



Figure A3 - Aerial Photograph Plate 3 (With Site Plan Overlay)



Figure A4 - Aerial Photograph Plate 4 (With Site Plan Overlay)

Appendix B
Floodplain and Wetland
8-Step Planning Document

DRAFT

**LSU AgCenter
Coastal Area Research Station
Facilities
Change of Location/Alternate Project
Reconstruction of New Facilities at the Aquaculture Research Station
FEMA Disaster 1603-DR-LA
AI Database # 1168 and AI # 1203**

Executive Order 11988 - FLOODPLAIN MANAGEMENT
Executive Order 11990 - WETLAND PROTECTION

8-STEP DECISION MAKING PROCESS

Date: 3/26/2012

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Project: Hurricane Katrina made landfall on August 29, 2005, in southeast Louisiana as a Category 3 storm. Maximum sustained winds at landfall were estimated at 120 miles per hour and were accompanied by strong and damaging storm surge well above normal high tide. President Bush declared a major disaster for the State of Louisiana and signed a disaster declaration (FEMA-1603-DR-LA) on August 29, 2005, authorizing the Department of Homeland Security's Federal Emergency Management Agency (FEMA) to provide federal assistance in designated areas of Louisiana.

The State of Louisiana Facility Planning and Control (FP&C) requested through the State of Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) that FEMA provide disaster assistance through the provision of federal grant funding pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), PL 93-288, as amended. Section 406 of the Stafford Act authorizes FEMA's Public Assistance Program to fund projects to repair, restore and replace facilities damaged as a result of the declared event.

FP&C was deemed eligible by FEMA for federal disaster public assistance as an eligible applicant serving the needs of the general public. Before Hurricane Katrina, the Citrus Research Station in Port Sulphur Louisiana in Plaquemines Parish provided facilities for research on citrus, mainly Satsuma and mandarin oranges, with some limited work on commercial vegetables, other fruits, and termites. The facility and its contents were damaged as a result of the declared event and FEMA has deemed them eligible for repair and/or replacement. The station has now been renamed the Coastal Area Research Station (CARS) to better reflect the post-storm expanded research emphasis planned.

The damaged CARS is located at 22193 Highway 23 in the town of Port Sulphur in Plaquemines Parish, Louisiana. The Station's initial focus was citrus research; however, it is now investigating coastal plants and the role these plants have in the state's fight against coastal erosion. Station researchers are investigating plant varieties such as smooth cordgrass and are trying to select and breed those plants that have the most beneficial characteristics and traits that will help protect or restore areas of the state that have experienced land loss. Facilities at the CARS included residential buildings, greenhouses, pump houses, a chemical storage building, a shop/storage building, an office, sheds, ponds, and other appurtenant facilities (LSU AgCenter, 2011).

FP&C determined that reconstruction of the facility to its predisaster configuration in its existing location would not best meet the needs of the community. Therefore, FP&C requested approval and federal grant funds for a change of location improved project to replace the eligible facilities with new facilities providing similar and new functions at a new location at the existing Louisiana State University (LSU) Aquaculture Research Station (LSU ARS) in East Baton Rouge Parish approximately 105 miles to the northwest of the damaged facility (Figure 1).

This project must be conducted in accordance with conditions for federal actions in the floodplain as set forth in presidential Executive Order (EO) 11988, *Floodplain Management*, and presidential Executive Order 11990, *Protection of Wetlands*, and the implementing regulation found at 44 Code of Federal Regulations (CFR) Part 9, *Floodplain Management and Protection of Wetlands*. These regulations apply to all direct and indirect Agency actions which have the potential to affect floodplains or wetlands or their occupants, or which are subject to potential harm by location in floodplains.

Public Assistance grant funded projects carried out in the floodplain or affecting the floodplain must be coordinated with the local floodplain administrator for a floodplain development permit prior to the undertaking and the action must be carried out in compliance with relevant, applicable and required local codes and standards and thereby, will reduce the risk of future flood loss, minimize the impacts of floods on safety, health, and welfare, and preserve and possibly restore beneficial floodplain values as required by Executive Order 11988.

Restoration projects conducted with Public Assistance grant funds must be carried out in accordance with the local floodplain management plan and ordinance and shall utilize the current FEMA Flood Insurance Rate Maps as the "best available data" as a minimum standard. Exceptions to this requirement shall be reported to the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), FEMA Environmental, and the local floodplain manager before undertaking the action.

STEP 1

Determine whether the proposed actions are located in a wetland and/or the 100-year floodplain (500-year floodplain for critical actions [44 CFR 9.4]), or whether they have the potential to affect or be affected by a floodplain or a wetland (see 44 CFR 9.7).

The project is located in relation to floodplains as mapped by:

Latitude: 30.367533 **Longitude:** -91.182056

Effective FIRM Panel: 22 033C 0310 E **Flood Zone:** AE/Shaded X

Base Flood Elevation (Not the Design Flood Elevation): 21 feet above the NAVD88

The project is located in a wetland as identified by:

A review of the U.S. Fish and Wildlife National Wetland Inventory indicates nearby mapped wetlands at the edge of the proposed site. While the site has been determined to be outside mapped or regulated wetlands, its proximity indicates proposed activities likely have the potential to affect nearby wetlands by contributing to overland flows of runoff and sediment and intrusion by equipment and activities associated with site construction.

STEP 2

Notify the public at the earliest possible time of the intent to carry out an action in a floodplain or wetland, and involve the affected and interested public in the decision making process (see 44 CFR 9.8).

Not applicable - Project is not located in a floodplain or in a wetland.

Applicable - Notice will be or has been provided by:

In general, FEMA has an obligation to provide adequate information to enable the public to have impact on the decision outcome for all actions having the potential to affect, adversely, or be affected by floodplains or wetlands that it proposes. FEMA shall provide the public with adequate information and opportunity for review and comment at the earliest possible time and throughout the decision-making process; and upon completion of this process, provide the public with an accounting of its final decision (see §9.12). A Cumulative Initial Public Notice was published statewide 11/7/2005-11/9/2005. Additional public notice shall be provided with release of the draft EA and as required by the Executive Order.

Furthermore, a National Environmental Policy Act (NEPA) Environmental Assessment (EA) is being drafted to determine if the construction of the LSU AgCenter Aquaculture Research Station facilities, as described, will have the potential for significant adverse effects on the quality of the human and natural environment. The results of the investigation are being used to make a decision whether to initiate preparation of an Environmental Impact Statement or to prepare a Finding of No Significant Impact. The availability of the Draft EA will be advertised in the Advocate, a statewide publication prior to the undertaking.

The Draft EA will be provided to the LSU Library and made available for public inspection and invite comments to be submitted with instructions for submission.

STEP 3

Identify and evaluate practicable alternatives to locating the proposed action in a floodplain or wetland (including alternative sites, actions and the "no action" option) [see 44 CFR 9.9]. If a practicable alternative exists outside the floodplain or wetland, FEMA must locate the action at the alternative site.

Not applicable - Project is not located in a floodplain or in a wetland.

Applicable - Alternatives identified as described below:

- **Alternative 1:** No Action – No action would leave the community without the function of the damaged CARS facilities. Additionally, this would leave the damaged facility and its environs in an unsafe condition, which would represent a safety hazard to the public and nearby properties.
- **Alternative 2:** - Reconstruction at a new location outside the coastal high hazard floodplain with mitigation (all steps necessary to minimize the potential adverse effects of the action) – This alternative would reconstruct similar facilities to the CARS facilities at a new location outside the coastal high hazard floodplain, including applicable codes and standards and conditions to comply with requirements of EO 11988 and the implementing regulations at 44 CFR Part 9.

Reconstruction of the facility at a new location outside the coastal high hazard floodplain has been determined by the applicant and GOHSEP to be a practicable option because this results in reduced flood risk. It has been determined by the applicant as a viable alternative that is economically feasible and socially acceptable. The community leaders concluded this alternative will adequately serve the best interests of the community.

- **Alternative 3:** - Reconstruction at the original location with mitigation (all steps necessary to minimize the potential adverse effects of the action) – This alternative would reconstruct the CARS facilities at their original location in substantially the same footprint, including applicable codes and standards and conditions to comply with requirements of EO 11988 and the implementing regulations at 44 CFR Part 9.

Reconstruction of the facilities at its original location is not a practicable option because it has been determined by the applicant as a non-viable alternative that is not the best choice, economically feasible, socially acceptable, and has been determined by the community leaders to not serve the best interests of the entire community.

STEP 4 **Identify the potential direct or indirect impacts associated with, the occupancy or modification of floodplains and wetlands and the potential direct and indirect support of floodplain and wetland development that could result from the proposed action (see 44 CFR 9.10).**

Not applicable - Project is not located in a floodplain or in a wetland.

Applicable - Alternatives identified as described below:

Alternative 2: Reconstruction at the new location with mitigation results in restoration of the lost functions of the damaged infrastructure and eliminates the hazards of unrepaired facilities.

A review of the natural environment, social concerns, and the economic aspects of the proposed project indicates that reconstruction of the Fire Station and Waterworks Building at the new location is the best choice possible and is a practicable alternative. No other practicable alternative has been identified outside the special flood hazard area.

STEP 5 **Minimize the potential adverse impacts and support to or within floodplains and wetlands to be identified under step # 4, restore and preserve the natural and beneficial values served by floodplains, and preserve and enhance the natural and beneficial values served by wetlands (see 44 CFR 9.11).**

Not applicable - Project is not located in a floodplain or in a wetland.

Applicable - Mitigation measures identified in the EA Document or as described below:

Alternative 2: Reconstruction shall be in accordance with local floodplain ordinances with applicable codes and standards applied to mitigate and minimize adverse effects (compliance with minimum National Flood Insurance Program standards and requirements).

STEP 6 **Reevaluate the proposed action to determine first, if it's still practicable in light of its exposure to flood hazards, the extent to which it will aggravate the hazards to others and its potential to disrupt floodplain and wetland values and second, if alternatives preliminarily rejected at step # 3 are practicable in light of the information gained in steps # 4 and # 5. FEMA shall not act in a floodplain or wetland unless it's the only practicable location.**

Not applicable - Project is not located in a floodplain or in a wetland.

Applicable - Action proposed is located in the only practicable location as described below:

The proposed action is the chosen practicable alternative based upon a review of possible adverse effects on the floodplain, the inclusion of measures to mitigate and minimize harm from floods, and community socioeconomic expectations.

STEP 7 Prepare and provide the public with a finding and public explanation of any final decision that the floodplain or wetland is the only practicable alternative (see 44 CFR 9.12).

Not applicable - Project is not located in a floodplain or in a wetland.

Applicable - Finding is or will be prepared as described below:

Construction of the CARS facilities in the floodplain has been determined to be a practicable alternative with significant benefits to the community which override the prudence of location outside the floodplain. This review and analysis of this proposed action was documented through the required 8-step public participation and decision-making process. A NEPA EA is being drafted that includes a Solicitation of Views from potentially affected parties and a public notice was prepared and advertised that presented these findings (Public Notice attached herein).

STEP 8 Review the implementation and post-implementation phases of the proposed action to ensure that the requirements of the order are fully implemented. Oversight responsibility shall be integrated into existing processes.

Not applicable - Project is not located in a floodplain or in a wetland.

Applicable - Approval conditioned on review of implementation and post-implementation phases to ensure compliance with the order(s).

Project shall be reviewed by FEMA at grant closeout to ensure the project was completed in accordance with all relevant and applicable floodplain ordinances, codes and standards and that all project actions were undertaken in accordance with terms and conditions stipulated to mitigate and minimize adverse effects in or to the floodplain and wetlands.

Appendix C

Public Notice

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**FEMA PUBLIC NOTICE OF AVAILABILITY
DRAFT ENVIRONMENTAL ASSESSMENT AND
DRAFT FINDING OF NO SIGNIFICANT IMPACT FOR
RECONSTRUCTION AT AN ALTERNATE LOCATION OF THE
LSU AGCENTER COASTAL AREA RESEARCH STATION
PLAQUEMINES PARISH, LOUISIANA**

Interested parties are hereby notified that the Federal Emergency Management Agency (FEMA) prepared an Environmental Assessment (EA) for a proposed relocation and reconstruction of the Hurricane Rita damaged Coastal Area Research Station (CARS) facilities formerly located at 22193 Highway 23, Port Sulphur, LA 70083 (Plaquemines Parish - latitude 29.57991/longitude - 89.82103). The LSU AgCenter will replace the functions and capacity of the eligible facility at the existing LSU Aquaculture Research Station (ARS), 2410 Ben Hur Rd., Baton Rouge, LA 70820 (East Baton Rouge Parish - latitude 30.367533/longitude -91.182056). This proposed action would include developing an area of the LSU Aquaculture Research Station site in the Duncan Point area of East Baton Rouge. This would include constructing a one acre holding pond, sixteen 10,000 square feet (sf) coastal plant ponds, two 3,000 sf greenhouses, a 9,180 sf work/storage building, a 6,000 sf equipment storage building, a can yard, two half acre sand beds, and placement of appurtenant utilities (electricity, water, and sewer) for the site.

The LSU AgCenter seeks federal grant funds for this action eligible under a Presidential Disaster Declaration, signed on August 29, 2005 (FEMA-1603-DR-LA). Per the National Environmental Policy Act (42 U.S.C. 4371 *et seq.*), and associated environmental statutes, a Draft EA has been prepared to evaluate the action's potential impacts on the human and natural environment. This Draft EA summarizes the purpose and need, site selection process, affected environment, and potential environmental consequences associated with the proposed action.

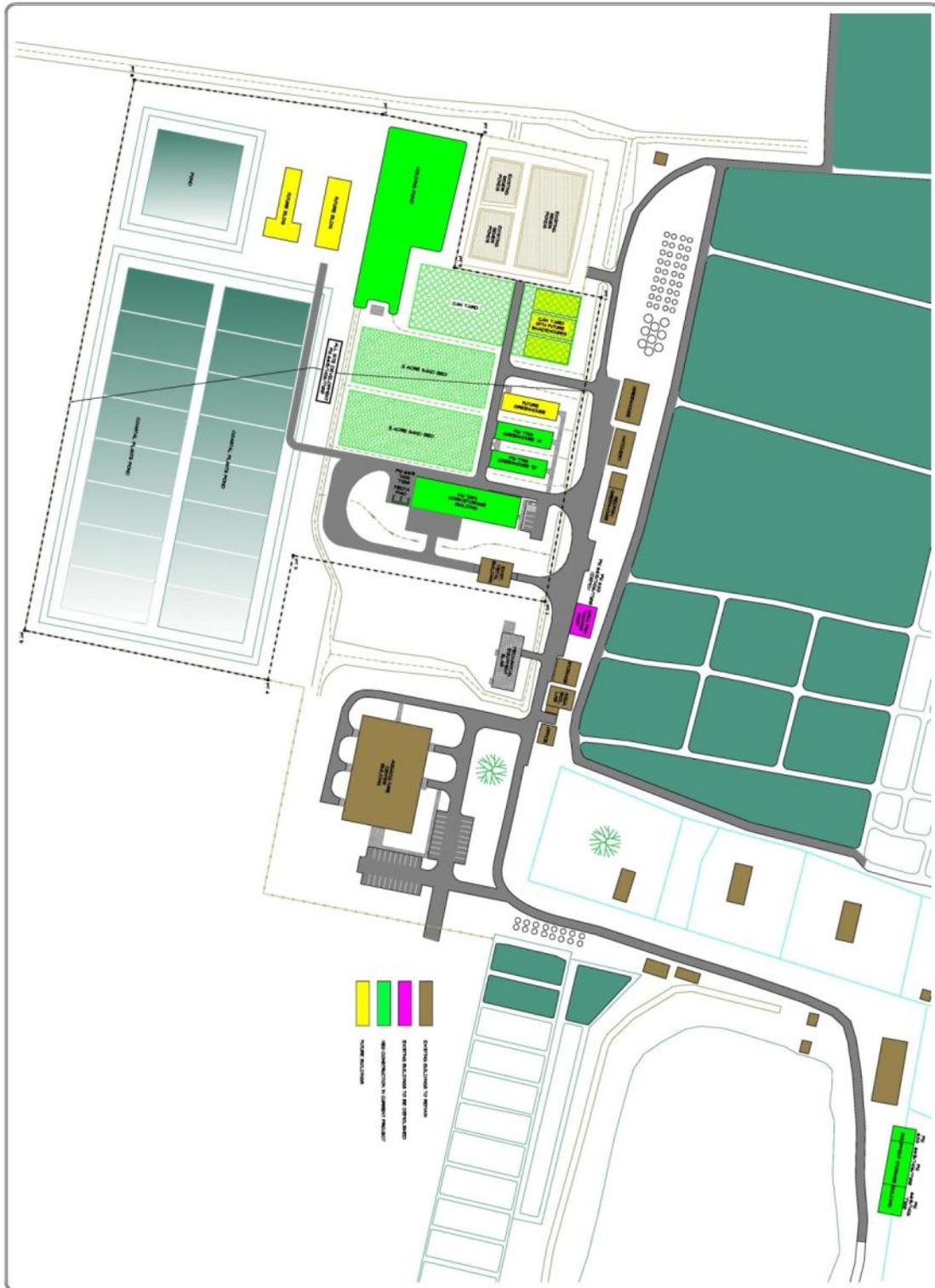
The Draft EA and Draft Finding of No Significant Impact (FONSI) are available for review at the East Baton Rouge Parish Public Library - Bluebonnet Regional Branch, located at 9200 Bluebonnet Boulevard, Baton Rouge, LA 70810, from May 14, 2012 through May 28, 2012 from 9:00 a.m. to 9:00 p.m., Monday through Thursday, 9:00 a.m. to 6:00 p.m. Friday and Saturday, and 2:00 p.m. to 6:00 p.m., Sunday. Additionally, a public notice regarding the proposed action will be published in the Advocate newspaper for five (5) consecutive days: May 14-18, 2012. The comment period will be fifteen (15) days, beginning on May 14, 2012 and concluding May 28, 2012. Written comments on the Draft EA or related matters can be faxed to FEMA's Louisiana Recovery Office at (504) 762-2323; or mailed to FEMA Louisiana Recovery Office, EHP - LSU CARS ARS EA, 1 Seine Court, New Orleans, Louisiana 70114. The Draft EA can be viewed and downloaded from FEMA's website: <http://www.fema.gov/plan/ehp/envdocuments/ea-region6.shtm>.

Based on FEMA's findings to date, no significant adverse environmental effects are anticipated. However, if FEMA receives new information that results in a change from no adverse effects then FEMA would revise the findings and issue a second public notice allowing time for additional comments. However, if there are no changes, this Draft EA will become the Final EA.

If no substantive comments are received, the Draft EA and associated Finding of No Significant Impact (FONSI) will become final and this initial Public Notice will also serve as the final Public Notice. Substantive comments will be addressed as appropriate in the final documents.

Appendix D
Site Construction Plans

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**COASTAL PLANTS FACILITIES
MASTER PLAN**

AQUACULTURE RESEARCH STATION
2410 BEN HEUB ROAD
BATON ROUGE, LOUISIANA 70802

ARCHIVED BY: LSU AgCENTER	SCALE: AS SHOWN
DRAWN BY: KSC	SHEET 1 OF 1 SHEETS
DATE: 1 OCTOBER 2010	FILE NAME: Coastal Plants Plan
REVISION 2 - 1 MARCH 2011	CHECKED BY: KSC



Appendix E
Agency Correspondence

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