COASTWIDE PROJECTS
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CW-01

Southwest Louisiana Salvinia Weevil Propagation
Southwest Louisiana *Salvinia* Weevil Propagation

**State Master Plan Consistency**
An official determination has yet to be provided regarding the consistency of the proposed project.

**Project Location**
Region 4, Cameron Parish, Calcasieu Parish, Vermilion Parish, and possibly other parishes

**Problem**
The invasive plant, giant *Salvinia*, was first observed in Chenier Plain marshes in 2009. Since then it has spread throughout most of the Louisiana Chenier Plain marshes. This plant can stack up above the water surface to as much as 6 to 12 inches. Under such conditions, oxygen exchange is greatly reduced, and decay of shaded *Salvinia* can easily cause anoxic conditions in affected areas. As a result, habitat quality of badly infested areas is severely degraded, and may affect many species typical of fresh marshes, including many species of management concern (alligator snapping turtle, mottled duck [including critical brood rearing habitat], wintering migratory waterfowl, black rail, king rail, little blue heron, whooping crane, and peregrine falcon).
The LSU Agricultural Center is operating a facility in Houma, but it is not able to address the growing problem in coastal southwest Louisiana.

**Goals**
Establish a weevil propagation facility at Lacassine Refuge, like that operated by LSU, to make weevils available free of charge to landowners in southwest coastal Louisiana.

**Proposed Project Features**
Lacassine Refuge has offered the use of existing agricultural lands to establish several weevil production ponds. The refuge also has heavy equipment capable of constructing, repairing, and operating the ponds. Costs associated with this project consist primarily of supplies and one full time refuge position to operate the ponds, coordinate public weevil harvests, keep records of release locations, monitor *Salvinia* problem areas, assist landowners conduct weevil releases, relay infested *Salvinia* to new locations, and conduct public outreach to promote the program.

**Preliminary Project Benefits**
Although *Salvinia* is not known to cause marsh loss, it severely degrades the fish and wildlife habitat functions provided by marsh ponds and waterbodies. The proposed project, would help to restore habitat functions lost as a result of *Salvinia* infestations.

**Identification of Potential Issues**
Project costs are comprised primarily of operation and maintenance of the facility.

**Preliminary Construction Costs**
The estimated construction cost is $67,000. The total cost to construct and operate the facility for 20 years is approximately $2.0M.

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State faces salvinia war

Giant Salvinia Control With Cyrtobagous Weevil

• *Cyrtobagous salviniae*

• Successfully used in 13 countries on 3 continents.
Delta Farms 2009

Delta Farms – late Fall 2010
Delta Farms – March 2011
WEEVIL SAMPLE = 15 ADULTS/KG

Delta Farms - Sept 2011
Requirements for Production of *Salvinia* Weevils

- Reliable freshwater source
- Good road access
- Labor to monitor and operate ponds

**Southwest Coastal Louisiana**
production site needed!!!

**Proposed *Salvinia* Weevil Production Facility**
Lacassine NWR Unit A

$1.0 \text{ M for 10 years} \quad \text{or} \quad$2.0\text{M for 20 years}
Southwest Coastal Louisiana *Salvinia* Weevil Production Facility

- Improve/restore fish & wildlife habitat on 300k acres
- Benefit habitat for at-risk species such as:
  - Whooping crane
  - Mottled duck
  - King rail
- Benefit habitat for other fish and wildlife such as:
  - Alligator
  - Migratory waterfowl
  - Wading birds
  - Freshwater fisheries

$1.0\ M\ for\ 10\ years\ or\ $2.0M\ for\ 20\ years$