Board of County Commissioners
Agenda Request 12

Date of Meeting: March 20, 2001
Date Submitted: March 15, 2001

To: Honorable Chairman and Members of the Board
From: Parwez Alam, County Administrator
       Michael C. Willett, Director of Public Works
Subject: Final Report on the Lake Jackson Restoration Project

Statement of Issue:
This item is a final report on the Lake Jackson Restoration Project, and is submitted for Board action.

Background:
Phase I Megennis Arm and Fords Arm:

Megennis Arm

Phase I of the County=s Lake Jackson restoration effort began on September 1, 1999, with the mobilization of County staff and equipment to start drying and stockpiling Megennis Arm bottom sediments for subsequent removal and disposal by a private contractor. Disposal bids were opened on October 6, 1999, for the loading, hauling, and disposal of stockpiled sediments from the arm. The low bidder was Mitchell Brothers, Inc., at $5.43 per cubic yard of material removed. Mitchell Brothers identified four sites to receive sediment: three sites in Leon County and one in Gadsden County. The sediment met the clean fill definition by the Florida Department of Environmental Protection (FDEP) so no specific disposal requirements were imposed by the State. The contractor decided to haul the material to his Gadsden County site. The work progressed rapidly with Mitchell Brothers completing the disposal of approximately 230,500 cubic yards of bottom sediments in December 1999, at a total cost of $1,213,000.

Fords Arm

The Florida Fish & Wildlife Conservation Commission (FFWCC) also contributed to the Phase I muck removal. The FWCC contracted with Lisa=s Environmental Services to excavate and remove the sediments from the upper portion of Fords Arm. The contractor was able to
secure an upland disposal site adjacent to the lake that allowed them to transport the material in off-road, all-wheel- drive trucks. This resulted in a bid price just over $1.00 per cubic yard of material removed. The contractor completed the work in January 2000. The FFWCC Phase I in-kind efforts within Ford's Arm resulted in the disposal of 213,000 cubic yards of sediment.

Phase II Southern Portion of Exposed Lake Bottom:

On September 15, 1999, Porter Hole Sink within Lake Jackson drained the remaining water from the southern portion of the lake, exposing approximately 750 additional acres of bottom area.

Bids were opened on December 3, 1999, for the excavation, loading, hauling and disposal of up to 1,000,000 cubic yards of sediments from the exposed lake bottom. The bid was divided into two sections. Phase II-A was the initial sediment removal process from the lake bottom consisting of excavating and stockpiling the sediment. Phase II-B was the loading and hauling of the stockpiled material to a permitted site for disposal. The Phase II-A low bidder was Sandco, Inc., at $1.28 per cubic yard of material stockpiled. The Phase II-B low bidder was Roberts Sand Company, Inc., at $2.71 per cubic yard of material disposed. Roberts Sand Company, Inc. identified and secured a disposal site at Ayavalla Plantation to receive all of the Phase II sediment. The County secured a Special Use Permit from the Northwest Florida Water Management District (NFWFMD) that allowed the Phase IIA contractor to cross Elinor Klapp Phipps Park for the purpose of accessing Ayavalla lands.

The Phase II sediment removal and disposal contractors mobilized on January 4, 2000, and Phase II disposal of 1,026,671 cubic yards of bottom sediment was completed in July 2000.

Phase III Additional Priority Areas:

Before the estimated 1,000,000 cubic yard quantity was achieved, it became evident that additional funds remained that could be used for sediment removal. Priority areas were established and on May 23, 2000, the Leon County Board of County Commissioners determined that an emergency situation existed regarding the Lake Jackson Restoration Project and directed staff to negotiate contract extensions with Roberts Sand Company, Sandco, Inc. and Mitchell Brothers, Inc., for excavation and disposal of bottom sediments at current Phase II A and B contract terms and prices.

Priority One was the remaining 118 acres of lake bottom east and contiguous to the existing excavation northeast of Megennis Arm, and a 15-acre depression located on the southwest shoreline near Lucerne Drive. Priority Two was 120 acres in size and encompassed the north end of Church Cove. The Priority One area was given to Sandco, Inc. and the Priority Two area was split evenly between Roberts Sand Company, Inc. and Mitchell Brothers. Each contractor received purchase orders to remove and dispose of 160,000 cubic yards of material. Notice to proceed was given to all three contractors on July 19, 2000.

On September 5, 2000 Sandco, Inc. completed Phase III excavation of sediments within their designated areas. Removal of haul routes and final dressing had begun when tropical storm Helene dropped approximately eight inches of rain in the Lake Jackson Basin. However, their
efforts resumed and haul route restoration and final dressing was completed. The contractor removed 139,350 cubic yards of material, leaving approximately 20,000 cubic yards toward completing their contract. Sandco continued to haul material through Phipps Park to access their disposal area on Ayavalla Plantation property.

Roberts Sand Company, Inc. completed Phase III excavation of sediments within their designated work area on September 20, 2000. Final lake bottom dressing and haul route restoration was also completed. The contractor fulfilled his entire 160,000 cubic yard contract. The contractor exited the lake bottom at Millers Landing and disposed of material in a permitted dry depressional area located on the Rollins property.

Mitchell Brothers began sediment removal on August 11, 2000. With the exception of a small amount of material that went to a permitted disposal site on Highway 20, Mitchell Brothers secured a permitted disposal site on Ayavalla Plantation and began to haul the remainder of the material to this site. The contractor was exiting the lake bottom through a drainage easement connected to Millers Landing Road. On September 18, 2000 tropical storm Gordon dropped approximately one inch of rain, and following that, on September 22, 2000, tropical storm Helene added another eight inches of rainfall, leaving the project area inundated with water. After the rains, water rose on the project for several days from overland sheet flow. Because of these events, on October 17, 2000, the Board of County Commissioners extended the Mitchell Brothers contract time and directed County staff to assist in dewatering the work area. Dewatering was accomplished in conjunction with the contractor and he completed his 160,000 cubic yard contract on January 29, 2001.

Mitchell Brothers was offered additional muck removal in their assigned work area, but declined acceptance due to the difficult working conditions. Roberts Sand Company, Inc. was then offered the additional work. They accepted the additional yardage and completed the task on March 13, 2001 with the removal of 16,910 cubic yards of muck.

**Other Sediment Removal Activities**

At the request of the Board, staff investigated potential muck removal from areas outside of the permitted boundaries. Staff, working with the NFWFMD, obtained and analyzed muck samples from the area of the lake along Highway 27 and Red and Sams Fish Camp. The test results indicate that the sediment is similar to the material tested in Fords and Megennis Arm. Thus, the material posed no special disposal problems and was handled in the same manner as previously excavated muck. Staff extended an offer to Sandco, Inc., and they excavated 25,250 cubic yards of sediments along the Highway 27 shoreline. The contractor completed this work on November 28, 2000. Based on the sediment test results, staff also oversaw the removal of sediments from Red and Sams Fish Camp. A total of 34,810 cubic yards of material was removed from this cove using Sandco, Inc. and Roberts Sand Company, Inc. as the contractors. Work was completed on February 15, 2001.

The area northeast of Rollins Point was also evaluated for potential muck removal. County staff and a representative from the FDEP met with Mr. Tom Rollins and subsequently collected sediment samples from the areas of concern. The samples were analyzed and compared to the samples taken in the Church Cove area. The laboratory reported that the chemical properties of
the sediments north of Rollins Point and in Church Cove were remarkably similar. The samples were highly organic and enriched with both nitrogen and phosphorus. Staff offered the additional excavation to Roberts Sand Company, Inc. The contractor accepted this additional work at current contract prices and conditions. Permits were obtained and 15,079 cubic yards of sediments were removed. The task was completed January 12, 2001.

**Analysis:**

<table>
<thead>
<tr>
<th>Sediment Removal Summary</th>
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<tbody>
<tr>
<td>Fords Arm</td>
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<td>Megennis Arm</td>
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<td>Southern Portion of Lake Bottom</td>
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<td>Church Cove</td>
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<td>Rollins Point</td>
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<td>U.S. Hwy 27 Boat Ramp</td>
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<td>Red and Sams</td>
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<td><strong>Total Yardage Removed</strong></td>
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<tr>
<th>Permitted Material Remaining To Be Removed</th>
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<tr>
<td>Church Cove Area</td>
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<td>Lucerne Drive area</td>
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<td><strong>Total Permitted Material Remaining</strong></td>
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## Funding Summary

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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<tr>
<td>County Stormwater Bond Issue</td>
<td>$2,000,000</td>
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<td>Reallocation of Existing County Stormwater Bond Funds</td>
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<td>Northwest Florida Water Management District SWIM Grant</td>
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<td>Florida Fish and Wildlife Conservation Commission Grant</td>
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<td>Florida Department of Environmental Protection Grant</td>
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<td>State Legislative Grant Funding</td>
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<td><strong>Total Funding</strong></td>
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### Future Funding

Staff has had discussions with FFWCC and has been informed that no grant monies were available this fiscal year. No bill is being filed by our Local Legislative Delegation and neither did the Board address obtaining more funding in their legislative priorities. However, staff has been directed by the Board to pursue additional funds to continue the project in areas where it is warranted. To date, no funds have been identified.

Funds may become available in FFWCC’s budget after July, 2001, but with the severe drought Florida is experiencing, competition for this type of funding is fierce.

### Petition for Action

The Jacksonview Drive residents have submitted a petition requesting assistance in the removal and/or permitting of muck removal in the lake bottom near their residences (Att. #1). This request for assistance was received early on in the project and was explained as outside the scope and intent of the project. The property owner was disappointed but understood our goals and objectives for the project.

Dredging activities by the homeowners has subsequently occurred in this area and it is being investigated by Florida Department of Environmental Protection and Leon County Growth and
Environmental Management officials for potential violations.

Attachment #2 is an e-mail from Jess Van Dyke of FDEP regarding this area. It is doubtful that the area can be permitted

Summary

The Drawdown Interagency Resource Team (DIRT) was formed to take advantage of the natural drawdown cycle of Lake Jackson and to develop a strategy for addressing documented long standing water quality problems in the southern and Highway 27 portions of the lake. Their goal was to improve water quality through the removal of undesirable aquatic plants and associated nutrient-rich organic sediments originating from the urban and suburban areas in the watershed that were contributing the majority of the stormwater runoff loading to the lake system. This overall goal was more than accomplished by the removal of 2,021,570 cubic yards of sediments. Removal of this material will certainly have positive short and long term impacts on the ecology of the entire lake. The removal of all sediment from the entire lake was never envisioned.

Currently all funds for muck removal have been expended, but staff is continuing to seek additional funding. If monies become available and the lake water level remains low, staff would complete the removal of remaining sediments from within currently permitted lake bottom areas. The first priority area is Church Cove, then the Lucerne Drive area.

The Jacksonview Drive site is being investigated and surveyed for possible dredge-and-fill violations. At the end of the investigation, the property owners may be required to restore the area at their expense. Until this matter is resolved, it is highly unlikely that any permits for additional work will be forthcoming.

Options:

1. Accept the Final Report.

2. Direct staff to continue looking for additional funds for the project and apply them to completing sediment removal in the permitted areas.

3. Delay acting on the petition request until the possible dredge-and-fill violations are resolved.

4. Board Direction.

Recommendation:

Staff recommends Options 1, 2, & 3.

Attachments:

1. Petition For Action
2. FDEP E-Mail