The basin is a freshwater habitat similar to that of the Florida Everglades. The climate is temperate to sub-tropical with mild winters and hot summers. This environment provides a fertile habitat for wildlife, plants, fish, birds, amphibians and reptiles. At the southernmost tip of the Basin, the Atchafalaya Delta forms vital wetlands for nesting birds and fragile estuaries for spawning fish and shrimp.

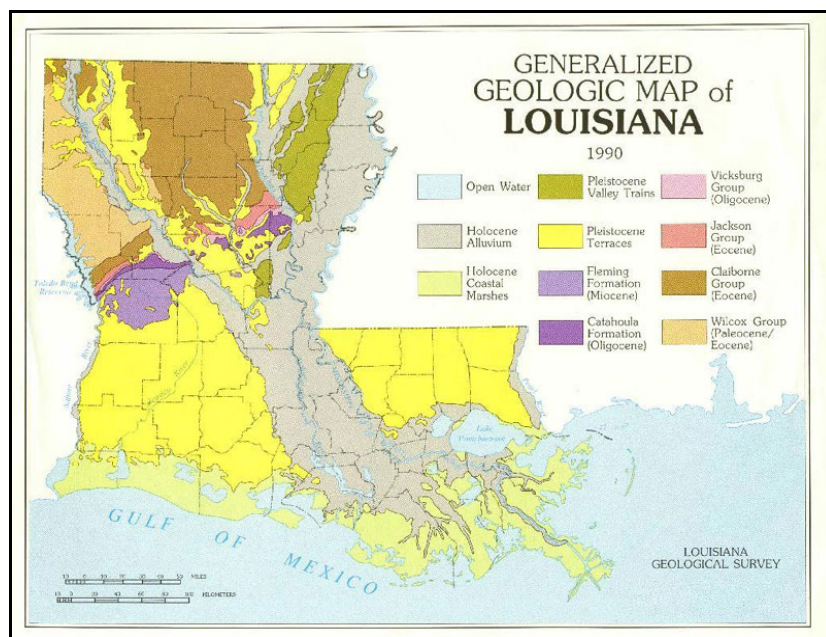


Figure 26. Generalized Geology, Louisiana Geological Survey

¹⁰⁰ *Louisiana Coastal Wetlands Restoration Plan*, USGS National Wetlands Research Center, Lafayette, LA: (November 1993).

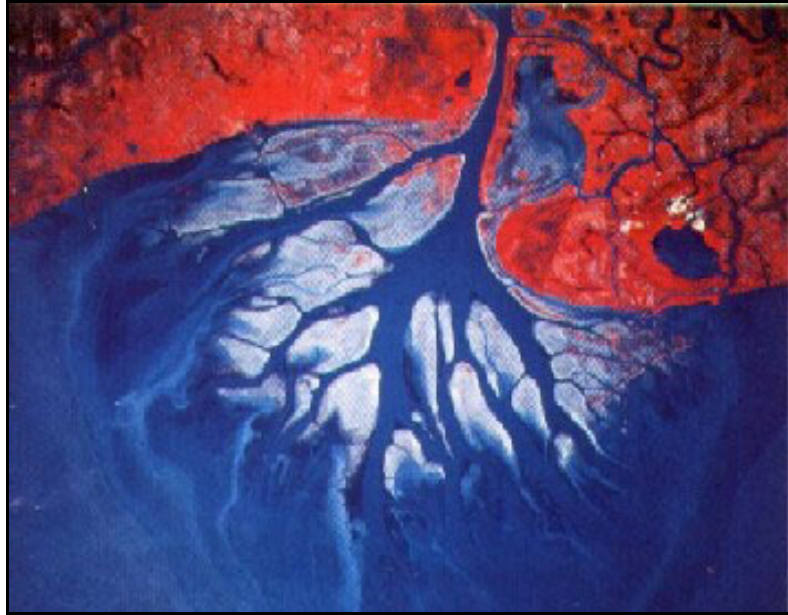


Figure 27. Atchafalaya Delta Formation, Atlas LSU

Maintaining the basin's freshwater aquatic and marine coastal ecosystem is a major effort in Louisiana. All levels of government and several major Universities located within the state explore and research several different flora and fauna of the Basin. Researchers conduct studies on invasive plant species, habitat management, aquaculture, engineering and more with the Basin's overall health in mind.

Terrestrial studies focusing upon wetland loss in Southern Louisiana are a popular conservation concern amongst politicians, recreational enthusiasts and residents. "Louisiana has 25 percent of the forested wetlands and 40 percent of the coastal wetlands in the 48 contiguous States but accounts for 80 percent of wetlands losses."¹⁰¹

¹⁰¹ U.S. Geological Survey, *USGS Fact Sheet FS-019-99*, Dept. of the Interior, Washington D.C.: (December 1999).

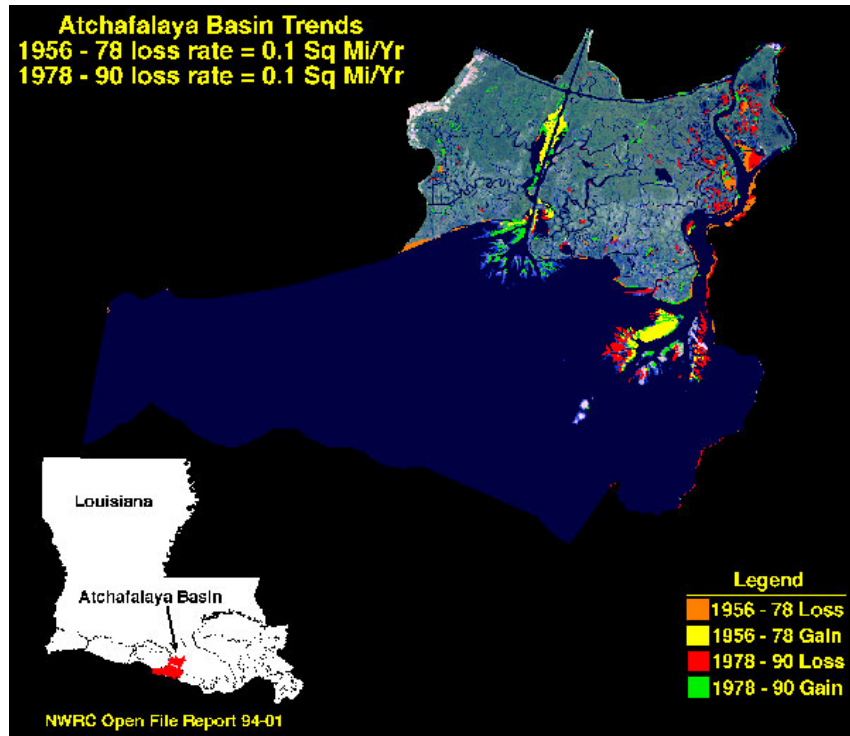


Figure 28. Atchafalaya Wetland Loss Trends, National Wetland Research Center

“Much land loss and marsh deterioration along the Louisiana coast has occurred where fresh marshes and swamps have been subjected to marine tidal processes, usually the result of subsidence and exacerbated by canal dredging.”¹⁰² The Federal and State Wetlands Task Force under the authority of The Coastal Wetlands Planning, Protection and Restoration Act of 1992, manage a multi agency effort to study and control wetland loss and coastal erosion.

The Atchafalaya Basin has the slowest rate of wetland loss compared to the Chenier Coast below Lake Charles, Louisiana or the Mississippi River Delta below New Orleans, Louisiana.¹⁰³ The Atchafalaya River is actually forming some wetlands near the Gulf of Mexico, as a natural delta emerges at the mouth of the river but loss continues at a faster rate than creation. The loss of wetland acreage within the basin as well as along the Atchafalaya Delta threatens to upset balance of the ecosystem. “The Atchafalaya Basin is unique among the basins because it has a

¹⁰² Coast 2050: *Toward a Sustainable Coastal Louisiana*, Louisiana Coastal Wetlands Conservation and Restoration Task Force, Wetlands Conservation, Restoration Authority, Louisiana Department of Natural Resources, Baton Rouge, LA: (1998).

¹⁰³ Coast 2050, par. 4.

growing delta system with nearly stable wetlands. Wetland loss is minor in the areas north of Atchafalaya Bay when compared to the other basins.”¹⁰⁴

The Atchafalaya Basin meets the World Heritage Convention’s criteria for a natural landscape nomination, specifically items (iii). Item (iii), describes exceptional natural beauty and aesthetic importance requiring sites to:

Contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance.

The Basin is a living canvas for artists, photographers and recreational enthusiasts. World-renowned artists such as John James Audubon found an unmatched beauty in the scenery of Louisiana. Beginning in 1820, Audubon painted 80 of his wildlife masterpieces, north of Baton Rouge; many were birds that heavily populate the Atchafalaya Basin region. “Audubon was cruising in and out of the bays and bayous of southern Louisiana-a paradise of birds. It was here that Audubon found some of the finest collecting and observation in all his journey.”¹⁰⁵



Figure 29. Audubon's Louisiana Heron, Audubon Gallery

¹⁰⁴ Coast 2050, par. 3.

¹⁰⁵ Samuel Wood Geiser, *Naturalists of the Frontier*, University Press, Southern Methodist University, Dallas, TX: (1948).

Travelers, locals and residents have kept journals of the scenic beauty of the Atchafalaya Basin for centuries. In 1842, an anonymous writer described the Atchafalaya Basin,

“The huge trunks of the cypress trees, which stand four or five feet asunder, shot up to a height of fifty feet, entirely free from branches, which then, however, spread out at right angles to the stem, making the trees appear like gigantic umbrellas, and covering the whole morass with an impenetrable roof, through which not even a sunbeam could find passage. Within this realm could be found thousands, tens of thousands, of birds and reptiles, alligators, enormous bullfrogs, night owls, anhinga, herons (all of whose dwellings were in the mud of the swamp or its leaky roof, (and) now lifted up their voices bellowing, hooting, shrieking, and groaning. Bursting forth from the obscene retreat in which they had hitherto lain hidden, the alligators raised their hideous snouts of the green coating of the swamp, gnashing their teeth, and straining toward us, while the owls and other birds circled round our heads, flapping and striking us with their wings as they passed.”¹⁰⁶



Figure 30. Cypress-Tupelo Swamp and Spanish Moss, Louisiana Tourism Department

Several nationally and even internationally known artists locate their studios in the Atchafalaya Basin. Contemporary artists Francis Pavy, George Rodrigue and Floyd Sonnier as

¹⁰⁶ Jim Bradshaw, “Atchafalaya Basin is a World Set Apart: Wetland Covers Nearly a Million Acres”, Lafayette: LA *Daily Advertiser*, (July 29, 1997).

well as photographers Greg Giourad and C.C. Lockwood use the Basin and associated plant and wildlife as subjects for work.



Figure 31. George Rodrigue's Blue Dog Oak Trees, Rodrigue Gallery

The Atchafalaya Basin meets the World Heritage Convention's natural criteria for nomination, specifically items (iv). Criteria (iv) defines significant natural habitats as:

Containing the most important and significant natural habitats for in situ (in the original or correct place built in relation to its surrounding)¹⁰⁷, conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

There are at least 300 species of birds in the Basin. The nation's largest colony of American woodcock (*Scolopax minor*) winters in the Atchafalaya Basin next to the Louisiana Heron (*Egretta tricolor*), many species of egrets, flocks of various ibis species, Anhinga (*Anhinga anhinga*) and the majestic Great Blue Herons (*Ardea herodias*). Anecdotal reports sighting the endangered, perhaps even extinct Ivory Billed Woodpecker (*Cantpephiliis principalis*) circulate amongst the Basin community. The American Bird Conservancy identifies the Atchafalaya Basin as a *Globally Important Bird Area*.¹⁰⁸

¹⁰⁷ Oxford Advanced Learner's Dictionary. Oxford University Press (2003).

¹⁰⁸ "Birding on Indian Bayou" U.S. Army Corps of Engineers, New Orleans, LA (2000).



Figure 32. Ivory Billed Woodpecker, National Geographic

The Endangered Species Act recognizes “endangered and threatened species as components of our ecosystem and stresses that integrity of ecosystems hinges on maintaining these species of concern.”¹⁰⁹ The basin hosts many threatened or endangered animal and fish species but two animals in particular are of great importance to the United States.



Figure 33. Eagle Nest in Atchafalaya Basin, Vernon Wright LSU

The image of a Bald Eagle (*Haliaeetus leucocephalus*) is the national emblem of America. Once threatened with extinction, these large birds are rebounding in large numbers nonetheless they remain protected by federal law. These raptors are birds of aquatic ecosystems preferring

¹⁰⁹ Michael J. Chamberlain, Assistant Professor, School of Renewable Natural Resources, “Restoring the Louisiana Black Bear in Louisiana” *Louisiana Agriculture* Baton Rouge, LA: Vol. 45, No. 2, (Spring 2002), p.12.

estuaries, large lakes and major rivers.¹¹⁰ Bald Eagles and nesting pairs inhabit the fertile freshwater ecosystem of the Atchafalaya Basin. Today about 150 active nests exist. Most are between the Mississippi River and Vermilion Bay¹¹¹ (the Atchafalaya Basin).

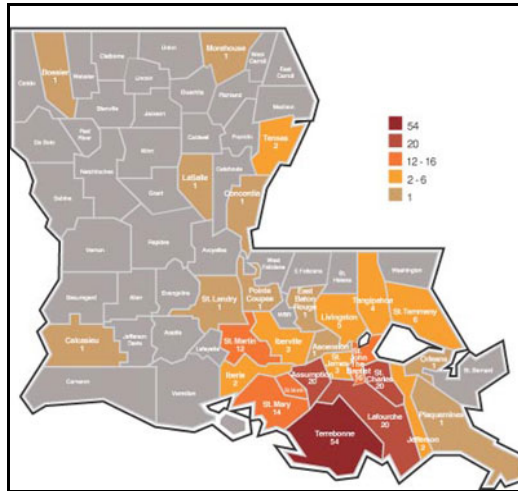


Figure 34. 1999 Eagle Population, Vernon Wright LSU

The Louisiana Black Bear (*Ursus americanus luteolus*) is threatened and without proper action has the potential to go extinct.¹¹² According to scientist, about 150 of the bears live in the Atchafalaya Basin, “an area fast becoming encroached upon by urban sprawl.”¹¹³

¹¹⁰ David B. Marshall, Paul R. Nickerson, "The Bald Eagle: 1776-1976" *National Parks & Conservation* 1976 p. 14.

¹¹¹ Vernon L. Wright, Tom Hess, “Bald Eagles Make Comeback in South Louisiana” *Louisiana Agriculture*, Baton Rouge LA: (2001), online

http://www.lsuagcenter.com/Communications/LouisianaAgriculture/agmag/45_2_articles/baldeagles.asp, viewed July 2004.

¹¹² Michael J. Chamberlain, Assistant Professor, School of Renewable Natural Resources, “Endangered Species Act”, Louisiana Agriculture, Baton Rouge LA: (Spring 2002), Vol. 45, No. 2, p. 12.

¹¹³ Linda Foster Benedict, “Three Louisiana Black Bear Cubs, Mama Relocated to Save Threatened Species” *Louisiana Agriculture*, Baton Rouge LA: (Spring 2002), Vol. 45, No. 2, p. 10.



Figure 35. Louisiana Black Bear Research, LSU AgCenter

U.S. President Theodore Roosevelt made the Louisiana Black Bear famous when he refused to shoot a small bear cub on one of his hunting trips to the Mississippi Valley. The *Teddy Bear* probably takes its name from this event.¹¹⁴ When toy makers heard of the president's act of mercy, they created this toy bear and named it "Teddy." The toy animal *Teddy Bear* is ingrained into American culture. Although the toy bears vary in shapes and colors, the origin of the toy remains part of the legacy of the Louisiana Black Bear.

¹¹⁴ National Museum of American History, Smithsonian Institution, Washington D.C.: 2004, online <http://americanhistory.si.edu/notkid/t.htm>, viewed July 2004.

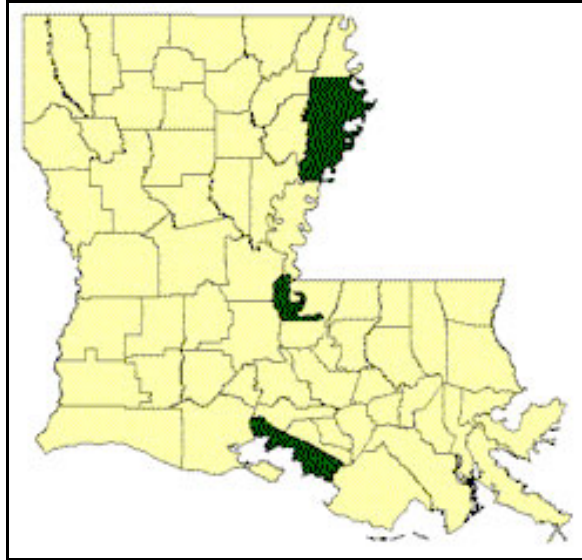


Figure 36. 2000 Black Bear Habitat, Dept. of Wildlife and Fisheries

Other examples of diverse wildlife, such as the bobcat, deer, turkey, nutria, mink, fox, muskrat, beaver, otter and raccoon fill the Basin. Additionally, sixty-five other species of reptiles and amphibians, salamanders, frogs, lizards, snakes, turtles and tortoises live in the Basin.¹¹⁵

The basin is also the habitat for the American Alligator (*Alligator mississippiensis*). Once a federally listed endangered species, alligators thrive in warm wetland ecosystems similar to the Atchafalaya Basin.¹¹⁶ Abundant throughout the Basin, the alligator remains federally listed as a threatened species. Federal and state law protects the alligator.

More than 85 species of fish live in the basin, and their populations frequently exceed 1,000 pounds per acre. Freshwater crustaceans provide significant economic benefits to the community.¹¹⁷ Red swamp crawfish (*Procambarus clarkii*) and white river crawfish

¹¹⁵ Jim Bradshaw, "Atchafalaya Basin is a World Set Apart: Wetland Covers Nearly a Million Acres", Lafayette: LA Daily Advertiser, (July 29, 1997).

¹¹⁶ "American Alligator Fact Sheet" Environmental Outreach & Education Program of Savannah River Ecology Laboratory, University of Georgia, (April 2001) online <http://www.uga.edu/srel/gators.htm>, viewed July 2004.

¹¹⁷ "Refuge Profile," Atchafalaya Basin National Wildlife Refuge, U.S. Dept. of Wildlife and Fisheries, online <http://refuges.fws.gov/profiles/recEdMore.cfm?ID=43614>, viewed June 2004.

(*Procambarus acutus*) are found in many bodies of water and are concentrated within the overflow basins of the Atchafalaya River.¹¹⁸

Comparative Plans

The Poverty Point State Commemorative Area is located in West Carroll Parish of Louisiana. This pre-Columbian site is five miles or 8 kilometers northeast of Epps, Louisiana on Bayou Macon.

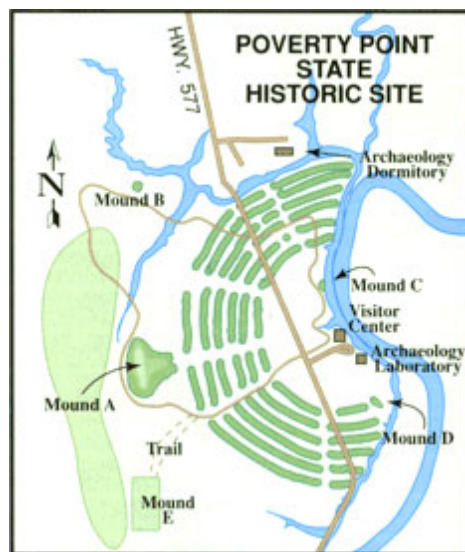


Figure 37. Poverty Point, Louisiana State Parks

In 1962, the U.S. Dept. of the Interior designated Poverty Point as a National Historic Landmark. Poverty Point is currently on the *Tentative List for Nomination to World Heritage Convention*. The tentative list is a formal acknowledgement by the World Heritage Committee that entitles a site to consideration for World Heritage designation.

The site is under consideration based upon the World Heritage Convention's cultural criteria, "(iii) bearing an exceptional testimony to a civilization which is living or has disappeared."¹¹⁹ Poverty Point is an archaeological sight representing the remains of the main trade center and ceremonial grounds of a definable Native American culture.

¹¹⁸ NOAA, Document #RRP_DPEIS.doc, Appendix A, Washington D.C., online <http://www.darp.noaa.gov/partner/rpp-la/pdf/la2041app.pdf>, viewed July 2004.

¹¹⁹ National Park Service, *Links To The Past: Cultural Resources of North America*, Washington D.C.: online <http://www.cr.nps.gov/worldheritage/list1.htm>, viewed July 2004.

Poverty Point contains some of the largest prehistoric earth works in North America.¹²⁰ Sophisticated communities flourished in the area from 1,500-600 B.C.¹²¹ The site contains a geometric earthwork complex, consisting of 11.2 miles of raised terraces arranged in six concentric octagons, and Poverty Point Mound, a bird-shaped ceremonial structure.¹²²



Figure 38. Poverty Point Mounds, Firespeaker Photos

“The area is considered by some researchers to be as archaeologically significant as England’s Stonehenge - and only 1 percent of the mound has been excavated.”¹²³ Eventual placement of Poverty Point on the list of World Heritage sites is virtually assured. Similar Native American sites, e.g., the Cahokia Mounds of Illinois are listed as World Heritage sites. Cahokia was listed as a World Heritage Site in 1982.¹²⁴

Everglades National Park is located on the Florida peninsula, along the Gulf of Mexico. The Everglades National Park was inscribed onto the World Heritage list in 1979 under the natural criteria of (i), (ii), and (iv).

¹²⁰ National Park Service, *Poverty Point, National Monument Louisiana*, Washington D.C.: online <http://www.nps.gov/popop/>, viewed July 2004.

¹²¹ Jon L. Gibson, *Poverty Point, A Terminal Archaic Culture of the Lower Mississippi Valley*, 2nd ed., University of Southwestern Louisiana, Lafayette LA: (May 1996).

¹²² allRefer.com, Reference North America Gazetteer, “Poverty Point State Commemorative Area”, online <http://reference.allrefer.com/gazetteer/P/P07722-poverty-point-state-commemorative-area.html>, viewed July 2004.

¹²³ Gay N. Martin, *The St. Petersburg Times* “The Gumbo that is Louisiana: From the Agrarian North to its Cajun South and Beguiling New Orleans, the State Offers a Mix of Cultures, Geographies and Culinary Delights.” St. Petersburg, FL: (April 18, 2004).

¹²⁴ Sally A. Kitt Chappell, “Cahokia: The Symbolic Language of Landscape Architecture” *Landscape Architecture* Washington, D.C.: Vol. 93, No. 5, May 2003, p. 28.



Figure 39. Florida and Everglades National Park Map, GORP

The Everglades National Park habitat resembles the ecosystem of the Atchafalaya Basin. Both are vital freshwater aquatic habitats with diverse plant and animal life. In fact, many of the bird species found in the Everglades are also found in the Basin region. Brackish water mangrove swamps and large flats of sea grass differentiate the Everglades from Louisiana's Atchafalaya Basin.

Similar to the Atchafalaya Basin, the Everglades World Heritage site is filled with cypress swamps, pinelands, and hardwoods as well as estuarine environments. The Everglades Park also offers habitat to more than 30 endangered species.¹²⁵ Two of these species, the Bald Eagle and the American Alligator (threatened) are also found in the Atchafalaya Basin.

The Everglades National Park World Heritage site is an internationally important natural landscape. The ecosystem is one of the more biologically diverse on earth. The Atchafalaya Basin is an equally diverse ecosystem. The exceptional beauty and richness of the Atchafalaya Basin habitat merits equal protection under the preservation umbrella of the World Heritage Convention.

¹²⁵ Appendix E, Plaintiff's Exhibit 16 from Plaintiff's Motion for Partial Summary Judgment in *United States v. SFWMD*, 88-1886-CIV-HOEVELER, Everglades National Park World Heritage Submission, UNESCO, Paris: February 1979.

Conclusion

The Atchafalaya Basin merits a complete conservation management program, including designation as a World Heritage Site. The Louisiana landscape called the Atchafalaya Basin meets the criteria outlined by the Convention Concerning the Protection of World Cultural and Natural Heritage. The Basin is one of the world's most outstanding landscapes.

Speaking to the American Society of Landscape Architects in 2002, Former Secretary of the Interior Bruce Babbitt said, "New landscape protections reflect more recent understanding that, to truly protect natural and cultural values, we must protect the larger landscapes-whole sections of ecosystems and communities that contain them."¹ Secretary Babbitt's statement reaffirms the general position advocated by this thesis project.

Landscape study varies greatly. Historically, conservationists, recreation enthusiasts, preservationists, scientists and even artists set the goals for protection of earth's great landscapes. These parties were essential elements in the formation of preservation policy. Today, the resulting policy and laws of our communities establish management goals, objectives and even guidelines for the actual use of the lands. National and regional support for these management initiatives preserves America's great landscapes. International landscape preservation is a logical fulfillment that represents global recognition and protection of these sites.

In 1972, the United Nations Educational, Scientific and Cultural Organization (UNESCO) formally established the concept of international landscape preservation through the World Heritage Convention. This treaty is an international instrument for preservation of the world's most outstanding cultural and natural landscapes.

The treaty offers state parties the opportunity to nominate sites within their borders to a select list of what humanity collectively considers the most significant and environmentally important landscapes of earth. Geological formations such as the Everglades and the Great Smokey Mountains are listed on the World Heritage Site roster. Other sites that recognizing the impact

¹ Michael Leccese, "Nurturing a Fragile Giant" *Landscape Architecture*, Washington D.C.: May 2003, Vol. 93, No. 6, p. 52.

of humans upon the natural landscape such as the Taos Pueblos of New Mexico, Egyptian Pyramids and even the Statue of Liberty in New York are on the World Heritage Site list.

An understanding of cultural and natural landscape protection by the many disciplines of landscape research is essential to identification of the sites. Archaeologists, artists, environmental planners and scientists as well as architects, engineers and landscape architects are joining to protect these internationally important sites.

The World Heritage Convention of 1972 provides a methodology for these researchers to use when nominating sites for inclusion to the World Heritage Site list. The treaty outlines criteria that each site must fulfill, partially or wholly. The Atchafalaya Basin meets certain specific criteria detailed for cultural and natural sites. Justification for nomination is based upon these criteria discussed in this thesis research project.

The Atchafalaya Basin of Southern Louisiana is a potential site for nomination. The cultural history of the region is told through the Acadian people and is uniquely maintained in the Basin. These French Canadian exiles sought refuge in the swamps and marshes of the Atchafalaya Basin as far back as 1755. The Acadians joined the Native Americans of the Basin, sharing the bounty of the freshwater aquatic ecosystems of the Mississippi and Atchafalaya Rivers.

Alligator, deer, turkey and even the endangered Louisiana Black Bear roam the Atchafalaya Basin. The biologically diverse ecosystem hosts game birds, wading birds, birds of prey and even birds, which may in fact be extinct. The Bald Eagle nests and lives in the Atchafalaya Basin, feeding upon the many fish species of the swamps, lakes and bayous. Recreational and commercial interests enjoy the bounty of the Atchafalaya waters by harvesting largemouth bass, crappie, and crawfish from the basin.

The Atchafalaya Basin is one of the world's outstanding landscapes. The Basin meets the requirement criteria of the World Heritage Convention in the cultural specification and the natural specification. The culture of the inhabitants represents a traditional civilization persecuted and settled in one of the world's most outstanding landscapes.

The Atchafalaya Basin is an outstanding example of an ongoing ecological and biological process, which has formed one of the world's most diverse freshwater aquatic ecosystems. The superlative natural beauty of the river basin of cypress-tupelo swamps filled with wildlife and migratory birds is exceptional. This ecosystem is a significant natural habitat of such outstanding universal value; science and conservationists invest time and public money to preserve the Atchafalaya Basin for all of humanity.

The World Heritage Convention details minimum criteria defining the world's outstanding landscapes. The Atchafalaya has a tremendous amount of evidence fulfilling these criteria. Further research detailing the immense numbers of animal and plant species will provide further evidence of the Atchafalaya Basin's diverse ecosystem worthy of preservation. Additionally, further research into the existence of Indian cultures and the establishment of the Acadians in the basin will also strengthen the justification for World Heritage Site designation.

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Vita

Mitchell Coffman is a native of Lafayette Louisiana, which is located 30 miles east of the Atchafalaya Basin. He is the son of Vernon and Mattie Coffman. Mitchell graduated Louisiana State University (LSU) in 1987 with a Bachelor of Arts in speech communication. After graduation he joined United States Senator John Breaux's Washington D.C., staff. He worked on Capitol Hill before joining the staff of Louisiana's Lt. Governor Melinda Schweggman in 1991. He served as Communications Director for the Lt. Governor and the Department of Culture, Recreation and Tourism for three years.

He worked for the New Orleans Chamber of Commerce and the economic development branch of the organization, MetroVision as Communications Manager. Mitchell Coffman is a survivor of West Nile Virus encephalitis, viral meningitis and poliomyelitis, and the founder of the West Nile Virus Survivors Foundation. He is a registered lobbyist with the State of Louisiana, working for the advancement of research and support for West Nile Virus survivors.

He also has his 1st Dan Degree in Tae Kwon Do Martial Arts, and is a Certified Feng Shui Practitioner and a member of the Four Winds Cherokee Tribe of Louisiana. Louisiana State University graduated him in December of 2004 with two separate master's degrees, one from LSU's College of Design, School of Landscape Architecture, and a Master of Science from LSU's Department of Environmental Studies in environmental planning and management.