

# DRAFT ALTERNATIVE ACTION PLAN FALSE RIVER ECOSYSTEM RESTORATION PROJECT



Prepared by:

Louisiana Department of Natural Resources  
and  
Louisiana Department of Wildlife and Fisheries

May 2012



## **Introduction**

In 2011, House Concurrent Resolution (HCR) No. 168 urged and requested that the Louisiana Department of Natural Resources (LDNR), in conjunction with the Pointe Coupee Parish Police Jury (PCPJ), assume the role of lead project sponsor for the “False River Aquatic Resources Ecosystem Restoration Project” and coordinate with other state agencies, local governmental agencies, and stakeholder groups in order to help expedite the efforts by the U.S. Army Corps of Engineers-New Orleans District (USACE) to restore the False River ecosystem. In March 2012 a False River Watershed Interim Report was prepared by LDNR to address the directives of HCR 168. As of that time the USACE’s draft Feasibility Report for that project was not complete and the USACE has stated that report would not be completed for some time due to a lack of funding. In addition, no funds currently appear to be available this year and next for a review of the Feasibility Report by the USACE. Furthermore, funding would have to be secured to construct and complete the recommended actions. As such, the LDNR was requested to work with other agencies to develop an alternative plan to initiate the restoration of False River that was science-based and utilized resources that are anticipated to be available while considering the concerns that have been raised by all stakeholders.

In 2011, the Louisiana Department of Wildlife and Fisheries (LDWF) issued their management plan for False River which indicates that increased sedimentation has caused a significant deterioration of spawning habitat and the loss of aquatic vegetation in the lake. The LDWF’s management plan includes an Action Plan describing corrective actions to address condition imbalance and problems within the watershed. The LDWF’s proposed actions are consistent with the alternative actions suggested in this report. Implementation of the actions described in this plan will begin to address the issues identified by LDWF, USACE as well as other stakeholders, for the False River Watershed.

## **Objectives**

The objectives of this Draft Alternative Action Plan are to:

- Initiate implementation of actions to improve the False River aquatic ecosystem which adopt recommendations set forth by the LDWF, PCPJ, USACE, LDNR, Natural Resources Conservation Service (NRCS) and others.
- Identify participating agencies and stakeholders.
- Identify funding mechanisms and estimate costs.
- Provide current status and a schedule for implementation.

## **Alternative Action Plan**

The following short-term, mid-term and long-term actions include recommendations from the PCPJ, LDWF, USACE, LDNR and others to improve the False River Aquatic Ecosystem. As shown on the Gantt chart that is part of this plan, short-term actions can be initiated immediately or are on-going, while mid- and long-term actions typically will require the availability of funding (e.g. State Capital Outlay, Federal Grants, Local Match, etc...) or the completion of another action (e.g. watershed drainage network assessment).

## **Short-Term Actions:**

### ***1. Channel and Sediment Basin Maintenance***

Actions: Implement routine cleaning of sediment traps and continued improvements to reduce erosion and sediment runoff into False River. Proceed with the routine maintenance and inspection of False River's drainage network.

Potential Funding Sources: PCPJ and NRCS; additional funding sources may be identified for sediment trap maintenance, fence construction and erosion control.

Lead Agencies: PCPJ and NRCS.

Estimated Cost/Status: The most recent sediment trap maintenance cost approximately \$22,000 to 23,000; pending landowner approval, approximately 1,000 feet of additional fencing is needed along the drainage canal (approximate cost \$5,000-\$10,000). This activity is ongoing.

### ***2. Watershed Drainage Network Assessment***

Action: Determine the current degree of lake sedimentation and turbidity.

Potential Funding Source: LDNR Capital Outlay (FY2011).

Lead Agencies: LDNR, Louisiana Dept. of Environmental Quality, LDWF, PCPJ and NRCS.

Estimated Cost/Status: \$50,000 (funding currently available through FY2011 Capital Outlay to LDNR). Proposals from DNR contract engineering firms have been requested.

### ***3. Habitat Improvement***

Actions: Develop and implement artificial reef, spawning bed and vegetative planting projects. The addition of complex cover will improve fish habitat and increase angler success. Work with local sponsors to secure funds, materials and labor (artificial reef, spawning beds and native aquatic vegetation). LDWF will take lead on the base project outlined in lake management plan. Encourage others (NGOs, corporate interests or individuals) to help in implementing habitat improvement projects.

Potential Funding Sources: State Capital Outlay, PCPJ, LDWF, grants, donations and volunteers.

Lead Agencies: LDWF, PCPJ, LDNR, and local groups.

Estimated Cost/Status: \$80,000 (utilize portion of FY2012 State Capital Outlay that is currently in House Bill 2 along with local match and private donations with assistance from LDWF and PCPJ). Actions will be implemented once funds are secured.

### ***4. Fisheries Evaluation and Stocking***

Actions: Continue standardized sampling of fish populations to evaluate the condition of the stock and evaluate nesting species success. This includes a three-year age and growth study of largemouth bass. Results of study will allow for informed consideration of harvest regulation and stocking. The next planned stocking of False River is scheduled for 2013 (Hybrid Striped Bass).

Potential Funding Source: Funded through the U.S. Fish and Wildlife Service's (USFWS) Sport Fish Restoration Act program in Louisiana through LDWF

Lead Agency: LDWF

Estimated Cost/Status: varies annually/part of ongoing efforts by LDWF – funded annually in LDWF budget

### **5. Commercial Fishing Season**

Action: Lift the commercial gill netting ban and implement a special season from November 1 to the end of February each year. Minimum mesh size for commercial gill nets and trammel nets set at 3.5” (the larger mesh is used to help exclude gamefish). This would provide for the return of commercial fishing to the lake and allow for the taking of larger fish species and reduce impacts related to these species.

Potential Funding Source: Not Applicable.

Lead Agency: LDWF.

Estimated Cost/Status: No cost is anticipated. Season has been approved and will open this fall.

### **6. Monitor Exotic, Invasive and other Deleterious Fish Species**

Actions: Monitor grass carp populations in the lake. Work with U.S. Geological Survey to determine reproductive capability/sterility of the grass carp population. It is also planned to investigate other herbivores in the lake. Herbivore monitoring and characterization is needed to evaluate and plan short and long term aquatic planting strategies for False River, as well as to evaluate commercial and recreational fishing regulations and seasons.

Potential Funding Source: Funded through the USFWS Sport Fish Restoration Act program in Louisiana through LDWF.

Lead Agency: LDWF.

Estimated Cost/Status: varies annually/part of ongoing efforts by LDWF – funded annually in LDWF budget.

### **Mid-Term Actions:**

### **7. Lake Monitoring/Water Quality Survey**

Actions: Develop and implement a protocol for a lake water quality monitoring (i.e., limnological) survey of the lake. Establish water quality monitoring stations throughout the lake as funding allows. These stations would include turbidity monitoring to quantify the total suspended and dissolved solids concentration. The survey is used to (1) determine the productivity, thermocline and overall health of the lake; and (2) evaluate fisheries production conditions/health and establish a baseline for future lake management actions.

Potential Funding Source: LDWF funded through the USFWS Sport Fish Restoration Act program in Louisiana.

Lead agency: LDWF, LDEQ and Louisiana State University (LSU).

Estimated cost: varies annually/water quality sampling is part of ongoing efforts – funded annually in LDWF budget. Additional funding is necessary for complete limnological survey to be performed; LDWF is evaluating additional funding options

## ***8. Drainage Network Hydromodification***

Actions: Evaluate and implement beneficial modifications to the network to foster storm flow detention and increase the sediment trapping efficiency of the network to further reduce siltation and turbidity in the lake.

Potential Funding Sources: PCPJ, NRCS, U.S. Environmental Protection Agency (USEPA) under Section 319 of the Clean Water Act through LDEQ and Capital Outlay.

Lead Agencies: PCPJ, NRCS, LDNR and LDWF.

Estimated Cost/Status: FY2012 Capital Outlay that is currently in House Bill 2 Priority 5 may be utilized once moved to Priority 1 or 2 along with local match for drainage network hydromodification. Action will take place once watershed assessment is completed and funding becomes available.

## ***9. Lake Level Management***

Action: A 2 to 3-foot water level adjustment between mid-September and mid-January would reduce the construction cost and improve the constructability of islands/terraces in the South Flats, reduce turbidity and improve water quality, be beneficial to the lake's ecosystem and water quality, facilitate the placement of edge habitat, and improve fisheries. Lake level management is proposed to take place concurrent with construction of island/terraces.

Potential Funding Source: PCPJ

Lead Agencies: PCPJ, LDWF, Louisiana Department of Transportation and Development (LDOTD), and LDNR.

## ***10. Creation of Island/Terrace Habitat***

Actions: The USACE, in their proposed restoration strategy for the lake, has indicated they will rely on dredging the lake sediments to create islands/terraces and promote the establishment of aquatic "edge" habitat as a potential restoration measure. Aquatic habitat establishment will provide beneficial complex fish environments which have been lost due to siltation and shoreline modifications. The creation of islands/terraces will improve wildlife habitat, wave attenuation, water temperature cooling, turbidity reduction and water quality improvement within the South Flats and can be scheduled to be constructed in one event or over a two-year period (two events) based upon an estimate of funding that may become available yearly. Once funding becomes available contracting, project engineering, permitting and public bidding must occur prior to construction.

Potential Funding Sources: utilize portion of FY2012 Capital Outlay that is currently in House Bill 2 Priority 2 and 5 along with local match by PCPJ.

Lead Agencies: PCPJ, LDNR and LDWF.

Estimated Cost/Status: One year - \$943,000 (assumes all construction occurring concurrently with lake level management – seasonal lake level reduction of 2 to 3-foot) to \$1,462,000 (without 2 to 3-foot lake level reduction). Approximately 6-8 islands/terraces constructed.

Estimated Cost/Status: Two years - \$1,084,000 (assumes all construction events occurring concurrently with lake level management – seasonal lake level reduction of 2 to 3-foot) to \$1,613,000 (without 2 to 3-foot lake level reduction)

Year	Lake Level Management		Scope
	With	Without	
1	\$361,000	\$437,000	2-3 islands/terraces
2	\$723,000	\$1,176,000	3-6 islands/terraces
Total	\$1,084,000	\$1,613,000	

Note: Cost increased in year 2 due to construction in deeper water

## **Long-Term Actions:**

### ***11. Watershed Management Plan***

Actions: Develop and implement a long-term conservation and watershed management strategy, including establishing best management practices, developing a watershed conservation plan and investigating the acquisition of conservation easements. This would provide for the long-term reduction of sediment flux from areas that drain into False River.

Potential Funding Sources: NRCS, Capital Outlay and PCPJ.

Lead Agencies: PCPJ, NRCS, LDWF and LDNR.

Estimated Cost/Status: utilize volunteers and agency staff (House Concurrent Resolution 123 of the 2012 Regular Session of the Louisiana Legislature created the False River Watershed Council) to develop and recommend a long-term management strategy and identify costs and sources of funding to implement. HCR123 was approved by the Louisiana Legislature in May 2012.

# Proposed Alternative Action Plan Implementation Schedule

