

# **ENVIRONMENTAL MONITORING REPORT**

## **PENNSUCO MITIGATION PROJECT**

**Miami-Dade County, Sections 6, 16, 30, 32  
Townships 52-South, 53-South, Range 39-East**

**Project: C-13604**



**Monitoring Performed:  
June 28, 2008**

**KCI Technologies, Inc.**

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## **1.0 Introduction**

KCI Technologies, Inc. (KCI) has conducted the annual vegetative monitoring and data collection assessment for the Pennsuco Monitoring Mitigation Project, C-13604, administered by the South Florida Water Management District (SFWMD). The monitoring requires qualitative and quantitative assessments to document the success of the vegetative and hydrologic restoration. Restoration success can be gauged by reduction of exotic species and the recruitment of target native species, sawgrass in particular.

## **2.0 Purpose**

The primary purpose of the monitoring program is to identify and describe the elements of the natural system, thus enabling the SFWMD to evaluate the success of exotic plant control activities. The vegetative success criteria outlined in the Draft Pennsuco Memorandum of Agreement (MOA) requires that the percent cover of exotic invasive species is no greater than five percent, the percent cover of open water and obligate and facultative wetland woody shrub species is no greater than 20 percent, and the percent cover of native plant herbaceous obligate and facultative wetland species is no less than 80 percent.

## **3.0 Site Location**

The Pennsuco Mitigation Area is composed of all or part of 11 blocks in Cell 26 of the East Coast Buffer and occupies approximately 13,000 acres in Miami-Dade County (Figure 1). The site is bordered on the west and north by Krome Avenue, to the south by the Tamiami Trail (US 41) and to the east by the Dade-Broward Levee. The SFWMD had been conducting invasive species eradication in these areas as a component of its restoration plan. The specific areas being monitored include Section 30, Township 52 South, Range 39 East; Section 5, Township 53 South, Range 39 East; Section 18, Township 53 South, Range 39 East; and Section 31, Township 53 South, Range 39 East.

## **4.0 Methodology**

The monitoring was conducted along four one-mile transects as identified in Figure 1 of the SFWMD Statement of Work or as adjusted by SFWMD staff at the field visit prior to the initiation of work. Three of the four transects are located adjacent to Krome Avenue (A, C, DR) and were directly accessible. The remaining transect (B) is located one mile east of Krome Avenue (Figure 2, Table 1). Global Positioning System (GPS) was used to identify the two end points of each transect. The points were permanently marked by installing a 10-foot length of 3-inch PVC pipe, painted fluorescent orange, at each location. GPS and/or compass bearings were then used to identify data collection stations along each transect.

**Table 1 Transect End Points**

Transect	Latitude	Longitude
<b>Begin "A"</b>	25° 53' 12.76"	80° 29' 03.33"
<b>End "A"</b>	25° 53' 12.69"	80° 28' 04.91"
<b>Begin "B"</b>	25° 51' 20.39"	80° 28' 01.70"
<b>End "B"</b>	25° 51' 19.15"	80° 27' 03.30"
<b>Begin "C"</b>	25° 49' 48.07"	80° 28' 55.38"
<b>End "C"</b>	25° 49' 48.00"	80° 27' 57.00"
<b>Begin "DR"</b>	25° 47' 20.64"	80° 28' 46.31"
<b>End "DR"</b>	25° 47' 45.57"	80° 28' 09.88"

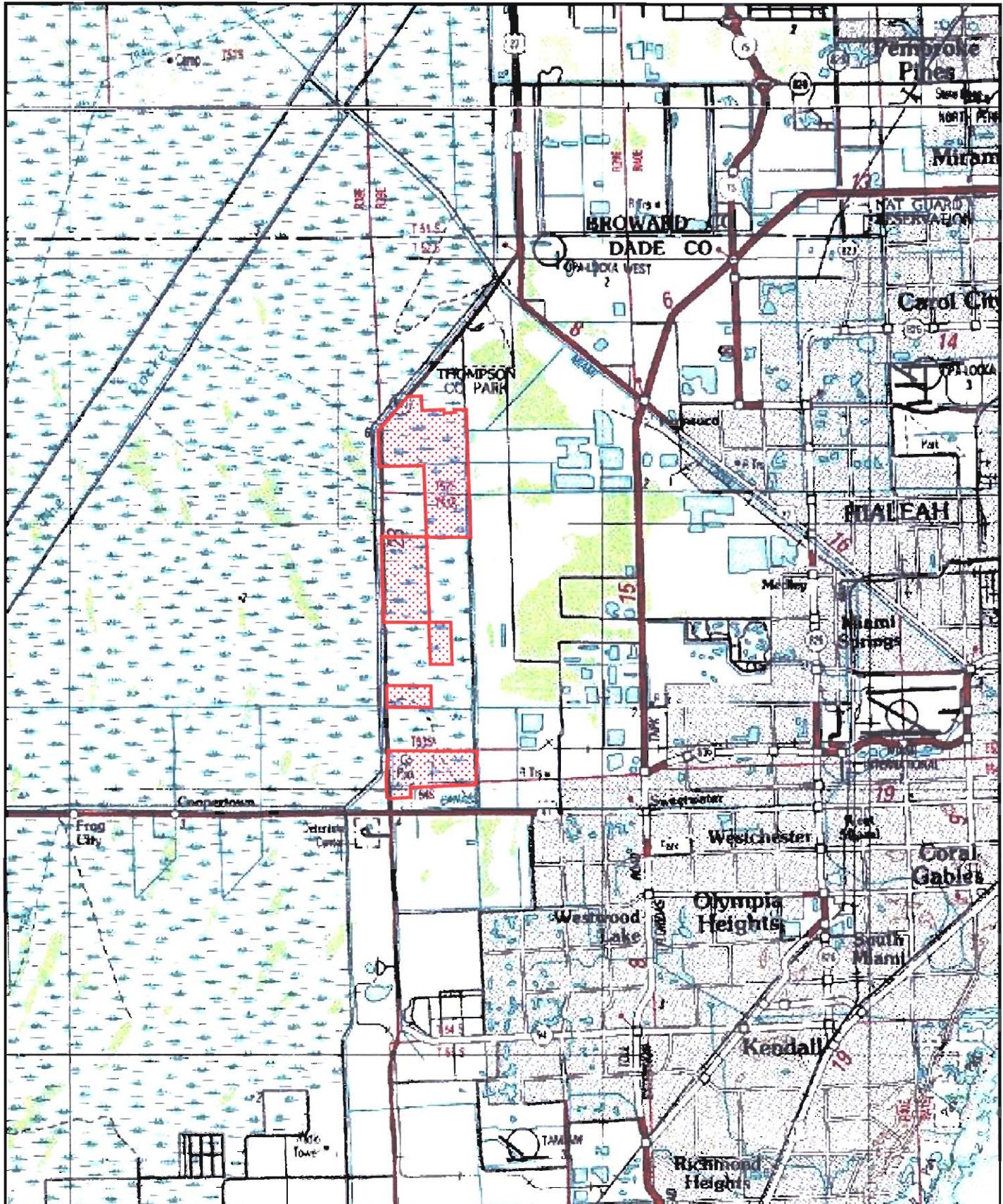


Figure 1. Location Map

Restoration Area

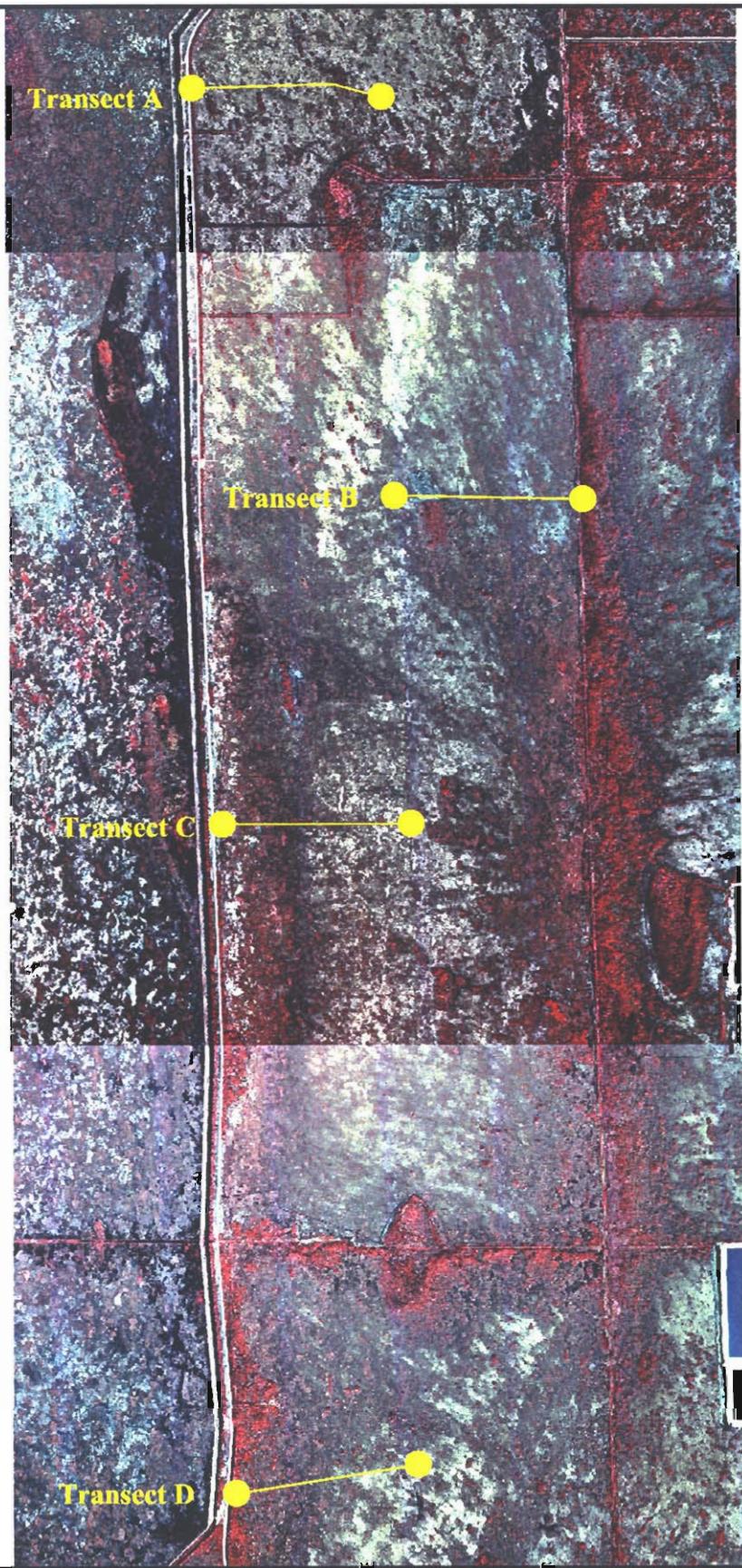


Figure 2. Transect Locations

A total of 30 data collection stations, each measuring 4 square meters, were established at approximately equally spaced intervals of 176 feet along each transect. Collection stations at the end points of each transect were established three meters from the point marker. At each data collection point, the center of a four-meter square grid was marked by placing a 5-foot length of white ¾-inch PVC pipe in the substrate. Where feasible, a 4-meter square portable PVC frame with 4 individual 1-meter cells was utilized to estimate percent coverage; otherwise, visual assessments were made by assessing the area 1 meter in each direction from the central point of the collection station. Percent coverage was estimated in each of four layers, described as follows:

1. **Submerged Aquatics** – Herbaceous plants occurring below water surface.
2. **Herbaceous** – Non-woody plants occurring at or above the water surface and woody plants less than one meter in height
3. **Sapling/Vine** – Woody plants one to three meters in height and woody vines.
4. **Overstory** – Woody plants greater than three meters in height.

Coverage was documented at each of the 120 collection stations as a percent coverage with the total percent not exceeding 100 percent/layer. All species found were documented by scientific and common name and entered on field forms. Water level and/or soil saturation, observed aquatic macrofauna, wildlife utilization, and/or indicators of wildlife (i.e. tracks, scat, etc.) were recorded at data collection stations 7, 14, 21, and 28 of each transect. Observations also focused on whether saw grass (*Cladium jamaicense*) and punk trees (*Melaleuca quinquenervia*) were either alive or dead due to eradication efforts. This distinction was not made for other vegetative types because of the significantly lower percentage of other species present.

Photographs of each collection station were taken for reference from an elevated position. Panoramic photos were taken from each transect end point to qualitatively document the existing vegetation along the transect. Each panoramic photo included the end point of each transect with the 3-inch PVC pipe shown for reference.

Data for each transect were organized into spreadsheets and correlated with photographic references for each collection station. Summary percent coverages by species were calculated for each layer by dividing the area occupied by each individual species in the transect by the total area surveyed in the transect. This procedure is outlined in the following:

CT = Percentage of coverage by species per collection station

CA = Total area sampled per collection point (4 square meters)

PC = Total area covered by species per collection station (CT\*CA)

TA = Total area sampled in transect (30 collection points x 4 square meters = 120 square meters)

TC = Total coverage by species per transect

TC = PC/TA

## 5.0 Results

The collected data were incorporated into individual spreadsheets for presentation. A narrative describing each transect followed by summary data and individual data is presented in the following section.

**MONITORING DATA**  
**June 28, 2008**

## **TRANSECT A**

### **Narrative**

Transect A is located in Section 30, Township 52, Range 39 (Cell 26 – Pennsuco Exotic Treatment Area). It starts on the levee at Krome Avenue with Point A1 (GPS Coordinates Latitude 25° 53' 12.76", Longitude 80° 29' 03.33") and continues east one mile to Point A30 (GPS coordinates Latitude 25° 53' 12.69", Longitude 80° 28' 04.91"), which is west of the Dade-Broward Levee (Figure 3). Two community types were identified for Transect A. Point A1 represents an upland levee community dominated by shield fern (*Thelypteris kunthii*) and bushy bluestem (*Andropogon glomeratus*). Points A2 through A30 represent a wet prairie community type dominated by saw grass (*Cladium jamaicense*). Previous control efforts focused primarily on punk tree (*Melaleuca quinquenervia*) eradication and consisted of herbicidal treatment and a physical removal program followed by a controlled burn.

### **Observations from June 28, 2008 monitoring**

The transect was relatively dry with saturated soil conditions and only 1 inch standing water observed in some locations. No macrofauna or indicators of wildlife were noted.

Transect A experienced little overall change during the period between the Fall 2007 and Spring 2008 monitoring periods. The coverage of live punk tree (*Melaleuca quinquenervia*) saplings decreased in Spring 2008 (1.7% total coverage) from Fall 2007 (3.0% total coverage). However at Plots 28 through 30, the surrounding areas consist of thriving punk trees. The majority of the trees are 4' to 5'. Of the 30 plots along the transect, 10 plots contained live punk trees. Only one plot saw a 5% increase in the percent coverage of punk trees. Also, there were five plots that saw a decrease in the percent coverage. The amount of saw grass increased slightly to 32.2% in Spring 2008 from 30.2% in Fall 2007.

In summary, the percent vegetative coverage by layer for this transect were as follows:

- In the submerged aquatics layer only, there was 100% open/void.
- In the herbaceous species layer, there was 32.2% live saw grass, 23.5% dead saw grass, 1.7% live punk tree, 3.5% dead punk tree, 11.0% capillary hairsedge (*Bulbostylis ciliataefolia*), 5.3% dead biomass, and 14.7% open/void.
- In the sapling/vine layer, there was 0.3% of nettletree (*Trema micranthum*), which is found at the beginning of the transect at A1, and 99.7% open/void.
- In the overstory layer, 100% open/void.



**Figure 3. Transect A**

End Points of Segment  
Data Collection Locations



**SUBMERGED AQUATICS**

12/8/2007

6/28/2008

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0.5%	0.0%
Bladderwort	<i>Utricularia foliosa</i>	0.0%	0.0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0.0%	0.0%
Ludwigia	<i>Ludwigia repens</i>	0.0%	0.0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0.0%	0.0%
Open/Void	N/A	99.5%	100.0%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	30.2%	32.2%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	15.8%	23.5%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	3.0%	1.7%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	1.3%	3.5%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0.2%	0.0%
Southern Swamp Lily	<i>Crinum americanum</i>	1.0%	1.8%
Pickerelweed	<i>Pontederia lanceolata</i>	0.0%	0.0%
Yellowtops	<i>Flaveria linearis</i>	0.2%	0.3%
Arrowhead	<i>Sagittaria graminea</i>	0.7%	0.8%
Floating-Heart	<i>Nymphoides aquatica</i>	0.3%	0.0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	12.5%	11.0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	1.0%	1.3%
Button Bush	<i>Cephalanthus occidentalis</i>	0.0%	0.0%
Maiden-Cane	<i>Panicum hemitomum</i>	0.0%	0.0%
Shield Fern	<i>Thelypteris kunthii</i>	0.5%	0.3%
Swamp Fern	<i>Blechnum serrulatum</i>	0.5%	2.7%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	1.2%	0.0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0.0%	0.0%
False Buttonweed	<i>Borreria laevis</i>	0.0%	0.0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0.3%	0.0%
Cattail	<i>Typha latifolia</i>	0.0%	0.2%
Unknown (A-1) ( <i>Commelinaceae</i> sp.?)	N/A	0.0%	0.0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0.0%	0.3%
Dog Fennel	<i>Eupatorium capillifolium</i>	0.0%	0.2%
Dead Biomass	N/A	5.0%	5.3%
Open Water/Mud/Void	N/A	26.3%	14.7%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.0%	0.0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0.0%	0.0%
Nettletree	<i>Trema micranthum</i>	0.7%	0.3%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0.0%	0.0%
Open/Void	N/A	99.3%	99.7%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.0%	0.0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0.0%	0.0%
Golden Fig	<i>Ficus aurea</i>	0.0%	0.0%
Open/Void	N/A	100.0%	100.0%
<b>TOTAL</b>		100%	100%

NOTES: \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacoda caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	0%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	5%	10%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	15%	10%
Swamp Fern	<i>Blechnum serrulatum</i>	15%	80%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	10%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	35%	0%
Open Water/Mud/Void	N/A	20%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	20%	10%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	80%	90%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

NOTES: \_\_\_\_\_

Water Level / Soil Moisture

Dry

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacoda caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	30%	45%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	25%	45%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	5%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	5%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	40%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

12/8/2007

6/28/2008

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacoda caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	25%	20%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	10%	20%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	15%	5%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	50%	55%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

12/8/2007 6/28/2008

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacoda caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	0%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	15%	5%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	5%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	5%
Open Water/Mud/Void	N/A	80%	90%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

12/8/2007

6/28/2008

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacoda caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	65%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	20%	35%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	35%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

12/8/2007

6/28/2008

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	35%	45%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	20%	10%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	15%	15%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	30%	30%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

- Water Level / Soil Moisture \_\_\_\_\_
- Aquatic Macrofauna \_\_\_\_\_
- Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	40%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	30%	40%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	5%	5%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	5%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	20%	10%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

- Water Level / Soil Moisture                    1/2" water, minimal ponding
- Aquatic Macrofauna
- Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	50%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	35%	45%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	5%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	5%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	10%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

NOTES: \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	45%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	40%	55%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	15%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	55%	20%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	25%	75%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	5%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	5%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	5%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	10%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_  
 Aquatic Macrofauna \_\_\_\_\_  
 Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	10%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	60%	45%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	10%	10%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	25%	35%
Open Water/Mud/Void	N/A	5%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	65%	55%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	35%	45%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	0%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	35%	0%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	10%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	5%	5%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	20%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	5%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	5%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	55%	60%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	60%	55%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	20%	45%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	20%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

Saturated, no standing water

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	30%	40%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	40%	35%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	5%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	20%	25%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	5%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	35%	30%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	15%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	5%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	30%	20%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	25%
Open Water/Mud/Void	N/A	20%	20%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

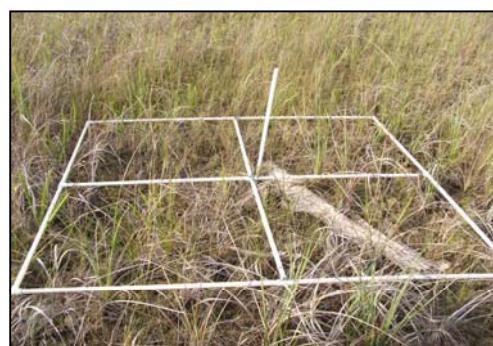
Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	5%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	95%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	40%	25%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	15%	25%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	5%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	35%	45%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	5%	0%
Water Cowbane	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	0%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	5%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	95%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	5%	15%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	5%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	45%	45%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	10%	30%
Open Water/Mud/Void	N/A	40%	0%
<b>TOTAL</b>		100%	95%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	65%	45%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	35%	55%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	0%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	40%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	30%	50%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	5%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	5%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	5%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	20%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	5%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	95%	100%
<b>TOTAL</b>		100%	100%

12/8/2007

6/28/2008

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	55%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	15%	25%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	5%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	35%	20%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

Saturated, no standing water

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	30%	30%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	10%	10%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	30%	20%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	20%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	5%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	10%	35%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	25%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	15%	20%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	20%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	5%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	20%	0%
Open Water/Mud/Void	N/A	40%	55%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	15%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	25%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	5%	5%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	15%	10%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	5%
Dead Biomass	N/A	30%	0%
Open Water/Mud/Void	N/A	50%	40%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_

Frog \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	20%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	10%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	15%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	35%	60%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	55%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	45%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	20%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	5%	10%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	30%	10%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	35%
Open Water/Mud/Void	N/A	45%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	10%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	5%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	40%	50%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	30%	30%
Open Water/Mud/Void	N/A	25%	10%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	40%	45%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	15%	25%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	10%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	20%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	15%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	20%	10%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

- Water Level / Soil Moisture Saturated, no standing water
- Aquatic Macrofauna \_\_\_\_\_
- Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

12/8/2007

6/28/2008

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	30%	30%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	10%	20%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	20%	20%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	20%	25%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	20%	5%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** Melaleuca trees are thriving in this area. Most trees are 4'-5'.

There is a visible line of dead trees compared to the living trees, where the control efforts are not used.

Water Level / Soil Moisture

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Aquatic Macrofauna

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Wildlife Indicators (tracks, scat, nests)

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Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Proserpinaca palustris</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw-grass (Alive)	<i>Cladium jamaicense</i>	55%	45%
Saw-grass (Dead)	<i>Cladium jamaicense</i>	20%	45%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	10%	10%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweeds	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Water Cowbane (white flower)	<i>Oxypolis filiformis</i>	0%	0%
False Buttonweed	<i>Borreria laevis</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Unknown (A-1)	N/A	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	15%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

## **TRANSECT B**

### **Narrative**

Transect B is located in Section 5, Township 53, Range 39 (Cell 26 – Pennsuco Exotic Treatment Area). It starts at Point B1 approximately one mile east of Krome Avenue (GPS Coordinates Latitude 25° 51' 20.39", Longitude 80° 28' 01.70") and extends one mile east to Point B30 at the Dade-Broward Levee (Figure 4). One community type - wet prairie primarily dominated by saw grass (*Cladium jamaicense*) - was identified for Transect B. Previous control efforts consisted of herbicidal treatment and a physical removal program followed by a controlled burn. A fire burned throughout this transect in the summer of 2004.

### **Observations from June 28, 2008 monitoring**

The entire transect was observed to be saturated with water surface levels ranging from 4 to 8 inches at the sampled points. No macrofauna or indicators of wildlife were noted.

The transect increased slightly in punk trees in Spring 2008 (0.2% total coverage) when compared to Fall 2007 (0% total coverage). Saw grass was once again the dominant species at 40.5% coverage, a slight decrease over the 44.8% coverage in Fall 2007. The amount of open/void coverage in the herbaceous layer increased to 25.0%. There were no other notable changes in species dominance during the Spring 2008 visit.

In summary, the percent vegetative coverage by layer for this transect as described below:

- The submerged aquatics layer was open/void except for 0.2% water-hyssops (*Bacopa caroliniana*).
- In the herbaceous species layer, the primary species were 40.5% live saw grass, 26.2% dead saw grass, 1.8% arrowhead (*Sagittaria graminea*), 1.8 buttonbush (*Cephalanthus occidentalis*), 1.0% southern swamp lily (*Crinum americanum*), 0.7% paragrass (*Urochloa mutica*), 0.5% dog fennel (*Eupatorium capillifolium*), 0.3% floating heart (*Nymphaeas aquatica*), 0.2% Tracy's beak rush (*Rhynchospora tracyi*), 0.2% cattail (*Typha latifolia*), 0.3% dead biomass, and 25% open/void
- In the sapling/vine layer, the transect was 100% open/void.
- In the overstory layer, the coverage was comprised of 100% open/void.

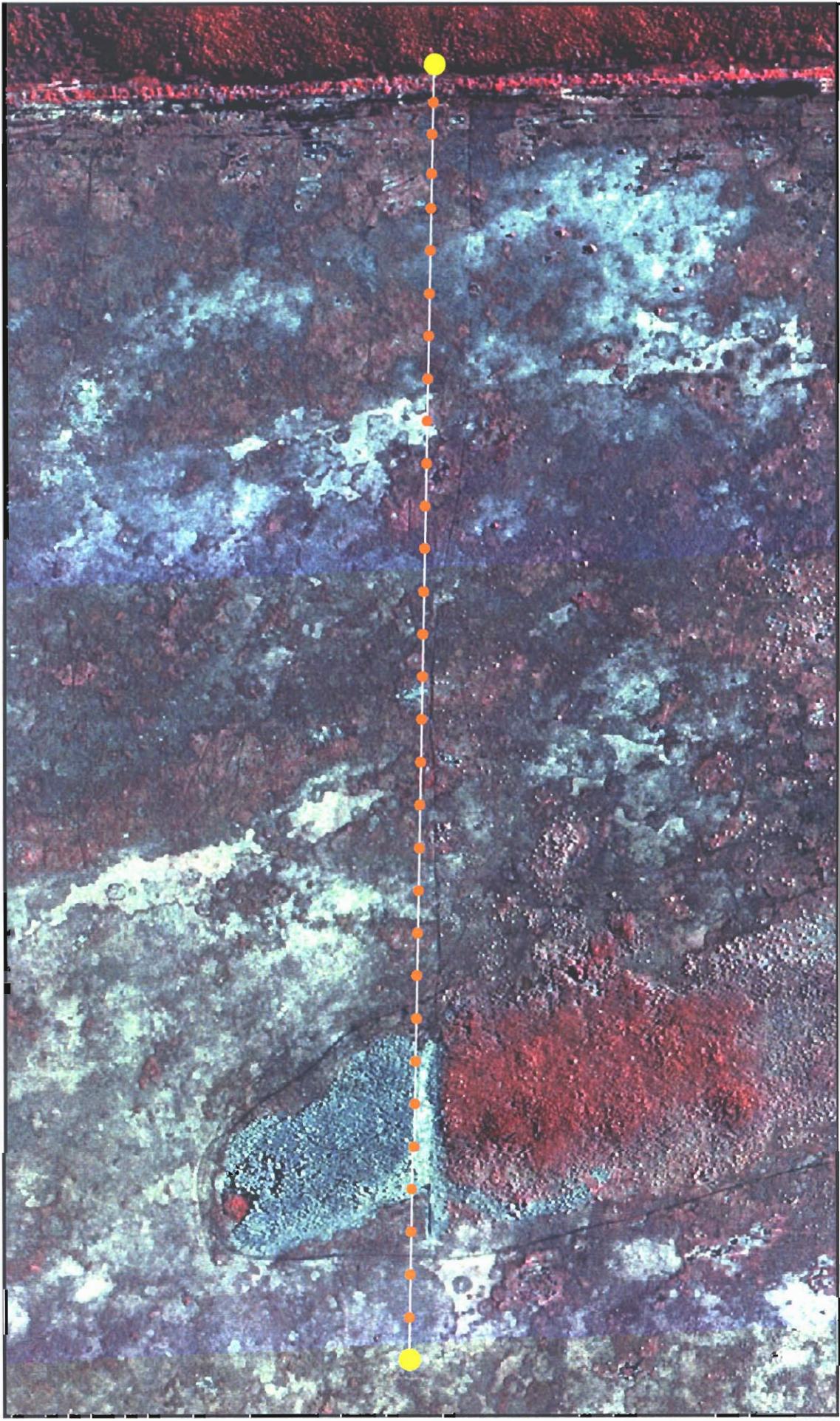


Figure 4. Transect B

End Points of Segment  
Data Collection Locations

KC  
TECHNOLOGIES

N

300 0 300 Feet

TRANSECT "B"

Total Length 5280'

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
Mermaid Weed	<i>Proserpinaca palustris</i>	0.0%	0.0%
Bladderwort	<i>Utricularia foliosa</i>	0.0%	0.0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0.5%	0.2%
Ludwigia	<i>Ludwigia repens</i>	0.0%	0.0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0.0%	0.0%
Open/Void	N/A	99.5%	99.8%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	44.8%	40.5%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	21.0%	26.2%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.0%	0.2%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	1.6%	1.3%
Southern Swamp Lily	<i>Crinum americanum</i>	1.6%	1.0%
Pickerelweed	<i>Pontederia lanceolata</i>	0.0%	0.0%
Yellowtops	<i>Flaveria linearis</i>	0.0%	0.0%
Arrowhead	<i>Sagittaria graminea</i>	3.1%	1.8%
Duck Potato	<i>Sagittaria latifolia</i>	0.3%	0.0%
Paragrass	<i>Urochloa mutica</i>	0.0%	0.7%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0.0%	0.0%
Cattail	<i>Typha latifolia</i>	0.3%	0.2%
Button Bush	<i>Cephalanthus occidentalis</i>	0.0%	1.8%
Maiden-Cane	<i>Panicum hemitomum</i>	0.0%	0.0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	1.4%	0.2%
Swamp Fern	<i>Blechnum serrulatum</i>	0.0%	0.0%
Horned bladderwort	<i>Utricularia cornuta</i>	0.0%	0.0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0.0%	0.0%
Swamp Cabbage	<i>Sabal palmetto</i>	0.0%	0.0%
Floating-Heart	<i>Nymphoides aquatica</i>	0.7%	0.3%
Dogfennel	<i>Eupatorium capillifolium</i>	0.0%	0.5%
Unknown cattail	N/A	0.0%	0.0%
Dead Biomass	N/A	0.9%	0.3%
Open Water/Mud/Void	N/A	24.3%	25.0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.0%	0.0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0.0%	0.0%
Nettletree	<i>Trema micranthum</i>	0.0%	0.0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0.0%	0.0%
Open/Void	N/A	100.0%	100.0%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.0%	0.0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0.0%	0.0%
Golden Fig	<i>Ficus aurea</i>	0.0%	0.0%
Open/Void	N/A	100.0%	100.0%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



0+00 Panoramic - Looking East



52+78 Panoramic - Looking West

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	5%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	95%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	40%	50%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	30%	30%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	5%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	25%	20%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture      1" Water level

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	75%	75%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	20%	25%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosyris ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	5%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

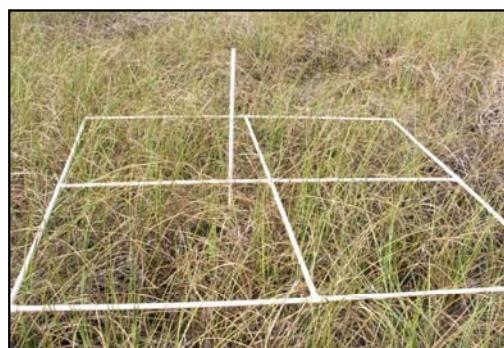
Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	50%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	35%	40%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	20%	10%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	5%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	95%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	55%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	30%	30%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	25%	15%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	35%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	40%	45%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosyris ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	5%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	10%	20%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

## SUBMERGED AQUATICS

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

12/8/2007

6/28/2008

## HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	55%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	35%	30%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	20%	15%
<b>TOTAL</b>		100%	100%

## SAPLING / VINE

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

## OVERSTORY

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

## NOTES:

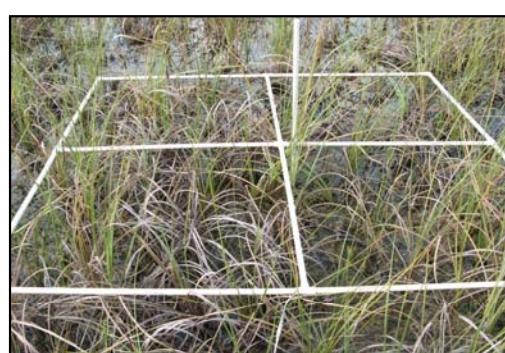
Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
Mermaid Weed	<i>Proserpinaca palustris</i>		0%
Bladderwort	<i>Utricularia foliosa</i>		0%
Water-Hyssops	<i>Bacopa caroliniana</i>		0%
Ludwigia	<i>Ludwigia repens</i>		0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>		0%
Open/Void	N/A		100%
<b>TOTAL</b>		0%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>		15%
Saw Grass (Dead)	<i>Cladium jamaicense</i>		0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>		5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>		0%
Southern Swamp Lily	<i>Crinum americanum</i>		0%
Pickerelweed	<i>Pontederia lanceolata</i>		0%
Yellowtops	<i>Flaveria linearis</i>		0%
Arrowhead	<i>Sagittaria graminea</i>		0%
Duck Potato	<i>Sagittaria latifolia</i>		0%
Paragrass	<i>Urochloa mutica</i>		0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>		0%
Cattail	<i>Typha latifolia</i>		0%
Button Bush	<i>Cephaelanthus occidentalis</i>		0%
Maiden-Cane	<i>Panicum hemitomum</i>		0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>		0%
Swamp Fern	<i>Blechnum serrulatum</i>		0%
Horned bladderwort	<i>Utricularia cornuta</i>		0%
Southern Water Hyssop	<i>Amaranthus australis</i>		0%
Swamp Cabbage	<i>Sabal palmetto</i>		0%
Floating-Heart	<i>Nymphoides aquatica</i>		0%
Dogfennel	<i>Eupatorium capillifolium</i>		0%
Unknown cattail	N/A		0%
Dead Biomass	N/A		0%
Open Water/Mud/Void	N/A		80%
<b>TOTAL</b>		0%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>		0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>		0%
Nettletree	<i>Trema micranthum</i>		0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>		0%
Open/Void	N/A		100%
<b>TOTAL</b>		0%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>		0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>		0%
Golden Fig	<i>Ficus aurea</i>		0%
Open/Void	N/A		100%
<b>TOTAL</b>		0%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture                  4" Water Level  
 Aquatic Macrofauna  
 Wildlife Indicators (tracks, scat, nests)

NOT monitored



Fall 2007

Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	10%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	45%	20%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	50%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	25%	10%
Open Water/Mud/Void	N/A	30%	10%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	30%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	15%	10%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	45%	20%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	5%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	40%	35%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	5%	25%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	30%	25%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	5%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	10%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	5%	5%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	5%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	50%	35%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	70%	25%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	10%	55%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	5%	5%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	5%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	5%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	10%	10%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	5%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	95%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	50%	30%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	30%	25%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	5%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	15%	45%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

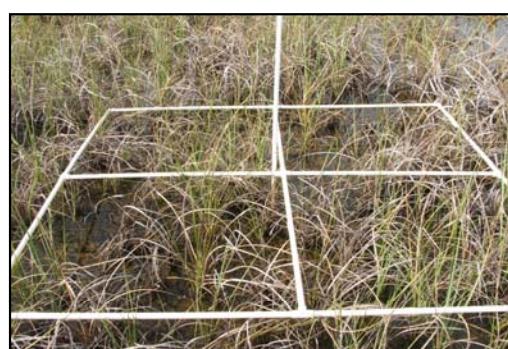
Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	5%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	95%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	85%	65%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	15%	30%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	5%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	0%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	40%	25%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	20%	20%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	5%
Southern Swamp Lily	<i>Crinum americanum</i>	10%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	10%	5%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	20%	45%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

2" Water Level

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	65%	55%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	20%	35%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	15%	10%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	30%	40%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	15%	20%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	5%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	10%	5%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	5%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	45%	25%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	35%	25%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	15%	15%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	50%	60%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	60%	40%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	15%	50%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	25%	10%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



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**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	50%	25%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	30%	55%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	20%	20%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



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**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	30%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	35%	40%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	20%	30%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	70%	20%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	20%	70%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	10%	10%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

3" Water Level

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	60%	70%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	40%	30%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosyris ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	0%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	60%	55%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	20%	25%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	20%	20%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	15%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	5%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	10%
Capillary Hairsedge	<i>Bulbosyris ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	25%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	70%	75%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

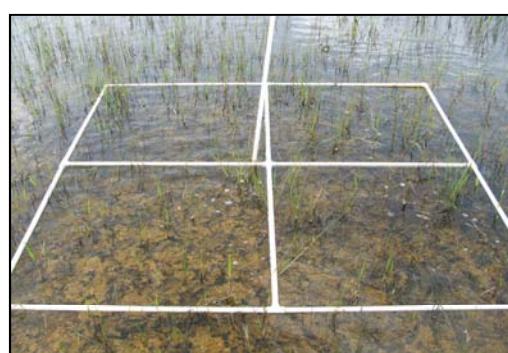
Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	40%	40%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	10%	15%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	10%	10%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	40%	35%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

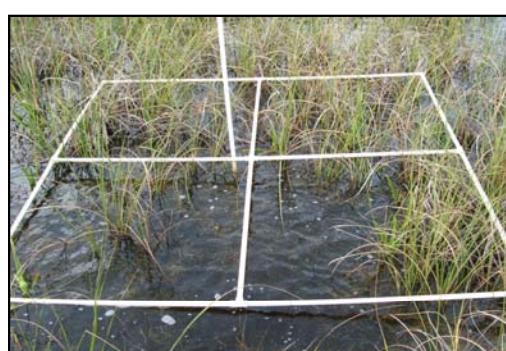
Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	55%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	45%	20%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	5%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	10%	20%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	45%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	45%	45%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	10%	10%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

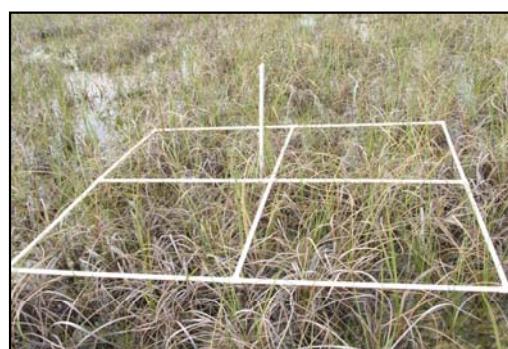
Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	50%	60%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	15%	20%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	5%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	35%	15%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/28/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	35%	30%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	10%	15%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	5%	5%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	50%	50%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	65%	65%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	10%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	10%	5%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	10%
Capillary Hairsedge	<i>Bulbosystis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Horned bladderwort	<i>Utricularia cornuta</i>	0%	0%
Southern Water Hyssop	<i>Amaranthus australis</i>	0%	0%
Swamp Cabbage	<i>Sabal palmetto</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Dogfennel	<i>Eupatorium capillifolium</i>	0%	0%
Unknown cattail	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	15%	20%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007	6/28/2008
		% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

2" Water Level

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Fall 2007



Spring 2008

## **TRANSECT C**

### **Narrative**

Transect C is located in Section 18, Township 53, Range 39 (Cell 26 – Pennsuco Exotic Treatment Area). It starts on the levee at Krome Avenue with Point C1 (GPS Coordinates Latitude 25° 53' 12.76", Longitude 80° 29' 03.33") and continues east one mile to point C30 (GPS coordinates Latitude 25° 53' 12.69", Longitude 80° 28' 04.91"), which is west of the Dade-Broward Levee (Figure 5). Two community types were identified for Transect C. Point C1 represents an upland levee community dominated by swamp fern (*Blechnum serrulatum*) and shield fern (*Thelypteris kunthii*) in the herbaceous layer. Points C2 through C30 represent a wet prairie community type dominated by saw grass (*Cladium jamaicense*). A fire burned throughout this transect in the summer of 2004.

### **Observations from June 28, 2008 monitoring**

The transect was not monitored fully due to missing transect poles. The majority of the poles could not be located and were likely removed from the transect. Transect Plots 1-4 and Plot 30 were present and monitored.

**Figure 5. Transect C**

End Points of Segment  
Data Collection Locations



300 0 300 Feet

**Pennsco Monitoring Project - Summary Sheet**

TRANSECT

"C"

Total Length

5280'

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/25/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0.0%	0.0%
Bladderwort	<i>Utricularia foliosa</i>	0.0%	0.0%
Bladderwort	<i>Utricularia purpurea</i>	0.0%	0.0%
Ludwigia	<i>Ludwigia repens</i>	0.0%	0.0%
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0.0%	0.0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0.7%	0.0%
Open/Void	N/A	99.3%	16.7%
<b>TOTAL</b>		100%	17%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	34.0%	4.0%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	28.0%	4.3%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.0%	0.0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0.0%	0.0%
Southern Swamp Lily	<i>Crinum americanum</i>	0.5%	0.3%
Pickerelweed	<i>Pontederia lanceolata</i>	0.0%	0.0%
Yellowtops	<i>Flaveria linearis</i>	0.0%	0.0%
Arrowhead	<i>Sagittaria graminea</i>	0.2%	0.0%
Duck Potato	<i>Sagittaria latifolia</i>	0.0%	0.0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0.0%	0.0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	1.0%	0.0%
Cattail (Alive)	<i>Typha latifolia</i>	3.3%	0.3%
Cattail (Dead)	<i>Typha latifolia</i>	0.7%	0.0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0.0%	0.0%
Maiden-Cane	<i>Panicum hemitomum</i>	0.0%	0.0%
Shield Fern	<i>Thelypteris kunthii</i>	1.3%	1.2%
Swamp Fern	<i>Blechnum serrulatum</i>	2.0%	1.8%
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0.0%	0.0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0.5%	0.0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	4.2%	0.0%
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0.7%	0.8%
Floating-Heart	<i>Nymphoides aquatica</i>	0.8%	0.0%
False Nettle	<i>Boehmeria cylindrica</i>	0.0%	1.7%
Rosy Camphorweed	<i>Pluchea rosea</i>	0.0%	0.0%
Dotted Smartweed	<i>Polygonum punctatum</i>	0.0%	0.2%
Unknown Red Stem	N/A	0.0%	0.0%
Unknown C3	N/A	0.0%	0.0%
Dead Biomass	N/A	0.5%	0.0%
Paragrass	<i>Urochloa mutica</i>	10.2%	1.0%
Open Water/Mud/Void	N/A	22.3%	1.5%
<b>TOTAL</b>		110%	17%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.0%	0.0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0.0%	0.0%
Nettletree	<i>Trema micranthum</i>	0.0%	0.0%
Shrubverbena / Lantana	<i>Lantana camara</i>	0.2%	0.0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0.0%	0.0%
Open/Void	N/A	99.8%	20.0%
<b>TOTAL</b>		100%	20%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.0%	0.0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0.0%	0.0%
Golden Fig	<i>Ficus aurea</i>	0.0%	0.0%
Nettletree	<i>Trema micranthum</i>	1.0%	1.0%
Open/Void	N/A	99.0%	19.0%
<b>TOTAL</b>		100%	20%

**NOTES:**

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_

**Vegetation Blocking View**

0+00 Panoramic - Looking east

52+78 Panoramic - Looking West



**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-1**

**STATION**

**0+00**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Open/Void	<i>N/A</i>	100%	100%
<b>TOTAL</b>		100%	100%

**12/8/2007**

**6/25/2008**

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	0%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail (Alive)	<i>Typha latifolia</i>	0%	0%
Cattail (Dead)	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	40%	35%
Swamp Fern	<i>Blechnum serrulatum</i>	60%	55%
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
False Nettle	<i>Boehmeria cylindrica</i>	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	0%
Unknown Red Stem	<i>N/A</i>	0%	0%
Unknown C3	<i>N/A</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	10%
Dead Biomass	<i>N/A</i>	0%	0%
Open Water/Mud/Void	<i>N/A</i>	0%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Shrubverbena / Lantana	<i>Lantana camara</i>	5%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	<i>N/A</i>	95%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	30%	30%
Open/Void	<i>N/A</i>	70%	70%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-2**

**STATION**

**1+82**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Open/Void	<i>N/A</i>	100%	100%
<b>TOTAL</b>		100%	100%

**12/8/2007**

**6/25/2008**

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	0%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	10%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail (Alive)	<i>Typha latifolia</i>	35%	10%
Cattail (Dead)	<i>Typha latifolia</i>	20%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
False Nettle	<i>Boehmeria cylindrica</i>	0%	50%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	0%
Unknown Red Stem	<i>N/A</i>	0%	0%
Unknown C3	<i>N/A</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Dead Biomass	<i>N/A</i>	0%	0%
Open Water/Mud/Void	<i>N/A</i>	0%	30%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	<i>N/A</i>	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	<i>N/A</i>	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Fall 2007



Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-3**

**STATION**

**3+64**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Open/Void	<i>N/A</i>	100%	100%
<b>TOTAL</b>		100%	100%

**12/8/2007**

**6/25/2008**

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	80%	50%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	15%	45%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail (Alive)	<i>Typha latifolia</i>	5%	0%
Cattail (Dead)	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
False Nettle	<i>Boehmeria cylindrica</i>	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	0%
Unknown Red Stem	<i>N/A</i>	0%	0%
Unknown C3	<i>N/A</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Dead Biomass	<i>N/A</i>	0%	0%
Open Water/Mud/Void	<i>N/A</i>	0%	0%
<b>TOTAL</b>		100%	95%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	<i>N/A</i>	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	<i>N/A</i>	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Fall 2007



Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-4**

**STATION**

**5+46**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Open/Void	<i>N/A</i>	100%	100%
<b>TOTAL</b>		100%	100%

**12/8/2007**

**6/25/2008**

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	55%	25%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	25%	45%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail (Alive)	<i>Typha latifolia</i>	0%	0%
Cattail (Dead)	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	20%	25%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
False Nettle	<i>Boehmeria cylindrica</i>	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	5%
Unknown Red Stem	<i>N/A</i>	0%	0%
Unknown C3	<i>N/A</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Dead Biomass	<i>N/A</i>	0%	0%
Open Water/Mud/Void	<i>N/A</i>	0%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	<i>N/A</i>	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	<i>N/A</i>	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Fall 2007



Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-5**

**STATION**

**7+28**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	15%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	20%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	<i>N/A</i>	0%	
Unknown C3	<i>N/A</i>	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Dead Biomass	<i>N/A</i>	15%	
Open Water/Mud/Void	<i>N/A</i>	50%	
<b>TOTAL</b>	100%	0%	

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

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Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Fall 2007

Marker Missing

Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-6**

**STATION**

**9+10**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	20%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	65%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	15%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	<i>N/A</i>	0%	
Unknown C3	<i>N/A</i>	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Dead Biomass	<i>N/A</i>	0%	
Open Water/Mud/Void	<i>N/A</i>	0%	
<b>TOTAL</b>	100%	0%	

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

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Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

Fall 2007

Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-7**

**STATION**

**10+92**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	30%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	60%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	10%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	<i>N/A</i>	0%	
Unknown C3	<i>N/A</i>	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Dead Biomass	<i>N/A</i>	0%	
Open Water/Mud/Void	<i>N/A</i>	0%	
<b>TOTAL</b>	100%	0%	

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

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Marker Missing

Fall 2007

Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-8**

**STATION**

**12+74**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	45%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephalanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	<i>N/A</i>	0%	
Unknown C3	<i>N/A</i>	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Dead Biomass	<i>N/A</i>	0%	
Open Water/Mud/Void	<i>N/A</i>	10%	
<b>TOTAL</b>	100%	0%	

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

Fall 2007

Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-9**

**STATION**

**14+56**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	5%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
Open/Void	<i>N/A</i>	95%	
<b>TOTAL</b>		100%	0%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	15%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	20%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	10%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	15%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	5%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	<i>N/A</i>	0%	
Unknown C3	<i>N/A</i>	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Dead Biomass	<i>N/A</i>	0%	
Open Water/Mud/Void	<i>N/A</i>	35%	
<b>TOTAL</b>		100%	0%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>		100%	0%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>		100%	0%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Fall 2007

Marker Missing

Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-10**

**STATION**

**16+38**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	5%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
Open/Void	<i>N/A</i>	95%	
<b>TOTAL</b>		100%	0%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	15%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	75%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	10%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	<i>N/A</i>	0%	
Unknown C3	<i>N/A</i>	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Dead Biomass	<i>N/A</i>	0%	
Open Water/Mud/Void	<i>N/A</i>	0%	
<b>TOTAL</b>		100%	0%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>		100%	0%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>		100%	0%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Fall 2007

Marker Missing

Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-11**

**STATION**

**18+20**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	50%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	5%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	<i>N/A</i>	0%	
Unknown C3	<i>N/A</i>	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Dead Biomass	<i>N/A</i>	0%	
Open Water/Mud/Void	<i>N/A</i>	0%	
<b>TOTAL</b>	100%	0%	

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-12**

**STATION**

**20+02**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	50%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	35%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	<i>N/A</i>	0%	
Unknown C3	<i>N/A</i>	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Dead Biomass	<i>N/A</i>	0%	
Open Water/Mud/Void	<i>N/A</i>	15%	
<b>TOTAL</b>	100%	0%	

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

Fall 2007

Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-13**

**STATION**

**21+84**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	20%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	5%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	5%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	20%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	<i>N/A</i>	0%	
Unknown C3	<i>N/A</i>	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Dead Biomass	<i>N/A</i>	0%	
Open Water/Mud/Void	<i>N/A</i>	50%	
<b>TOTAL</b>	100%	0%	

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

Fall 2007

Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-14**

**STATION**

**23+66**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	50%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	15%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	15%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	<i>N/A</i>	0%	
Unknown C3	<i>N/A</i>	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Dead Biomass	<i>N/A</i>	0%	
Open Water/Mud/Void	<i>N/A</i>	20%	
<b>TOTAL</b>	100%	0%	

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-15**

**STATION**

**25+48**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	40%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	50%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	<i>N/A</i>	0%	
Unknown C3	<i>N/A</i>	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Dead Biomass	<i>N/A</i>	0%	
Open Water/Mud/Void	<i>N/A</i>	10%	
<b>TOTAL</b>	100%	0%	

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

Fall 2007

Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-16**

**STATION**

**27+30**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	55%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	25%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephalanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	5%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	<i>N/A</i>	0%	
Unknown C3	<i>N/A</i>	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Dead Biomass	<i>N/A</i>	0%	
Open Water/Mud/Void	<i>N/A</i>	15%	
<b>TOTAL</b>	100%	0%	

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-17**

**STATION**

**29+12**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	20%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	15%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	5%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	10%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	<i>N/A</i>	0%	
Unknown C3	<i>N/A</i>	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Dead Biomass	<i>N/A</i>	0%	
Open Water/Mud/Void	<i>N/A</i>	50%	
<b>TOTAL</b>	100%	0%	

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Fall 2007

Marker Missing

Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-18**

**STATION**

**30+94**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	25%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	20%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	5%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	<i>N/A</i>	0%	
Unknown C3	<i>N/A</i>	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Dead Biomass	<i>N/A</i>	0%	
Open Water/Mud/Void	<i>N/A</i>	50%	
<b>TOTAL</b>	100%	0%	

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	<i>N/A</i>	100%	
<b>TOTAL</b>	100%	0%	

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

Fall 2007

Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-19**

**STATION**

**32+76**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	20%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	20%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Duck Potato	<i>Ipomoea sagittata</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephalanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	10%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphaoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	N/A	0%	
Unknown C3	N/A	0%	
Dead Biomass	N/A	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Open Water/Mud/Void	N/A	50%	
<b>TOTAL</b>		100%	0%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Fall 2007

Marker Missing

Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-20**

**STATION**

**34+58**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**12/8/2007**

**6/25/2008**

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	35%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	25%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	5%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	N/A	0%	
Unknown C3	N/A	0%	
Dead Biomass	N/A	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Open Water/Mud/Void	N/A	35%	
<b>TOTAL</b>		100%	0%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

Fall 2007

Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-21**

**STATION**

**36+40**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**12/8/2007**

**6/25/2008**

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	30%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	25%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	5%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	N/A	0%	
Unknown C3	N/A	0%	
Dead Biomass	N/A	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Open Water/Mud/Void	N/A	40%	
<b>TOTAL</b>		100%	0%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

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Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

Fall 2007

Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-22**

**STATION**

**38+22**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**12/8/2007**

**6/25/2008**

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	40%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	25%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphaoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	N/A	0%	
Unknown C3	N/A	0%	
Dead Biomass	N/A	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Open Water/Mud/Void	N/A	35%	
<b>TOTAL</b>		100%	0%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

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Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

Fall 2007

Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-23**

**STATION**

**40+04**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**12/8/2007**

**6/25/2008**

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	35%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	15%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	10%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphaoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	N/A	0%	
Unknown C3	N/A	0%	
Dead Biomass	N/A	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Open Water/Mud/Void	N/A	40%	
<b>TOTAL</b>		100%	0%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-24**

**STATION**

**41+86**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	5%	
Open/Void	N/A	95%	
<b>TOTAL</b>		100%	0%

**12/8/2007**

**6/25/2008**

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	20%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	5%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	5%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	5%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	N/A	0%	
Unknown C3	N/A	0%	
Dead Biomass	N/A	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Open Water/Mud/Void	N/A	65%	
<b>TOTAL</b>		100%	0%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

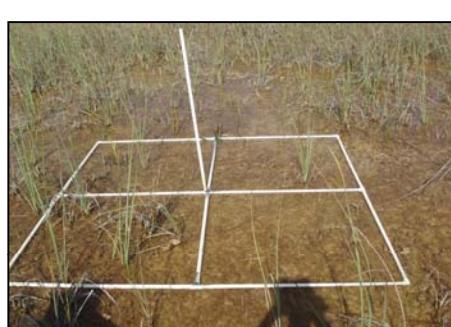
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Aquatic Macrofauna

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Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

Fall 2007

Spring 2008

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-25**

**STATION**

**43+68**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**12/8/2007**

**6/25/2008**

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	25%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	25%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	15%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	N/A	0%	
Unknown C3	N/A	0%	
Dead Biomass	N/A	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Open Water/Mud/Void	N/A	35%	
<b>TOTAL</b>		100%	0%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-26**

**STATION**

**45+50**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**12/8/2007**

**6/25/2008**

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	40%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	5%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphaoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	N/A	0%	
Unknown C3	N/A	0%	
Dead Biomass	N/A	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Open Water/Mud/Void	N/A	10%	
<b>TOTAL</b>		100%	0%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

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Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-27**

**STATION**

**47+32**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	50%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	25%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	5%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	N/A	0%	
Unknown C3	N/A	0%	
Dead Biomass	N/A	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Open Water/Mud/Void	N/A	20%	
<b>TOTAL</b>		100%	0%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-28**

**STATION**

**49+14**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	25%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	25%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	30%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	10%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	N/A	0%	
Unknown C3	N/A	0%	
Dead Biomass	N/A	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Open Water/Mud/Void	N/A	10%	
<b>TOTAL</b>		100%	0%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

**Pennsoco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-29**

**STATION**

**50+96**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	
Bladderwort	<i>Utricularia foliosa</i>	0%	
Bladderwort	<i>Utricularia purpurea</i>	0%	
Ludwigia	<i>Ludwigia repens</i>	0%	
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	
Water-Hyssops	<i>Bacopa caroliniana</i>	5%	
Open/Void	N/A	95%	
<b>TOTAL</b>		100%	0%

**12/8/2007**

**6/25/2008**

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	30%	
Saw Grass (Dead)	<i>Cladium jamaicense</i>	50%	
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Southern Swamp Lily	<i>Crinum americanum</i>	0%	
Pickerelweed	<i>Pontederia lanceolata</i>	0%	
Yellowtops	<i>Flaveria linearis</i>	0%	
Arrowhead	<i>Sagittaria graminea</i>	0%	
Duck Potato	<i>Sagittaria latifolia</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	
Cattail (Alive)	<i>Typha latifolia</i>	0%	
Cattail (Dead)	<i>Typha latifolia</i>	0%	
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	
Maiden-Cane	<i>Panicum hemitomum</i>	0%	
Shield Fern	<i>Thelypteris kunthii</i>	0%	
Swamp Fern	<i>Blechnum serrulatum</i>	0%	
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	
Floating-Heart	<i>Nymphoides aquatica</i>	0%	
False Nettle	<i>Boehmeria cylindrica</i>	0%	
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	
Unknown Red Stem	N/A	0%	
Unknown C3	N/A	0%	
Dead Biomass	N/A	0%	
Paragrass	<i>Urochloa mutica</i>	0%	
Open Water/Mud/Void	N/A	20%	
<b>TOTAL</b>		100%	0%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	
Golden Fig	<i>Ficus aurea</i>	0%	
Nettletree	<i>Trema micranthum</i>	0%	
Open/Void	N/A	100%	
<b>TOTAL</b>		100%	0%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture

\_\_\_\_\_

Aquatic Macrofauna

\_\_\_\_\_

Wildlife Indicators (tracks, scat, nests)

\_\_\_\_\_



Marker Missing

**Pennsuco Monitoring Project - Data Form**

**TRANSECT / POINT**

**C-30**

**STATION**

**52+78**

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudgrass	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**12/8/2007**

**6/25/2008**

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	55%	45%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	40%	40%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail (Alive)	<i>Typha latifolia</i>	0%	0%
Cattail (Dead)	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Chinese Ladder Brake (Fern)	<i>Pteris vittata</i>	0%	0%
Horned bladderwort (Rush/yellow flower)	<i>Utricularia cornuta</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
False Nettle	<i>Boehmeria cylindrica</i>	0%	0%
Rosy Camphorweed	<i>Pluchea rosea</i>	0%	0%
Dotted Smartweed	<i>Polygonum punctatum</i>	0%	0%
Unknown Red Stem	N/A	0%	0%
Unknown C3	N/A	0%	0%
Dead Biomass	N/A	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Open Water/Mud/Void	N/A	5%	15%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Shrubverbena / Lantana	<i>Lantana camara</i>	0%	0%
Saltmarsh morning glory (vine)	<i>Ipomoea sagittata</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:** \_\_\_\_\_

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



## **TRANSECT DR**

### **Narrative**

Transect DR is a relocated transect due to the previous D transect being a treated area. Transect DR is located in Section 31, Township 53, Range 39 east (Cell 26 - Pennsuco Exotic Treatment Area). It starts at point DR1 approximately one mile east of Krome Avenue (GPS Coordinates Latitude 25° 47' 20.64", Longitude 80° 28' 46.31") and continues southwest to point DR25 (GPS coordinates Latitude 25° 47' 45.57", Longitude 80° 28' 09.88") (Figure 6). One community type, wet prairie, primarily dominated by saw grass (*Cladium jamaicense*) in the herbaceous layer and punk tree (*Melaleuca quinquenervia*) in the sapling/vine layer, was identified for transect DR.

SFWMD requested that the existing D transect location be relocated to an untreated area during the November 2003 monitoring period. The new transect (DR) was established at approximately equally spaced intervals of 150 feet along the transect. The transect was shortened due to dense upland area that was not easily accessible. During the Fall 2006 visit, markers were missing at DR-13 through DR-17 and DR-19. These markers were reestablished along the transect during the Spring 2007 monitoring visit.

### **Observations from June 28, 2008 monitoring**

The transect had ponded water along its entire length, ranging from 2 to 5 inches at the monitoring points. No macrofauna or indicators of wildlife were noted.

The percentage of punk tree coverage increased from 0.2% coverage in Fall 2007 to 1.4% coverage in Spring 2008. The dominant herbaceous cover in Transect DR was live saw grass with 22.8% coverage. The transect also has 30.0% open/void coverage in the herbaceous layer.

In summary, the percent vegetative coverage by layer for this transect was identified as follows:

- In the submerged aquatics layer, the coverage included 1.2% water-hyssops (*Bacopa caroliniana*) and 0.2% mermaid weed (*Proserpinaca palustris*) with the remainder in open/void.
- In the herbaceous species layer, the dominant species covering the transect included 6.6% Tracy's beak rush (*Rhynchospora tracyi*), 3.8% capillary hair sedge (*Bulbostylis ciliataefolia*), 2.0% southern swamp lily (*Crinum americanum*), 1.8% maiden cane (*Panicum hemitomum*), and 1.2% arrowhead (*Sagittaria graminea*).
- In the sapling/vine layer, the coverage is 100% open/void.
- In the overstory layer, the transect had 100% open/void coverage.

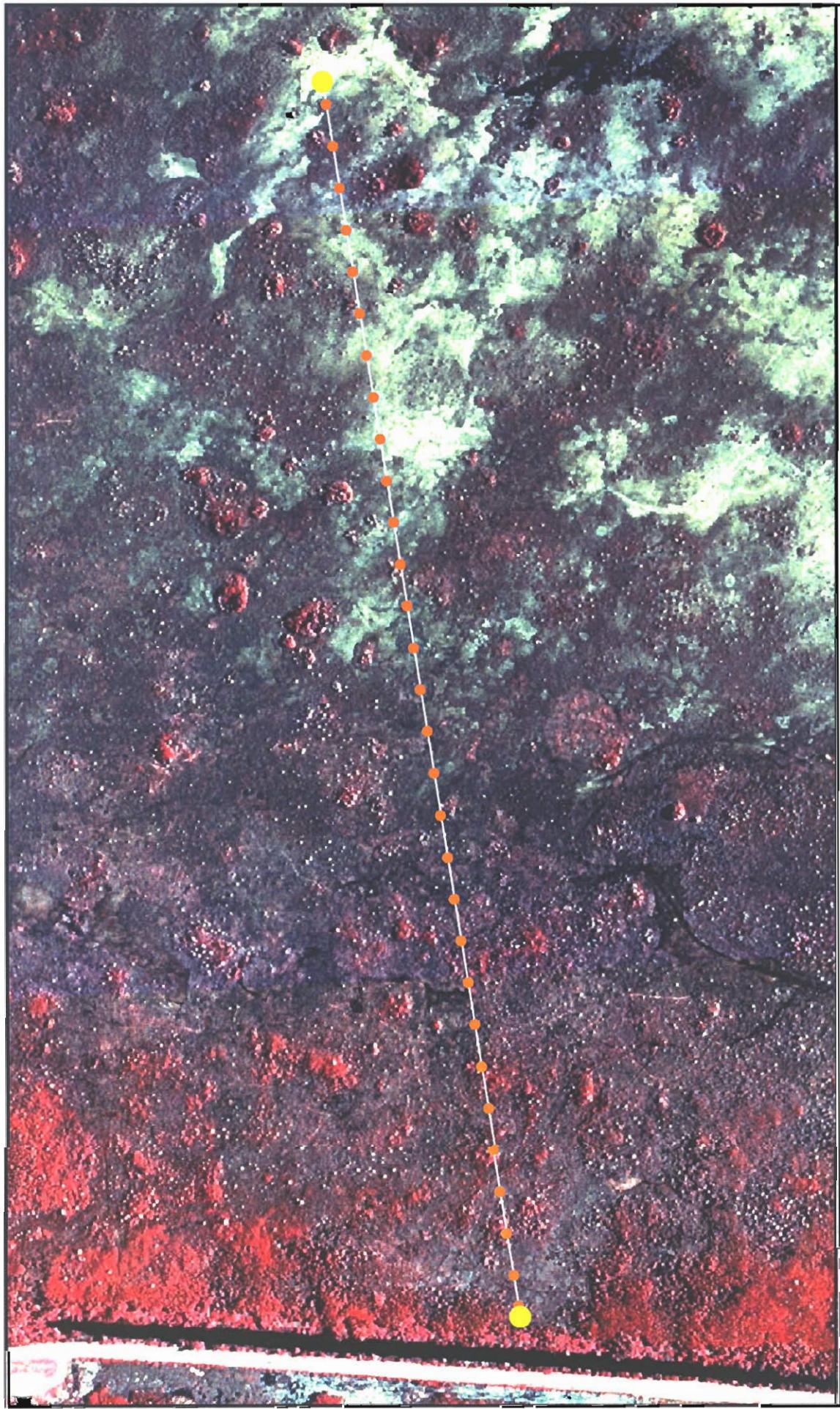


Figure 6. Transect D

● End Points of Segment  
● Data Collection Locations



N  
A  
300 0 300 Feet

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0.3%	0.0%
Bladderwort	<i>Utricularia foliosa</i>	0.0%	0.0%
Bladderwort	<i>Utricularia purpurea</i>	0.0%	0.0%
Ludwigia	<i>Ludwigia repens</i>	0.0%	0.0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0.0%	0.0%
Water-Hyssops	<i>Bacopa caroliniana</i>	1.5%	0.4%
Open/Void	N/A	98.6%	99.6%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	28.2%	22.8%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	23.2%	28.0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.2%	1.4%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	1.6%	1.0%
Southern Swamp Lily	<i>Crinum americanum</i>	1.6%	2.0%
Pickerelweed	<i>Pontederia lanceolata</i>	1.0%	0.0%
Yellowtops	<i>Flaveria linearis</i>	0.0%	0.0%
Duck Potato	<i>Sagittaria latifolia</i>	0.0%	0.0%
Arrowhead	<i>Sagittaria graminea</i>	0.8%	1.2%
Floating-Heart	<i>Nymphoides aquatica</i>	0.0%	0.0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	1.2%	3.8%
Cattail	<i>Typha latifolia</i>	0.0%	0.0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0.0%	0.0%
Maiden-Cane	<i>Panicum hemitomum</i>	0.0%	1.8%
Shield Fern	<i>Thelypteris kunthii</i>	0.0%	0.0%
Swamp Fern	<i>Blechnum serrulatum</i>	0.0%	0.0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	12.8%	6.6%
Paragrass	<i>Urochloa mutica</i>	0.3%	0.0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0.5%	0.0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0.0%	0.0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0.0%	0.0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0.0%	0.0%
Unknown DR-3 Grass	N/A	0.0%	0.8%
Dog Fennel	<i>Eupatorium capillifolium</i>	0.0%	0.4%
Dead Biomass	N/A	6.2%	0.4%
Open Water/Mud/Void	N/A	22.8%	30.0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.0%	0.0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0.0%	0.0%
Nettletree	<i>Trema micranthum</i>	0.0%	0.0%
Open/Void	N/A	100.0%	100.0%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.0%	0.0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0.0%	0.0%
Golden Fig	<i>Ficus aurea</i>	0.0%	0.0%
Open/Void	N/A	100.0%	100.0%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)

0-40 Panoramic - Looking east



52-78 Panoramic - Looking West



**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	5%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	5%	5%
Open/Void	N/A	90%	95%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	0%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	5%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	10%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	10%	30%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	5%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	25%	0%
Open Water/Mud/Void	N/A	55%	60%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture                            5" Water

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	5%
Open/Void	N/A	100%	95%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	15%	10%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	55%	60%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	10%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	20%	25%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

12/8/2007

6/25/2008

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	0%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	5%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	20%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	45%	20%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	5%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	5%
Dead Biomass	N/A	30%	0%
Open Water/Mud/Void	N/A	20%	55%
<b>TOTAL</b>		100%	105%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

12/8/2007

6/25/2008

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	55%	70%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	45%	30%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	0%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

12/8/2007

6/25/2008

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	30%	40%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	55%	55%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	5%	5%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	10%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

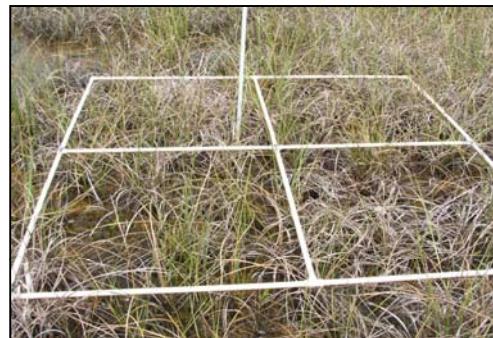
Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	35%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	15%	40%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	5%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	35%	20%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

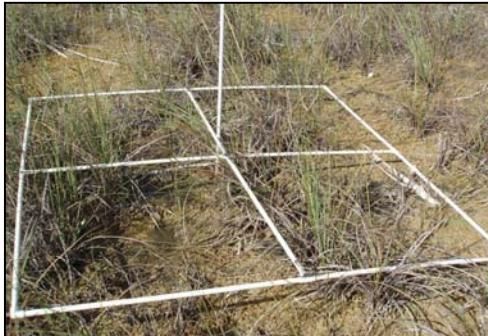
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

12/8/2007

6/25/2008

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	55%	50%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	20%	30%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	25%	20%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

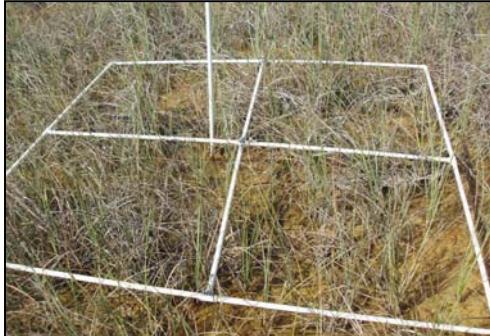
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/25/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/25/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	55%	45%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	25%	30%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	5%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	15%	25%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/25/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/25/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007

Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	5%	0%
Open/Void	N/A	95%	100%
<b>TOTAL</b>		100%	100%

12/8/2007

6/25/2008

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	40%	30%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	30%	40%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	15%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	15%	30%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	5%	0%
Open/Void	N/A	95%	100%
<b>TOTAL</b>		100%	100%

12/8/2007

6/25/2008

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	25%	20%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	15%	25%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	5%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	5%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	50%	55%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

2" Water

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

12/8/2007

6/25/2008

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	15%	10%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	50%	15%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	10%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	25%	75%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/25/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/25/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	25%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	40%	45%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	5%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	10%	25%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/25/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/25/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

12/8/2007

6/25/2008

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	50%	30%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	20%	50%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	5%	5%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	5%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	5%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	20%	10%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	40%	25%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	40%	50%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	20%	20%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

2" Water

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

12/8/2007

6/25/2008

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	20%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	35%	65%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	20%	15%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	55%	55%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	35%	40%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	10%	5%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture \_\_\_\_\_

Aquatic Macrofauna \_\_\_\_\_

Wildlife Indicators (tracks, scat, nests) \_\_\_\_\_



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/25/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/25/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	0%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	5%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	15%	20%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	5%	5%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	75%	70%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/25/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/25/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

12/8/2007

6/25/2008

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	35%	30%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	25%	45%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	20%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	20%	25%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

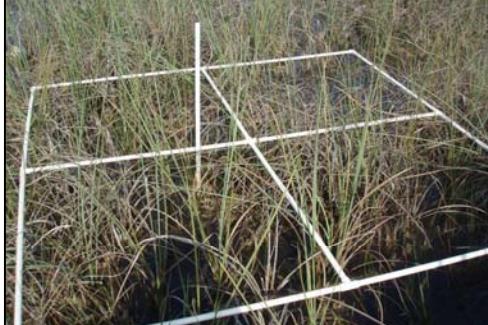
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

12/8/2007

6/25/2008

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	0%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	10%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	75%	20%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	25%	10%
Open Water/Mud/Void	N/A	0%	60%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	5%	0%
Open/Void	N/A	95%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	40%	35%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	55%	55%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	5%	10%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	0%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	5%	0%
Open/Void	N/A	95%	100%
<b>TOTAL</b>		100%	100%

12/8/2007

6/25/2008

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	0%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	10%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	10%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	70%	25%
Paragrass	<i>Urochloa mutica</i>	5%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	25%	0%
Open Water/Mud/Void	N/A	0%	55%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

6" Water

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	60%	40%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	20%	20%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	10%	20%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	10%	20%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	12/8/2007 % Coverage	6/25/2008 % Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	12/8/2007 % Coverage	6/25/2008 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	0%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	20%	15%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	5%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	55%	65%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	10%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	5%
Dead Biomass	N/A	10%	0%
Open Water/Mud/Void	N/A	15%	0%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	12/8/2007 % Coverage	6/25/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	12/8/2007 % Coverage	6/25/2008 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007

Spring 2008

**SUBMERGED AQUATICS**

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

12/8/2007

6/25/2008

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	0%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	5%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	10%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	10%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	65%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	5%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	30%	0%
Open Water/Mud/Void	N/A	50%	25%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

SUBMERGED AQUATICS		12/8/2007	6/25/2008
Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Manatee Mudflower	<i>Micranthemum glomeratum</i>	0%	0%
Water-Hyssops	<i>Bacopa caroliniana</i>	5%	0%
Open/Void	N/A	95%	100%
<b>TOTAL</b>		100%	100%

**HERBACEOUS SPECIES**

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	0%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	10%	15%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Duck Potato	<i>Sagittaria latifolia</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	5%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	30%	25%
Cattail	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephaelanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Paragrass	<i>Urochloa mutica</i>	0%	0%
Horned Bladderwort	<i>Utricularia cornuta</i>	0%	0%
Shortbeak Beaksedge	<i>Rhynchospora nitens</i>	0%	0%
Bushy Bluestem	<i>Andropogon glomeratus</i>	0%	0%
Shrubby False Buttonweed	<i>Spermacoce verticillata</i>	0%	0%
Unknown DR-3 Grass	N/A	0%	0%
Dog Fennel	<i>Eupatorium capillifolium</i>	0%	0%
Dead Biomass	N/A	10%	0%
Open Water/Mud/Void	N/A	50%	55%
<b>TOTAL</b>		100%	100%

**SAPLING / VINE**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Nettletree	<i>Trema micranthum</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**OVERSTORY**

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus aurea</i>	0%	0%
Open/Void	N/A	100%	100%
<b>TOTAL</b>		100%	100%

**NOTES:**

Water Level / Soil Moisture

5" Water

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Fall 2007



Spring 2008

## **RAINFALL DATA 2007-2008**

**Monthly Precipitation**  
**MIAMI KENDALL TAMiami**  
**December 2007- July 2008**

