

ENVIRONMENTAL MONITORING REPORT

PENNSUCO MITIGATION PROJECT

Miami-Dade County

Township-52-South, Sections-30 and 32, Range 39-East

Township-53-South, Section -16, Range-39-East

Township-53/54-South, Section-6, Range-39-East

Project: C-13604

Monitoring Performed:

May 15, 2004

Submitted:

June 2004

KCI Technologies, Inc.



ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

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June 4, 2004

South Florida Water Management District
3301 Gun Club Road
West Palm Beach, Florida 33406

Attn: Marjorie Moore

Subject: Pennsuco Monitoring
KCI Job Order #1002034A1

*Document transferred to
Francis for comments
6/21. Comments due 7/14.*

Dear Ms. Moore:

KCI has completed the Spring 2004 monitoring draft report on the Pennsuco restoration project. We are forwarding two copies of the document for your review and approval. The next monitoring for the site is scheduled for November 2004.

Please note: "Transect DR" could not be monitored this period due to site conditions.

Please feel free to contact me if you have any questions about the work or need additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph J. Pfeiffer, Jr." followed by "PWS" and "Vice President".

Joseph J. Pfeiffer, Jr. PWS
Southeast Environmental Manager
Vice President

Cc: Darryl Kroeze, KCI

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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 over a five-year period. The vegetative success criteria outlined in the Draft Pennsuco Memorandum of Agreement (MOA) requires that after five-years: 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
Begin "A"	25° 53' 12.76"	80° 29' 03.33"
End "A"	25° 53' 12.69"	80° 28' 04.91"
Begin "B"	25° 51' 20.39"	80° 28' 01.70"
End "B"	25° 51' 19.15"	80° 27' 03.30"
Begin "C"	25° 49' 48.07"	80° 28' 55.38"
End "C"	25° 49' 48.00"	80° 27' 57.00"
Begin "DR"	25° 47' 20.64"	80° 28' 46.31"
End "DR"	25° 47' 45.57"	80° 28' 09.88"

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 onto 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 and punk trees 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 vegetation present.

Photographs of the 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 was 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 was 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
May 15, 2004

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 punk tree (*Melaleuca quinquenervia*), yellowtops (*Flaveria linearis*) and an unknown plant (UK 9) belonging to the Malvaceae family. Points A2 through A30 represent a wet prairie community type dominated by saw-grass (*Cladium jamaicense*). Control efforts focused primarily on punk trees, and consisted of herbicidal treatment and a physical removal program, followed by a controlled burn.

Observations from May 15, 2004 monitoring

The existing point 23 could not be located; therefore this point is now at a new location.

Punk tree seedlings, totaling less than five percent of the vegetative coverage, were observed at photopoints 5, 10, 17, 20, 22, 23, 25, 26, 27, 28, 29, and 30.

Throughout the transect dead punk tree saplings and trees were observed. During the monitoring, it was observed that the previous herbicide treated saplings and trees are experiencing re-growth.

The entire transect was observed to be fairly dry with no surface water, however there was soil saturation at the four photopoint locations (A7, A14, A22, and A28). No macro-fauna or indicators of wildlife were noted.

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

- In the submerged aquatics layer only, 100 percent open/void.
- In the herbaceous species layer, 23 percent live saw-grass, 32 percent dead saw-grass, 1 percent live punk tree, 3 percent dead punk tree, 1 percent Southern Swamp Lily (*Crinum americanum*), 3 percent Capillary Hairsedge (*Bulbostylis ciliataefolia*), and 1 percent Tracy's Beak Rush (*Rhynchospora tracyi*).
- In the sapling/vine layer, 1 percent dead punk trees.
- In the overstory layer, less than 1 percent alive and dead punk trees.

TRANSECT

"A"

Total Length 5280'

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003 % Coverage	5/15/2004 % Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0.00%	0.00%
Bladderwort	<i>Utricularia foliosa</i>	0.00%	0.00%
Bladderwort	<i>Utricularia purpurea</i>	0.00%	0.00%
Ludwigia	<i>Ludwigia repens</i>	0.80%	0.00%
Open/Void	N/A	99.20%	100.00%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	11/22/2003 % Coverage	5/15/2004 % Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	14.20%	22.50%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	12.83%	32.20%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.17%	1.10%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0.07%	3.07%
Bluestem	<i>Andropogon spp.</i>	0.00%	0.83%
Southern Swamp Lily	<i>Crinum americanum</i>	0.67%	1.00%
Pickerelweed	<i>Pontederia lanceolata</i>	0.03%	0.33%
Yellowtops	<i>Flaveria linearis</i>	2.50%	0.67%
Arrowhead	<i>Sagittaria graminea</i>	0.07%	0.33%
Floating-Heart	<i>Nymphoides aquatica</i>	0.30%	0.17%
Capillary Hairsgedge	<i>Bulbostylis ciliataefolia</i>	0.40%	3.33%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0.57%	1.33%
Button Bush	<i>Cephalanthus occidentalis</i>	0.00%	0.00%
Maiden-Cane	<i>Panicum hemitomum</i>	0.03%	0.17%
Shield Fern	<i>Thelypteris kunthii</i>	0.13%	0.00%
Swamp Fern	<i>Blechnum serrulatum</i>	0.00%	0.50%
Elm	<i>Trema micrantha</i>	0.00%	0.00%
Dead Biomass	N/A	0.00%	0.83%
Open Water/Mud/Void	N/A	68.03%	31.63%
TOTAL		100%	100%

SAPLING / VINE

Common Name	Scientific Name	11/22/2003 % Coverage	5/15/2004 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.23%	0.50%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	2.43%	0.83%
Elm	<i>Trema micrantha</i>	0.00%	0.00%
TBD	N/A	0.00%	0.00%
Open/Void	N/A	97.33%	98.67%
TOTAL		100%	100%

OVERSTORY

Common Name	Scientific Name	11/22/2003 % Coverage	5/15/2004 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.67%	0.20%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	2.50%	0.20%
Golden Fig	<i>Ficus Aurea</i>	0.00%	0.00%
Open/Void	N/A	96.83%	99.60%
TOTAL		100%	100%

NOTES:

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)

0+00 Panoramic - Looking east



52+78 Panoramic - Looking West



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-1

STATION 0+00

SUBMERGED AQUATICS

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacoda caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Bluestem	<i>Andropogon spp.</i>	0%	25%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	75%	20%
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%	15%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	25%
Open Water/Mud/Void	N/A	25%	15%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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>	50%	0%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	50%	100%
TOTAL		100%	100%

NOTES:

- | | |
|-------------------------------------------|----------------------------------|
| Water Level / Soil Moisture | Soil is moist, but not saturated |
| Aquatic Macrofauna | NONE |
| Wildlife Indicators (tracks, scat, nests) | NONE |



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-2

STATION 1+82

SUBMERGED AQUATICS

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacoda caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	5%	0%
Open/Void	N/A	95%	100%
TOTAL		100%	100%

11/22/2003

5/15/2004

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	17%	20%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	20%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bluestem	<i>Andropogon spp.</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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	83%	60%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT

A-3

STATION

3+64

SUBMERGED AQUATICS

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacoda caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	5%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	5%	25%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bluestem	<i>Andropogon spp.</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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	95%	70%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

OVERSTORY

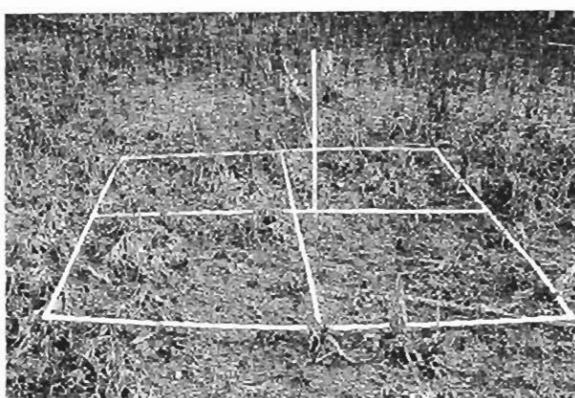
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-4

STATION 5+46

SUBMERGED AQUATICS

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacoda caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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>	5%	40%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	10%
Bluestem	<i>Andropogon spp.</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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	95%	50%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-5

STATION 7+28

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
		% Coverage	% Coverage
Water-Hyssops	<i>Bacoda caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	33%	55%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	29%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	1%	1%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bluestem	<i>Andropogon spp.</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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	66%	15%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

OVERSTORY

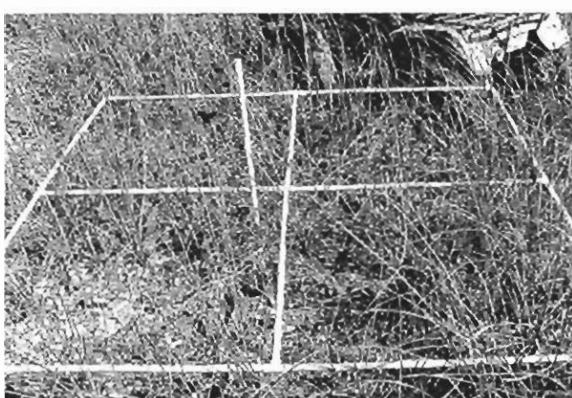
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-6

STATION 9+10

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	2%	0%
Open/Void	N/A	98%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	3%	15%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	10%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bluestem	<i>Andropogon spp.</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	2%	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>	0%	15%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	95%	50%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

OVERSTORY

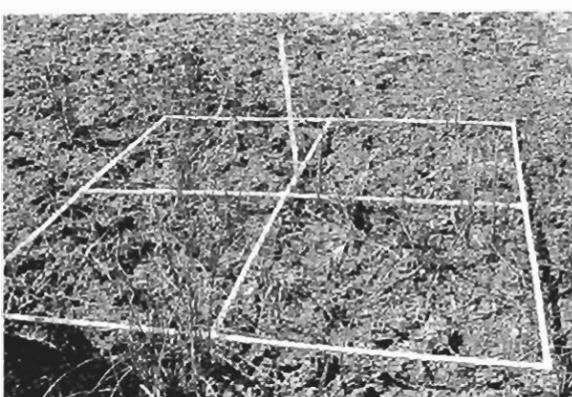
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT

A-7

STATION

10+92

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	40%	50%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	25%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bluestem	<i>Andropogon spp.</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	1%	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>	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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	59%	15%
TOTAL		100%	100%

SAPLING / VINE

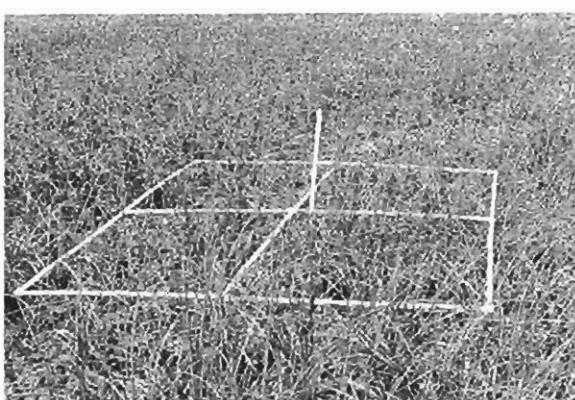
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture	No standing water, saturated soil
Aquatic Macrofauna	NONE
Wildlife Indicators (tracks, scat, nests)	NONE



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-8

STATION 12+74

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	35%	60%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	15%	40%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bluestem	<i>Andropogon spp.</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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	45%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-9

STATION 14+56

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	20%	30%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	5%	40%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bluestem	<i>Andropogon spp.</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>	3%	5%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	72%	25%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-10

STATION 16+38

SUBMERGED AQUATICS

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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>	5%	25%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bluestem	<i>Andropogon spp.</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>	3%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	20%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	62%	0%
TOTAL		100%	100%

SAPLING / VINE

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	3%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	97%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-11

STATION 18+20

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Bluestem	<i>Andropogon spp.</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>	5%	20%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	95%	80%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

OVERSTORY

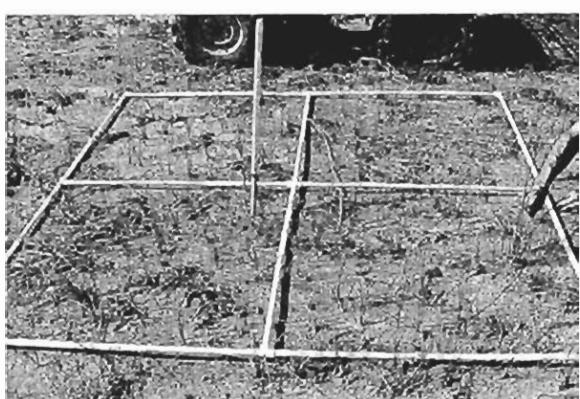
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT

A-12

STATION

20+02

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	5%	0%
Open/Void	N/A	95%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	50%	60%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	10%	25%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bluestem	<i>Andropogon spp.</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	1%	5%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	39%	10%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-13

STATION 21+84

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003 % Coverage	5/15/2004 % Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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>	5%	50%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	10%
Bluestem	<i>Andropogon spp.</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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	95%	40%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-14

STATION 23+66

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	30%	50%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	20%	40%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bluestem	<i>Andropogon spp.</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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	50%	10%
TOTAL		100%	100%

SAPLING / VINE

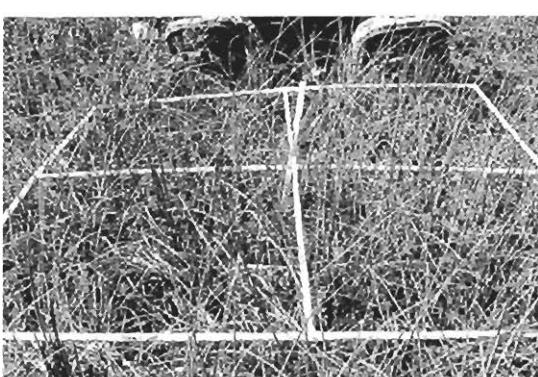
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

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%
TOTAL		100%	100%

NOTES: _____

- | | |
|-------------------------------------------|-----------------------------------|
| Water Level / Soil Moisture | No standing water, saturated soil |
| Aquatic Macrofauna | NONE |
| Wildlife Indicators (tracks, scat, nests) | NONE |



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-15

STATION 25+48

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003 % Coverage	5/15/2004 % Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	15%	25%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	40%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bluestem	<i>Andropogon spp.</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	5%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	1%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	7%	15%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	2%	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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	75%	15%
TOTAL		100%	100%

SAPLING / VINE

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	1%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	99%	100%
TOTAL		100%	100%

OVERSTORY

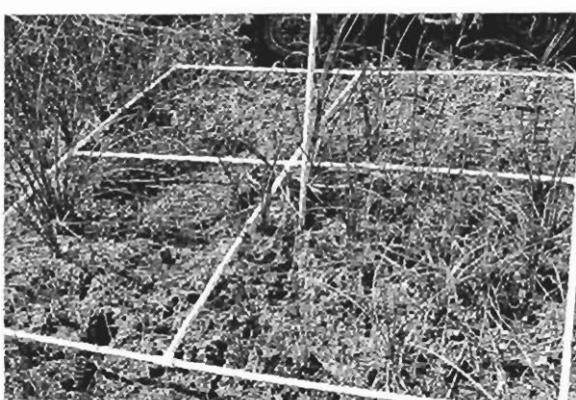
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT

A-16

STATION

27+30

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003 % Coverage	5/15/2004 % Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	5%	0%
Open/Void	N/A	95%	100%
TOTAL		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%	15%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bluestem	<i>Andropogon spp.</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%	50%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	10%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	1%	5%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	84%	15%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT

A-17

STATION

29+12

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	3%	0%
Open/Void	N/A	97%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	17%	30%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	20%	45%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	2%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	1%	1%
Bluestem	<i>Andropogon spp.</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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	60%	19%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: 2 *Melaleuca* saplings alive, 1 dead

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-18

STATION 30+94

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	3%	0%
Open/Void	N/A	97%	100%
TOTAL		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>	10%	20%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	10%
Bluestem	<i>Andropogon spp.</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>	2%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	2%	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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	86%	60%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT

A-19

STATION

32+76

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	75%	75%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	25%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bluestem	<i>Andropogon spp.</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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	25%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

OVERSTORY

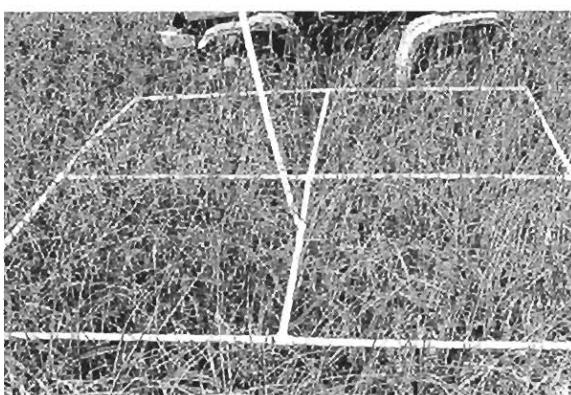
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-20

STATION 34+58

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	20%	40%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	10%	34%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	1%	1%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bluestem	<i>Andropogon spp.</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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	69%	25%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

OVERSTORY

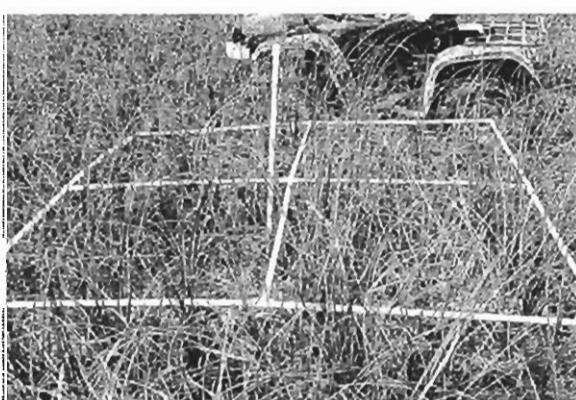
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: 1 *Melaleuca* sapling alive

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT

A-21

STATION

36+40

SUBMERGED AQUATICS

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	1%	0%
Open/Void	N/A	99%	100%
TOTAL		100%	100%

11/22/2003

5/15/2004

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	15%	35%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	5%	34%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	1%
Bluestem	<i>Andropogon spp.</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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	80%	30%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

- | | |
|-------------------------------------------|-----------------------------------|
| Water Level / Soil Moisture | No standing water, saturated soil |
| Aquatic Macrofauna | NONE |
| Wildlife Indicators (tracks, scat, nests) | NONE |



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-22

STATION 38+22

SUBMERGED AQUATICS

Common Name	Scientific Name	% Coverage	% Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	1%	10%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	40%	65%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	1%	10%
Bluestem	<i>Andropogon spp.</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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	58%	10%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: Melaleuca regrowth from stumps throughout plot

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-23

STATION 40+04

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%	55%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	5%
Bluestem	<i>Andropogon spp.</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	15%	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>	2%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	83%	40%
TOTAL		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>	5%	0%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	95%	100%
TOTAL		100%	100%

OVERSTORY

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	20%	1%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	10%	1%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	70%	98%
TOTAL		100%	100%

NOTES: Melaleuca regrowth from stumps throughout plot

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-24

STATION 41+86

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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>	65%	50%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bluestem	<i>Andropogon spp.</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>	2%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	33%	50%
TOTAL		100%	100%

SAPLING / VINE

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	10%	20%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	90%	75%
TOTAL		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>	15%	0%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	85%	100%
TOTAL		100%	100%

NOTES: Melaleuca regrowth from stumps throughout plot

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT

A-25

STATION

43+68

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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>	40%	0%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bluestem	<i>Andropogon spp.</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>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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	60%	95%
TOTAL		100%	100%

SAPLING / VINE

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	20%	0%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	80%	95%
TOTAL		100%	100%

OVERSTORY

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	5%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	100%	90%
TOTAL		100%	100%

NOTES: Melaleuca regrowth from stumps throughout plot

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-26

STATION 45+50

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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>	65%	20%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	5%
Bluestem	<i>Andropogon spp.</i>	0%	0%
Southern Swamp Lily	<i>Crinum americanum</i>	2%	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%	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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	33%	65%
TOTAL		100%	100%

SAPLING / VINE

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	1%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	5%	5%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	94%	90%
TOTAL		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%
TOTAL		100%	100%

NOTES: Melaleuca regrowth from stumps throughout plot

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT

A-27

STATION

47+32

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003 % Coverage	5/15/2004 % Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	0%	5%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	45%	55%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bluestem	<i>Andropogon spp.</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>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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	55%	30%
TOTAL		100%	100%

SAPLING / VINE

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	2%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	20%	0%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	78%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: Melaleuca regrowth from stumps throughout plot

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-28

STATION 49+14

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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>	15%	50%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	15%
Bluestem	<i>Andropogon spp.</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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	85%	30%
TOTAL		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>	2%	0%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	98%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: 6 *Melaleuca* saplings alive

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-29

STATION 50+96

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	5%	10%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	50%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	5%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	25%
Bluestem	<i>Andropogon spp.</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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	95%	10%
TOTAL		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>	10%	0%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	90%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: 5 Melaleuca saplings alive

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT A-30

STATION 52+78

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003 % Coverage	5/15/2004 % Coverage
Water-Hyssops	<i>Bacopa caroliniana</i>	0%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	11/22/2003 % Coverage	5/15/2004 % Coverage
Saw-grass (Alive)	<i>Cladium jamaicense</i>	15%	40%
Saw-grass (Dead)	<i>Cladium jamaicense</i>	0%	39%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	1%	1%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Bluestem	<i>Andropogon spp.</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%	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%
Elm	<i>Trema micrantha</i>	0%	0%
Dead Biomass	N/A	0%	0%
Open Water/Mud/Void	N/A	84%	15%
TOTAL		100%	100%

SAPLING / VINE

Common Name	Scientific Name	11/22/2003 % Coverage	5/15/2004 % Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	1%	0%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	99%	100%
TOTAL		100%	100%

OVERSTORY

Common Name	Scientific Name	11/22/2003 % Coverage	5/15/2004 % 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%
TOTAL		100%	100%

NOTES: 3 *Melaleuca* saplings alive

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



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. Control efforts consisted of herbicidal treatment and a physical removal program, followed by a controlled burn.

Observations from May 15, 2004 monitoring

Photo points B6 and B12, though dominated by dead and alive Saw Grass (*Cladium jamaicense*), also each contained 5 percent punk tree (*Melaleuca quinquenervia*) seedlings within the herbaceous species.

The entire transect was observed to be fairly dry with no surface water, however there was soil saturation at the four photopoint locations (B7, B14, B21, and B28). No macro fauna or indicators of wildlife were noted.

Much of the punk tree vegetative communities were dead, as shown in photos B8 and B9, due to enhancement efforts, which called for eradication of exotic and invasive species.

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

- In the submerged aquatics layer, 99 percent open/void.
- In the herbaceous species layer, 32 percent live saw-grass, 37 percent dead saw-grass, 2 percent Southern Swamp Lily (*Crinum americanum*), and 3 percent Arrowhead (*Sagittaria graminea*).
- In the sapling/vine layer, 100 percent open/void.
- In the overstory layer, 100 percent open/void.

Pennsuco Monitoring Project - Summary Sheet

TRANSECT "B"

Total Length 5280'

SUBMERGED AQUATICS

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0.00%	0.00%
Bladderwort	<i>Utricularia foliosa</i>	0.00%	0.00%
Bladderwort	<i>Utricularia purpurea</i>	0.00%	0.00%
Ludwigia	<i>Ludwigia repens</i>	0.50%	0.67%
Open/Void	N/A	99.50%	99.33%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	34.57%	42.47%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	8.87%	36.50%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.07%	0.33%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0.00%	1.17%
Southern Swamp Lily	<i>Crinum americanum</i>	0.27%	2.00%
Pickerelweed	<i>Pontederia lanceolata</i>	0.23%	0.17%
Yellowtops	<i>Flaveria linearis</i>	0.00%	1.00%
Arrowhead	<i>Sagittaria graminea</i>	0.53%	2.83%
Floating-Heart	<i>Nymphoides aquatica</i>	0.20%	0.17%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0.00%	0.00%
Cattail	<i>Typha latifolia</i>	0.00%	1.17%
Button Bush	<i>Cephalanthus occidentalis</i>	0.07%	0.03%
Maiden-Cane	<i>Panicum hemitomum</i>	0.33%	1.00%
Shield Fern	<i>Thelypteris kunthii</i>	0.00%	0.00%
Swamp Fern	<i>Blechnum serrulatum</i>	0.00%	0.00%
Elm	<i>Trema micrantha</i>	0.00%	0.00%
Creaser Weed <i>Urena lobata</i>	<i>Urena lobata</i>	0.00%	0.00%
Open Water/Mud/Void	N/A	54.87%	11.17%
TOTAL		100%	100%

SAPLING / VINE

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.00%	0.00%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0.00%	0.00%
Elm	<i>Trema micrantha</i>	0.00%	0.00%
TBD	N/A	0.00%	0.00%
Open/Void	N/A	100.00%	100.00%
TOTAL		100%	100%

OVERSTORY

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.00%	0.00%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	1.07%	0.00%
Golden Fig	<i>Ficus Aurea</i>	0.00%	0.00%
Open/Void	N/A	98.93%	100.00%
TOTAL		100%	100%

NOTES:

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



0+00 Panoramic - Looking East



52+78 Panoramic - Looking West

Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	20%	35%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	5%	10%
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%	5%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	75%	50%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

OVERSTORY

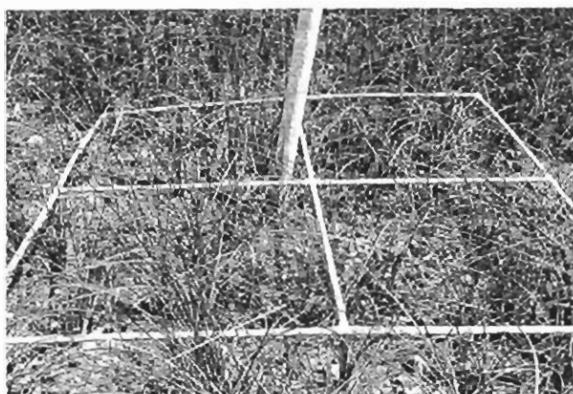
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	40%	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%
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%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	40%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-3

STATION 3+64

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	70%
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%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	40%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsoco Monitoring Project - Data Form

TRANSECT / POINT

B-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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	30%	60%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	10%	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%
Floating-Heart	<i>Nymphoides aquatica</i>	1%	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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	59%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-5STATION 7+28**SUBMERGED AQUATICS**

Common Name	Scientific Name	11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	20%	35%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	20%	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%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	60%	10%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT

B-6

STATION

9+10

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%
Open/Void	N/A	100%	100%
TOTAL		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>	35%	55%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	2%	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%
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%	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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	63%	35%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: 3 *Melaleuca* saplings alive

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-7STATION 10+92**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>	2%	0%
Open/Void	N/A	98%	100%
TOTAL		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%	15%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	0%
Yellowtops	<i>Flaveria linearis</i>	0%	25%
Arrowhead	<i>Sagittaria graminea</i>	10%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	3%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail	<i>Typha latifolia</i>	0%	30%
Button Bush	<i>Cephaelanthus occidentalis</i>	2%	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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	85%	30%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: 2 dead *Melaleuca* fallen through point

Water Level / Soil Moisture	No standing water, saturated soil
Aquatic Macrofauna	NONE
Wildlife Indicators (tracks, scat, nests)	NONE



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-8

STATION 12+74

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>	3%	0%
Open/Void	N/A	97%	100%
TOTAL		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%	10%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	5%
Yellowtops	<i>Flaveria linearis</i>	0%	0%
Arrowhead	<i>Sagittaria graminea</i>	3%	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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	97%	75%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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>	2%	0%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	98%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-9

STATION 14+56

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
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>	10%	20%
Open/Void	N/A	90%	80%
TOTAL		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%	25%
Southern Swamp Lily	<i>Crinum americanum</i>	0%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	1%	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%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	99%	75%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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>	30%	0%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	70%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-10

STATION 16+38

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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	50%	50%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	5%	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>	1%	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%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	44%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

OVERSTORY

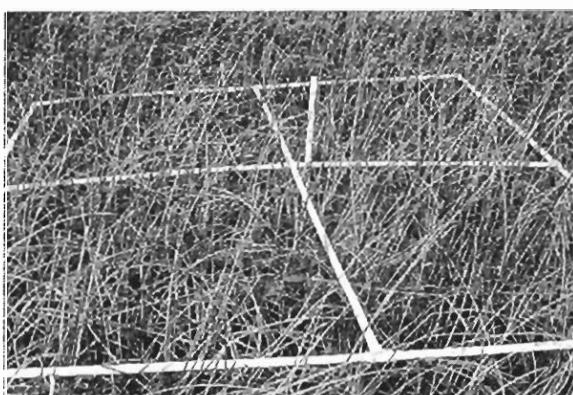
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-11

STATION 18+20

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	30%	55%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	10%	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>	1%	0%
Pickerelweed	<i>Pontederia lanceolata</i>	1%	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%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	58%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-12STATION 20+02**SUBMERGED AQUATICS**

Common Name	Scientific Name	11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	32%	50%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	8%	40%
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%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	60%	5%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: 2 Melaleuca saplings alive

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-13

STATION 21+84

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	20%	25%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	5%	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%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	2%	5%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	73%	50%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

OVERSTORY

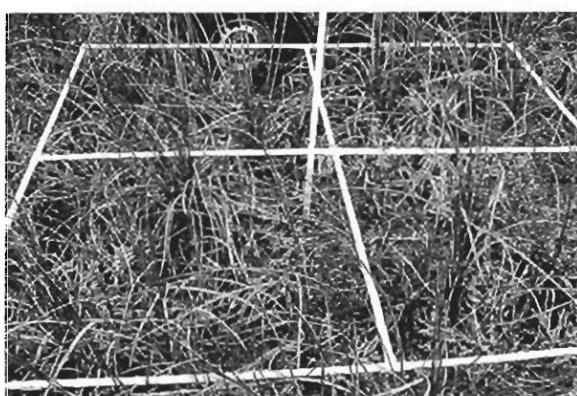
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-14

STATION 23+66

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	25%	40%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	25%	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%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	50%	5%
TOTAL		100%	100%

SAPLING / VINE

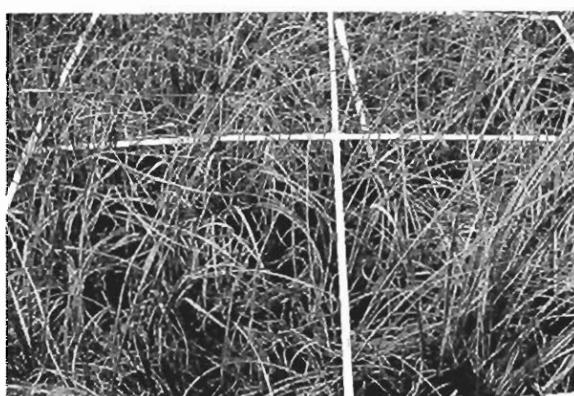
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

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%
TOTAL		100%	100%

NOTES:

Water Level / Soil Moisture	No standing water, saturated soil
Aquatic Macrofauna	NONE
Wildlife Indicators (tracks, scat, nests)	NONE



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT

B-15

STATION

25+48

SUBMERGED AQUATICS

11/22/2003

5/15/2004

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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	60%	65%
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>	2%	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%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	18%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-16

STATION 27+30

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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	40%	40%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	5%	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>	1%	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%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	54%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-17

STATION 29+12

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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	35%	60%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	15%	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%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	50%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: 3 dead *Melaleuca* trees

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Pennsoco Monitoring Project - Data Form

TRANSECT / POINT

B-18

STATION

30+94

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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

11/22/2003

5/15/2004

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	40%	60%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	10%	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%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	50%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-19

STATION 32+76

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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

11/22/2003

5/15/2004

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	25%	40%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	10%	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>	1%	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>	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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	64%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

OVERSTORY

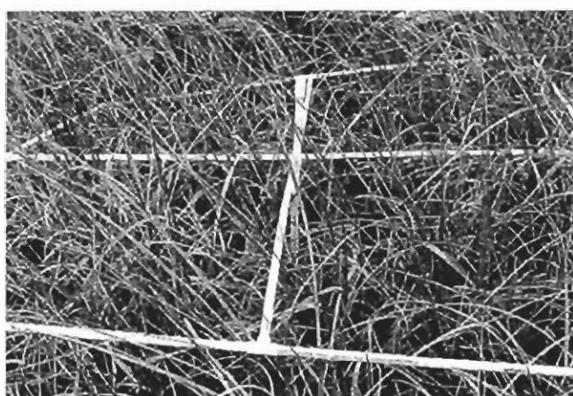
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT

B-20

STATION

34+58

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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	40%	50%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	10%	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%	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%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	50%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-21

STATION 36+40

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	30%	50%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	5%	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%	5%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	65%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

- Water Level / Soil Moisture No standing water, saturated soil
 Aquatic Macrofauna NONE
 Wildlife Indicators (tracks, scat, nests) NONE



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-22

STATION 38+22

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	30%	60%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	3%	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%	5%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	67%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

OVERSTORY

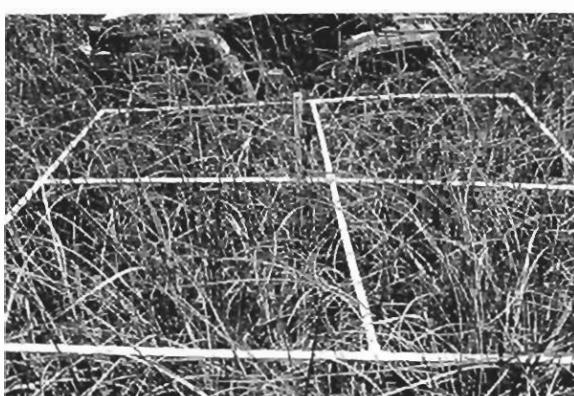
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsoco Monitoring Project - Data Form

TRANSECT / POINT B-23

STATION 40+04

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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	85%	45%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	5%	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>	3%	0%
Yellowtops	<i>Flaveria linearis</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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	7%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT

B-24

STATION

41+86

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	40%	40%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	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>	1%	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%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	59%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-25

STATION 43+68

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%
Open/Void	N/A	100%	100%
TOTAL		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>	5%	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>	3%	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>	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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	52%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-26

STATION 45+50

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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

11/22/2003

5/15/2004

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	25%	45%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	5%	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%	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%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	70%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT

B-27

STATION

47+32

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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

11/22/2003

5/15/2004

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	65%	60%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	5%	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%	5%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	30%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-28

STATION 49+14

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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

11/22/2003

5/15/2004

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	40%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	5%	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>	3%	20%
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%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	47%	0%
TOTAL		100%	100%

SAPLING / VINE

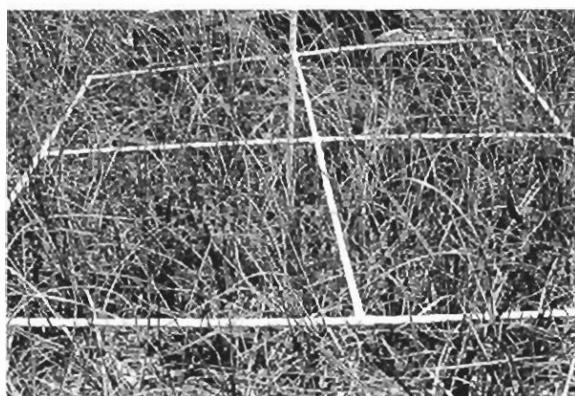
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

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%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture	No standing water, saturated soil
Aquatic Macrofauna	NONE
Wildlife Indicators (tracks, scat, nests)	NONE



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT B-29

STATION 50+96

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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

11/22/2003

5/15/2004

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	40%	59%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	5%	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%
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%	1%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Elm	<i>Trema micrantha</i>	0%	0%
Mallow	<i>Malvaceae spp.</i>	0%	0%
Open Water/Mud/Void	N/A	55%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

OVERSTORY

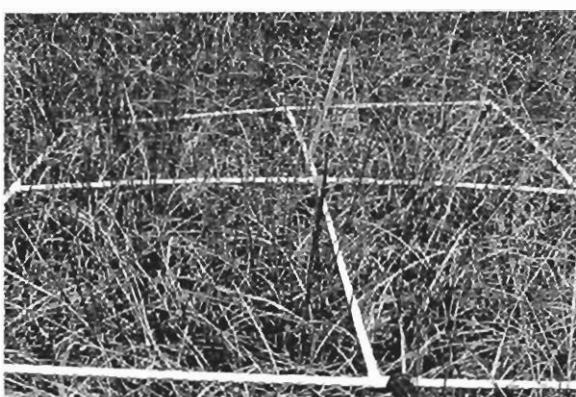
Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	0%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0%	0%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



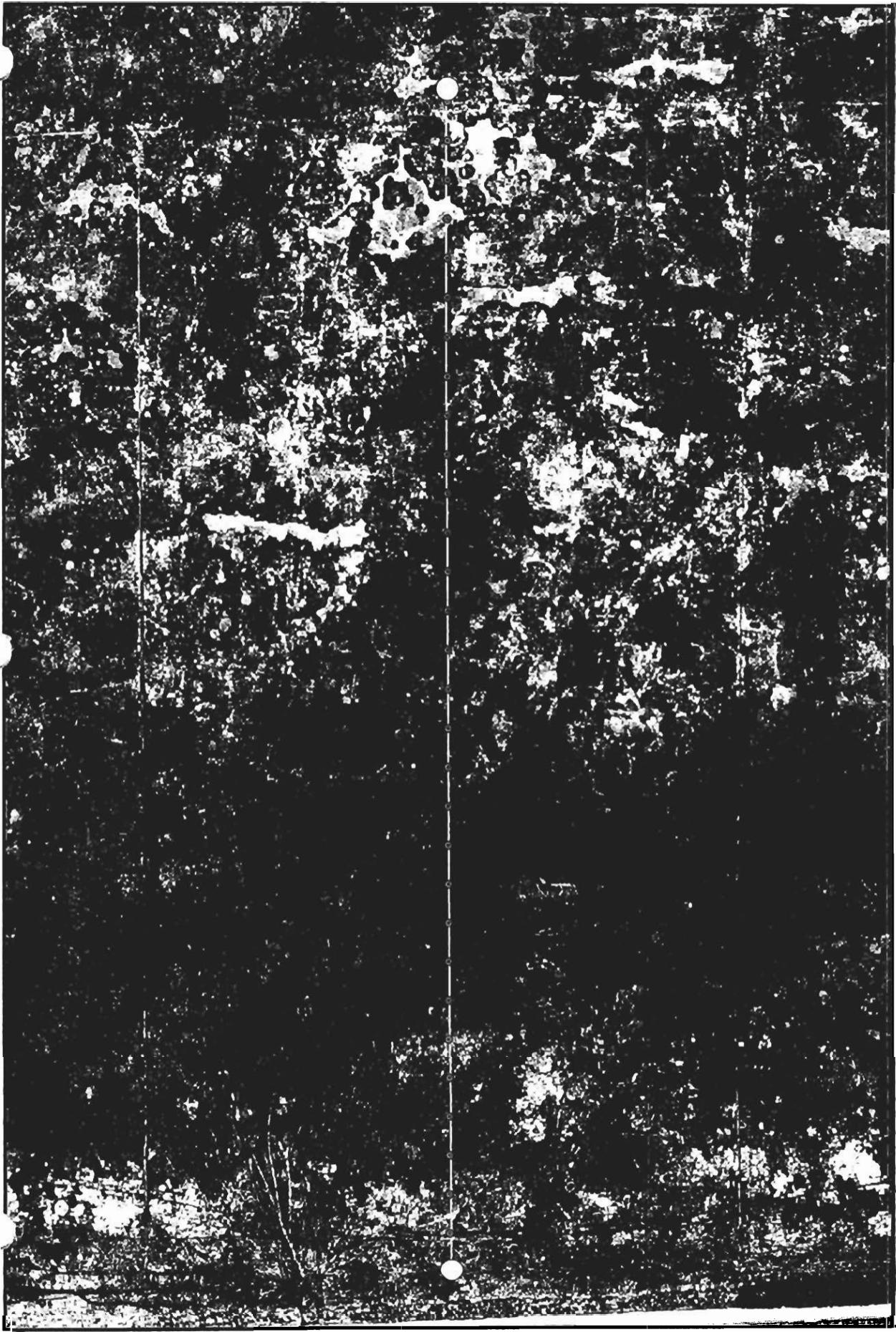
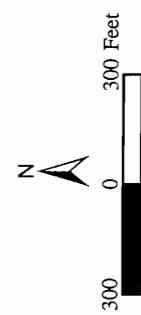


Figure 5. Transect C

- End Points of Segment
- Data Collection Points



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*) in the herbaceous layer and Elm (*Trema micrantha*) in the sapling layer. Points C2 through C30 represent a wet prairie community type dominated by saw-grass (*Cladium jamaicense*). This area was reported to have burned two to three years ago. Evidence of past treatments in this area (i.e. dead vegetation, punk tree stumps/slash etc.) was not apparent. The area along this transect has rebounded with a saw-grass dominated plant community. Dead saw-grass along this transect appeared to be natural.

Observations from November 22, 2003 monitoring

Water depths ranged from 8 to 10 inches at photopoints C2, C7, C14, C20 and C27. No macro fauna or indicators of wildlife were noted.

The dead saw-grass along this transect appeared to be natural. The vegetative community consisted primarily of saw-grass, which ranged from six to eight feet in height. Additionally, one to two percent of punk tree was observed in the herbaceous layer at data collection point C23. These plants appear to gain a footing in openings where the saw-grass density is limited.

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

- In the submerged aquatics layer, 100 percent open/void
- In the herbaceous species layer, 33 percent live saw-grass (*Cladium jamaicense*), 33 percent dead saw-grass (*Cladium jamaicense*), 1 percent floating-heart (*Nymphoides aquatic*a), 2 percent cattail (*Typha latifolia*), and 2 percent swamp fern (*Blechnum serrulatum*).
- In the sapling/vine layer, 100 percent open/void.
- In the overstory layer, 100 percent open/void.

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*) in the herbaceous layer and Elm (*Trema micrantha*) in the sapling layer. Points C2 through C30 represent a wet prairie community type dominated by saw-grass (*Cladium jamaicense*). This area was reported to have burned two to three years ago. Evidence of past treatments in this area (i.e. dead vegetation, punk tree stumps/slash etc.) was not apparent. The area along this transect has rebounded with a saw-grass dominated plant community. Dead saw-grass along this transect appeared to be natural.

Observations from May 15, 2004 monitoring

The dead saw-grass along this transect appeared to be natural. The vegetative community consisted primarily of saw-grass, which ranged from six to eight feet in height. Additionally, one to three percent of punk tree was observed in the herbaceous layer at data collection points C13 and C23. These plants appear to gain a footing in openings where the saw-grass density is limited.

The entire transect was observed to be fairly dry with surface water only present at one point C12, which had less than 1 inch. There was soil saturation at the four photopoint locations (C7, C14, C21, and C28). No macro fauna or indicators of wildlife were noted.

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

- In the submerged aquatics layer, 100 percent open/void
- In the herbaceous species layer, 42 percent live saw-grass (*Cladium jamaicense*), 40 percent dead saw-grass (*Cladium jamaicense*), 1 percent Southern Swamp Lily (*Crinum americanum*), 2 percent Cattail (*Typha latifolia*), and 2 percent swamp fern (*Blechnum serrulatum*).
- In the sapling/vine layer, 100 percent open/void.
- In the overstory layer, 100 percent open/void.

Pennsuco Monitoring Project - Summary Sheet

TRANSECT "C"

Total Length 5280'

SUBMERGED AQUATICS

Common Name	Scientific Name	% Coverage	% Coverage
Mermaid Weed	<i>Proserpinaca palustris</i>	0.00%	0.00%
Bladderwort	<i>Utricularia foliosa</i>	0.00%	0.00%
Bladderwort	<i>Utricularia purpurea</i>	0.00%	0.00%
Ludwigia	<i>Ludwigia repens</i>	0.07%	0.00%
Open/Void	N/A	99.93%	100.00%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	32.83%	42.03%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	32.50%	39.93%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.03%	0.13%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0.00%	0.00%
Southern Swamp Lily	<i>Crinum americanum</i>	0.13%	1.07%
Pickerelweed	<i>Pontederia lanceolata</i>	0.03%	0.43%
Yellowtops	<i>Flaveria linearis</i>	0.00%	0.00%
Arrowhead	<i>Sagittaria graminea</i>	0.03%	0.00%
Floating-Heart	<i>Nymphoides aquatica</i>	0.67%	0.17%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0.00%	0.17%
Cattail (Alive)	<i>Typha latifolia</i>	1.83%	2.17%
Cattail (Dead)	<i>Typha latifolia</i>	0.00%	0.50%
Button Bush	<i>Cephalanthus occidentalis</i>	0.00%	0.50%
Maiden-Cane	<i>Panicum hemitomum</i>	0.00%	0.67%
Shield Fern	<i>Thelypteris kunthii</i>	0.33%	0.50%
Swamp Fern	<i>Blechnum serrulatum</i>	1.83%	2.17%
Elm	<i>Trema micrantha</i>	0.00%	0.00%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0.00%	0.00%
Open Water/Mud/Void	N/A	29.77%	9.57%
TOTAL		100%	100%

SAPLING / VINE

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.00%	0.00%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0.00%	0.00%
Elm	<i>Trema micrantha</i>	0.00%	0.00%
TBD	N/A	0.00%	0.00%
Open/Void	N/A	100.00%	100.00%
TOTAL		100%	100%

OVERSTORY

Common Name	Scientific Name	% Coverage	% Coverage
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0.00%	0.00%
Punk Tree (Dead)	<i>Melaleuca quinquenervia</i>	0.33%	0.00%
Golden Fig	<i>Ficus Aurea</i>	0.00%	0.00%
Elm	<i>Trema micrantha</i>	2.33%	0.00%
Open/Void	N/A	97.33%	100.00%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



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%
Open/Void	N/A	100%	100%
TOTAL		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>	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%
Cattail (Alive)	<i>Typha latifolia</i>	0%	0%
Cattail (Dead)	<i>Typha latifolia</i>	0%	0%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	0%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	20%
Shield Fern	<i>Thelypteris kunthii</i>	10%	15%
Swamp Fern	<i>Blechnum serrulatum</i>	55%	65%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	35%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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>	10%	0%
Golden Fig	<i>Ficus Aurea</i>	0%	0%
Elm	<i>Trema micrantha</i>	70%	0%
Open/Void	N/A	20%	100%
TOTAL		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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	100%	75%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	0%	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%
Floating-Heart	<i>Nymphoides aquatica</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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	0%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	80%	70%
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%
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%
Cattail (Alive)	<i>Typha latifolia</i>	0%	20%
Cattail (Dead)	<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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	10%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

11/22/2003

5/15/2004

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	60%	55%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	10%	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%
Floating-Heart	<i>Nymphoides aquatica</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>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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	30%	15%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



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%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	10%	15%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	5%	10%
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%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail (Alive)	<i>Typha latifolia</i>	20%	20%
Cattail (Dead)	<i>Typha latifolia</i>	0%	15%
Button Bush	<i>Cephalanthus occidentalis</i>	0%	15%
Maiden-Cane	<i>Panicum hemitomum</i>	0%	0%
Shield Fern	<i>Thelypteris kunthii</i>	0%	0%
Swamp Fern	<i>Blechnum serrulatum</i>	0%	0%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	65%	25%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT C-6

STATION 9+10

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	30%	65%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	40%	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%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail (Alive)	<i>Typha latifolia</i>	15%	10%
Cattail (Dead)	<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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	15%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



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%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	70%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	30%	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%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail (Alive)	<i>Typha latifolia</i>	10%	15%
Cattail (Dead)	<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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	15%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: 6 *Melaleuca* saplings alive adjacent to plot

Water Level / Soil Moisture	No standing water, soil saturated
Aquatic Macrofauna	NONE
Wildlife Indicators (tracks, scat, nests)	NONE



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%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	45%	75%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	5%	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>	1%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	0%
Cattail (Alive)	<i>Typha latifolia</i>	10%	0%
Cattail (Dead)	<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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	39%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



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%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	20%	30%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	30%	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%
Floating-Heart	<i>Nymphoides aquatica</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>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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	50%	20%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



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%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	25%	35%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	75%	62%
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%	3%
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%
Cattail (Alive)	<i>Typha latifolia</i>	0%	0%
Cattail (Dead)	<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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	0%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT

C-11

STATION

18+20

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	30%	52%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	60%	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>	1%	3%
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%
Cattail (Alive)	<i>Typha latifolia</i>	0%	0%
Cattail (Dead)	<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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	9%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT C-12

STATION 20+02

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003 % Coverage	5/15/2004 % 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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	25%	25%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	45%	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%
Floating-Heart	<i>Nymphoides aquatica</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>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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	30%	5%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture

<1" standing water

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



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%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	25%	47%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	55%	45%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	0%	3%
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%
Floating-Heart	<i>Nymphoides aquatica</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>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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	20%	5%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: 2 *Melaleuca* saplings alive

Water Level / Soil Moisture

Aquatic Macrofauna

Wildlife Indicators (tracks, scat, nests)



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT C-14

STATION 23+66

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	30%	35%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	70%	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%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</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>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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	0%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

- Water Level / Soil Moisture No standing water, saturated soil
 Aquatic Macrofauna NONE
 Wildlife Indicators (tracks, scat, nests) NONE



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT C-15

STATION 25+48

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003 % Coverage	5/15/2004 % 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%
Open/Void	N/A	100%	100%
TOTAL		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>	60%	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%
Floating-Heart	<i>Nymphoides aquatica</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>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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	10%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT C-16

STATION 27+30

SUBMERGED AQUATICS

		11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	25%	35%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	70%	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>	2%	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>	0%	0%
Cattail (Alive)	<i>Typha latifolia</i>	0%	0%
Cattail (Dead)	<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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	3%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT

C-17

STATION

29+12

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		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>	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%
Floating-Heart	<i>Nymphoides aquatica</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>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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	30%	10%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



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%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	20%	40%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	65%	60%
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%
Floating-Heart	<i>Nymphoides aquatica</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>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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	15%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT C-19

STATION 32+76

SUBMERGED AQUATICS

		11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	40%	55%
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>	1%	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%
Cattail (Alive)	<i>Typha latifolia</i>	0%	0%
Cattail (Dead)	<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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	34%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT C-20STATION 34+58**SUBMERGED AQUATICS**

Common Name	Scientific Name	11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	20%	45%
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%
Arrowhead	<i>Sagittaria graminea</i>	0%	0%
Floating-Heart	<i>Nymphoides aquatica</i>	5%	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>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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	45%	15%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT C-21

STATION 36+40

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	35%	47%
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%	3%
Pickerelweed	<i>Pontederia lanceolata</i>	0%	10%
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%
Cattail (Alive)	<i>Typha latifolia</i>	0%	0%
Cattail (Dead)	<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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	45%	10%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES:

- Water Level / Soil Moisture No standing water, soil saturated
- Aquatic Macrofauna
- Wildlife Indicators (tracks, scat, nests)



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT C-22

STATION 38+22

SUBMERGED AQUATICS

		11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	20%	45%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	25%	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%
Floating-Heart	<i>Nymphaoides aquatica</i>	0%	0%
Capillary Hairsedge	<i>Bulbostylis ciliataefolia</i>	0%	5%
Cattail (Alive)	<i>Typha latifolia</i>	0%	0%
Cattail (Dead)	<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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	55%	25%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT C-23

STATION 40+04

SUBMERGED AQUATICS

11/22/2003 **5/15/2004**

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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	25%	25%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	10%	24%
Punk Tree (Alive)	<i>Melaleuca quinquenervia</i>	1%	1%
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%
Floating-Heart	<i>Nymphoides aquatica</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>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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	64%	50%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT C-24

STATION 41+86

SUBMERGED AQUATICS

		11/22/2003	5/15/2004
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>	2%	0%
Open/Void	N/A	98%	100%
TOTAL		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>	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%
Floating-Heart	<i>Nymphoides aquatica</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>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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	45%	15%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



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%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	50%	30%
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%
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%
Cattail (Alive)	<i>Typha latifolia</i>	0%	0%
Cattail (Dead)	<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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	15%	15%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT C-26

STATION 45+50

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003 % Coverage	5/15/2004 % 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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	25%	25%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	45%	72%
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%	3%
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%
Cattail (Alive)	<i>Typha latifolia</i>	0%	0%
Cattail (Dead)	<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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	30%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



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%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	20%	30%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	35%	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%
Floating-Heart	<i>Nymphoides aquatica</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>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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	45%	0%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT

C-28

STATION

49+14

SUBMERGED AQUATICS

Common Name	Scientific Name	11/22/2003	5/15/2004
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%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

HERBACEOUS SPECIES

Common Name	Scientific Name	% Coverage	% Coverage
Saw Grass (Alive)	<i>Cladium jamaicense</i>	15%	30%
Saw Grass (Dead)	<i>Cladium jamaicense</i>	5%	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>	1%	3%
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>	15%	5%
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>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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	64%	42%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture	No standing water, saturated soil
Aquatic Macrofauna	NONE
Wildlife Indicators (tracks, scat, nests)	NONE



Pennsuco 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%	0%
Bladderwort	<i>Utricularia foliosa</i>	0%	0%
Bladderwort	<i>Utricularia purpurea</i>	0%	0%
Ludwigia	<i>Ludwigia repens</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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>	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%	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>	0%	0%
Cattail (Alive)	<i>Typha latifolia</i>	0%	0%
Cattail (Dead)	<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%
Elm	<i>Trema micrantha</i>	0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>	0%	0%
Open Water/Mud/Void	N/A	35%	20%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
TBD	N/A	0%	0%
Open/Void	N/A	100%	100%
TOTAL		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%
Elm	<i>Trema micrantha</i>	0%	0%
Open/Void	N/A	100%	100%
TOTAL		100%	100%

NOTES: _____

Water Level / Soil Moisture _____

Aquatic Macrofauna _____

Wildlife Indicators (tracks, scat, nests) _____



Pennsuco Monitoring Project - Data Form

TRANSECT / POINT C-30

STATION 52+78

SUBMERGED AQUATICS

			11/22/2003	5/15/2004
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%
Open/Void	N/A		100%	100%
TOTAL			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>		30%	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%
Floating-Heart	<i>Nymphoides aquatica</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>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%
Elm	<i>Trema micrantha</i>		0%	0%
Tracy's Beak Rush	<i>Rhynchospora tracyi</i>		0%	0%
Open Water/Mud/Void	N/A		40%	15%
TOTAL			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%
Elm	<i>Trema micrantha</i>		0%	0%
TBD	N/A		0%	0%
Open/Void	N/A		100%	100%
TOTAL			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%
Elm	<i>Trema micrantha</i>		0%	0%
Open/Void	N/A		100%	100%
TOTAL			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 DR30 (GPS coordinates Latitude 25° 47' 45.57", Longitude 80° 28' 09.88"), (Figure 6). One community type, wet prairie primarily dominated by dominated by Saw-grass (*Cladium jamaicense*) in the herbaceous layer and Punk trees (*Melaleuca quinquenervia*) in the sapling/vine layer was identified for transect DR.

SFWMD requested that the existing DR transect location be relocated to an untreated area during the November 2003 monitoring period. The transect was established at approximately equally spaced intervals of 150 feet along the transect. The transect was shortened due to dense upland area which was not easily accessible.

Observations from May 15, 2004 monitoring

Transect DR could not be monitored due to conditions at the site. Overall the site was fairly dry and was not easily accessible by airboat or ATV's. The transect will continue to be monitored during the fall season.

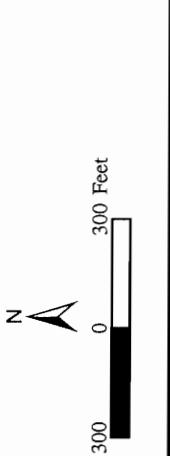
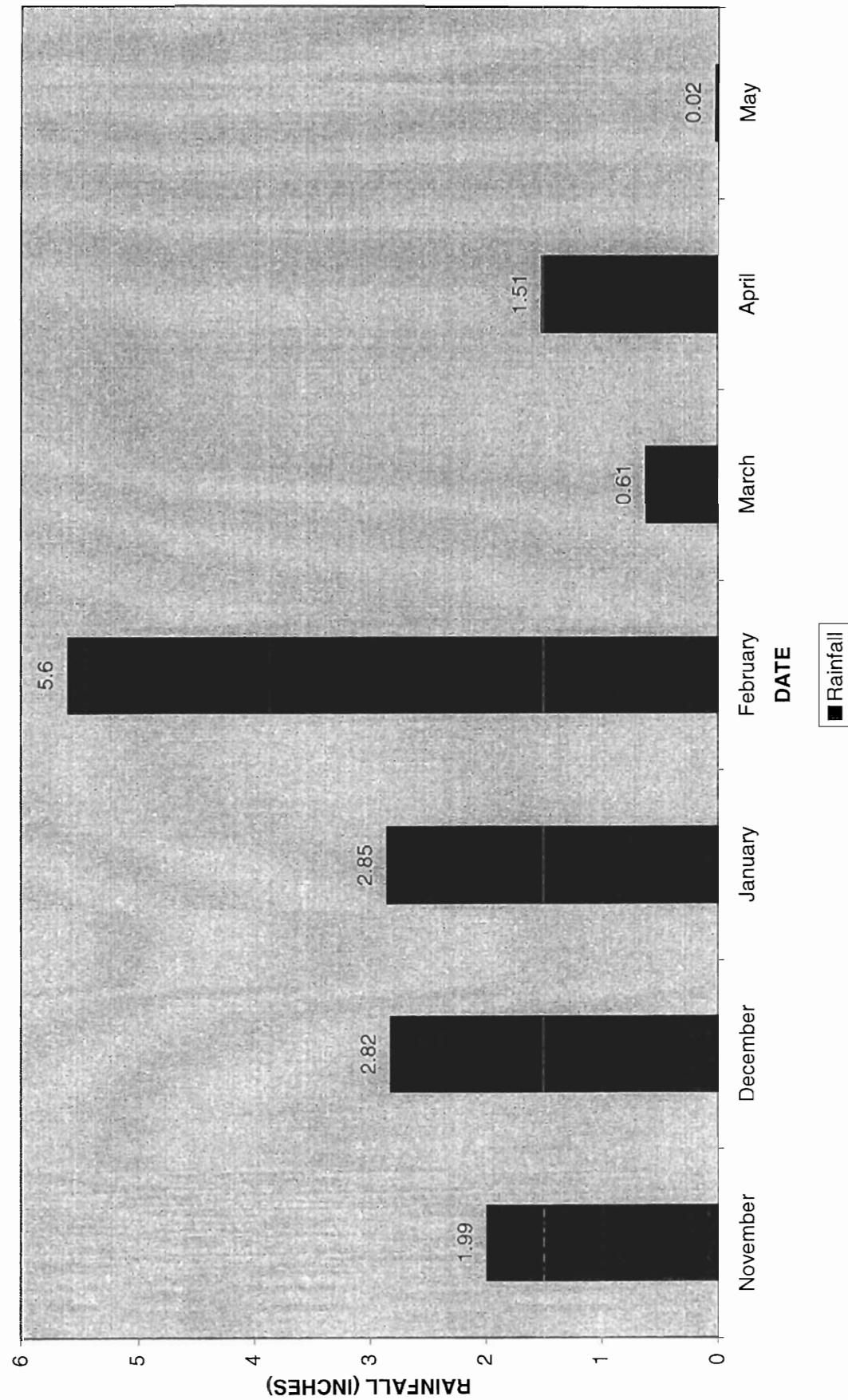


Figure 6. Transect DR

- End Points of Segment
- Data Collection Points

RAINFALL DATA 2004

Monthly Precipitation 2003/2004
TAMiami Trail 40 MI BEND, FL



FIGURES

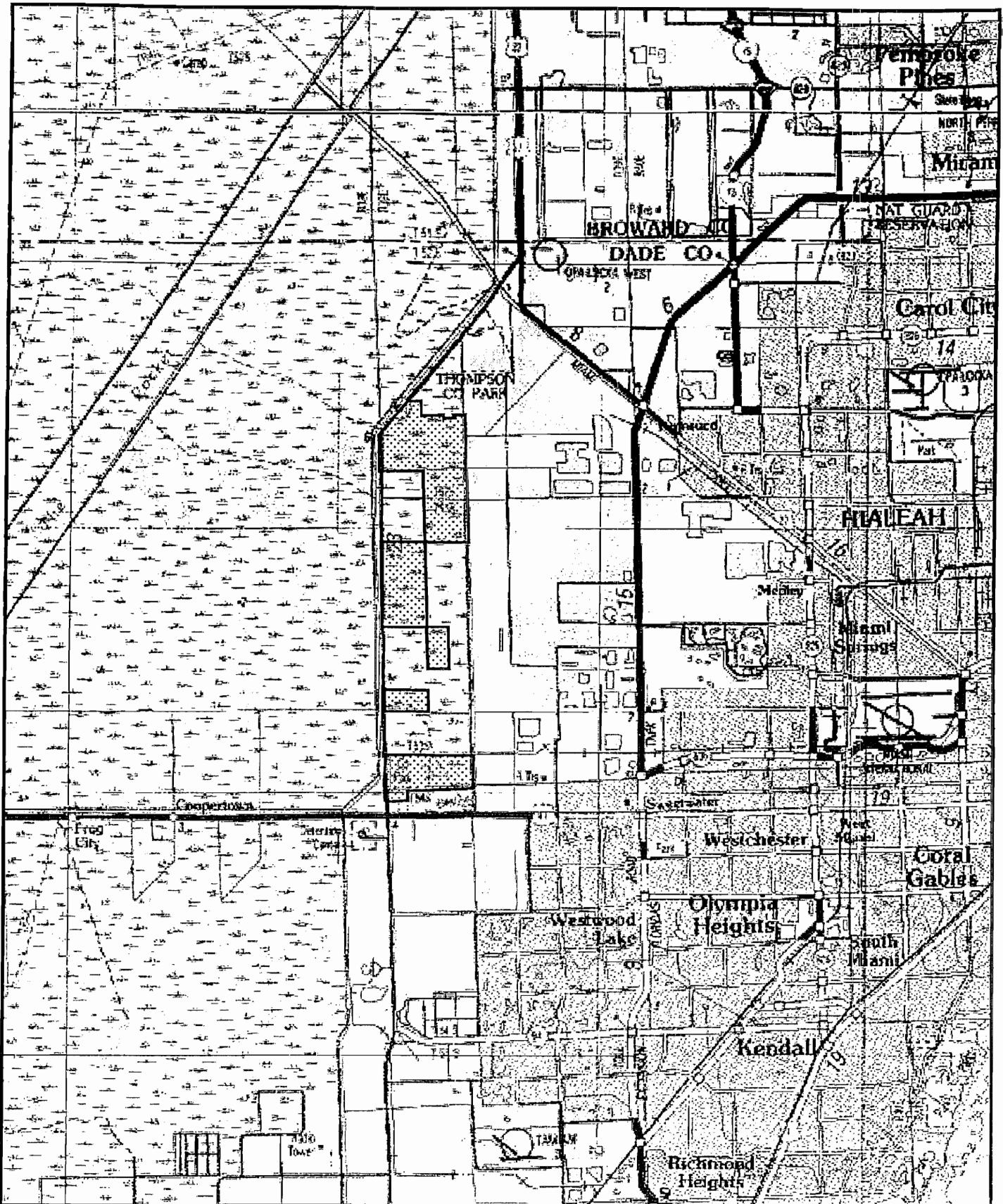


Figure 1. Location Map

 Restoration Area



10000 0 10000 20000 Feet

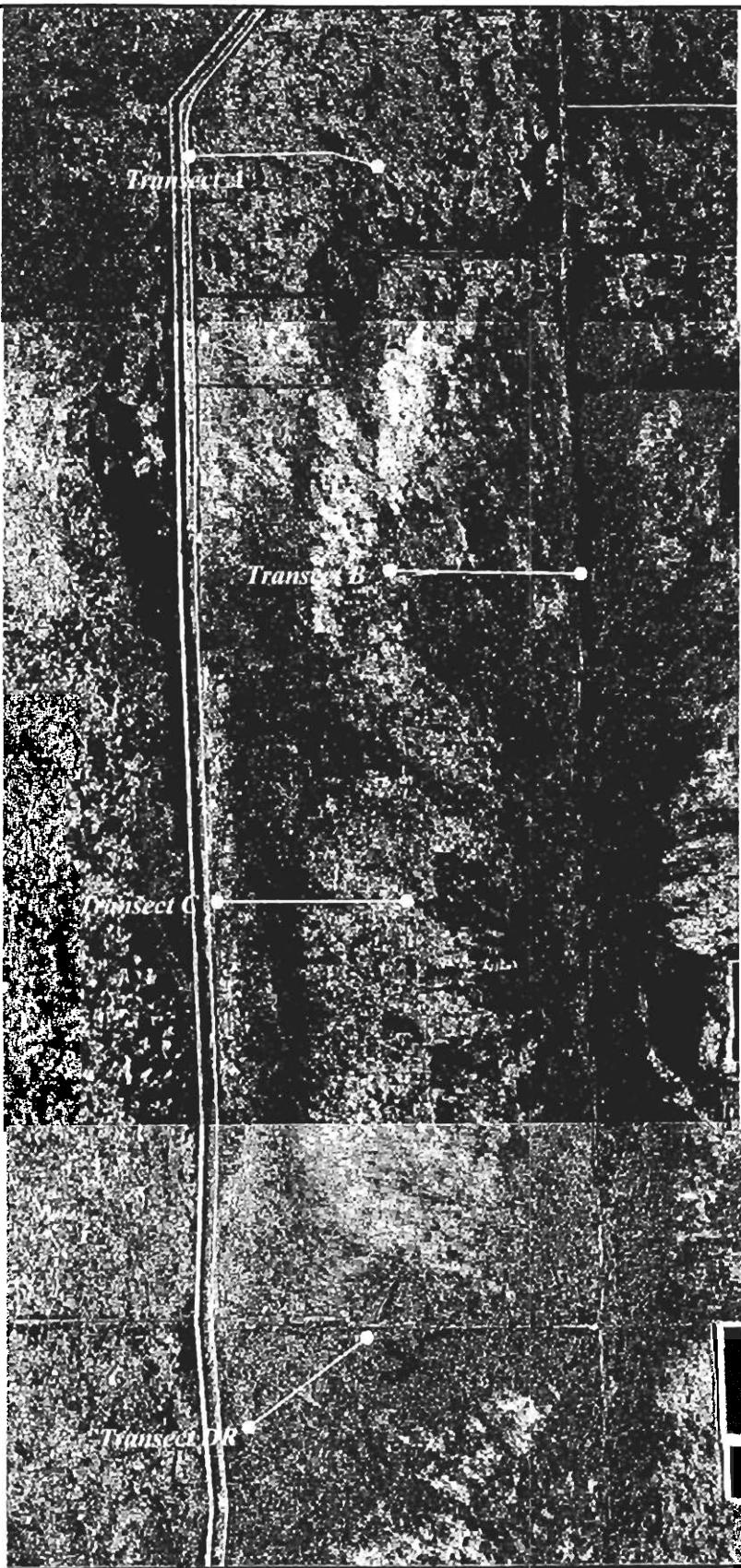


Figure 2. Transect Locations

Figure 3. Transect A

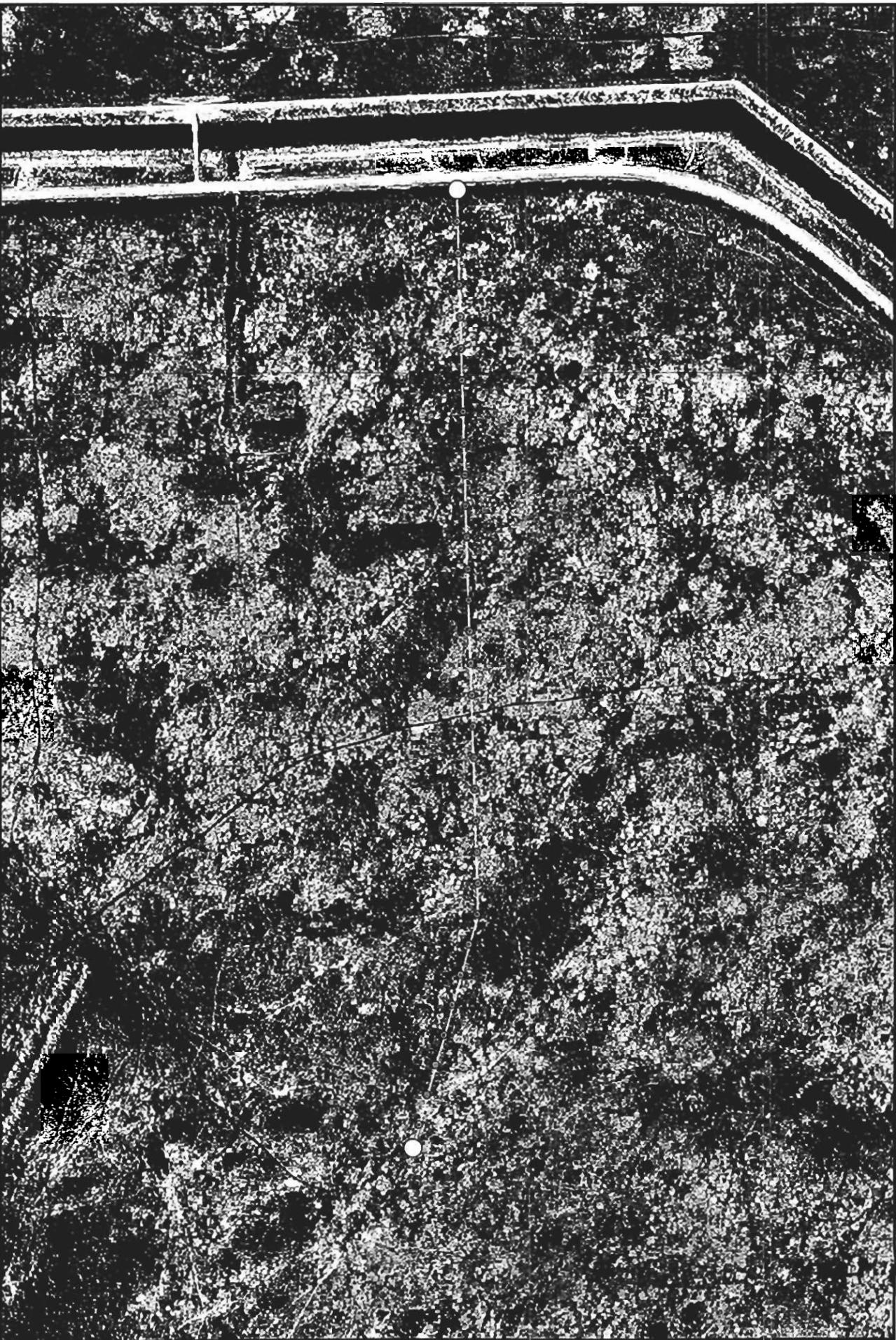
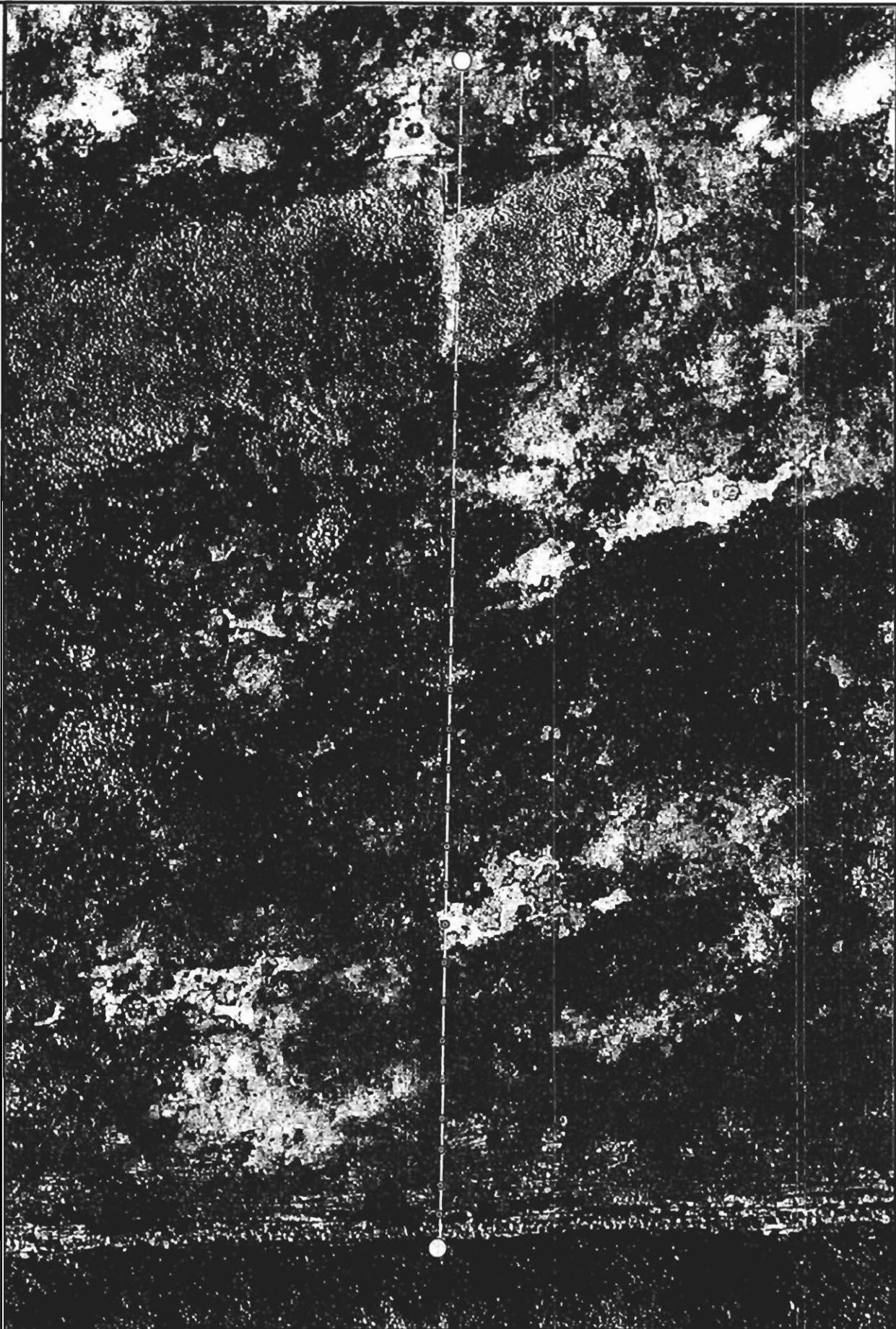




Figure 4. Transect B

○ End Points of Segment
◎ Data Collection Points

300
0
300 Feet



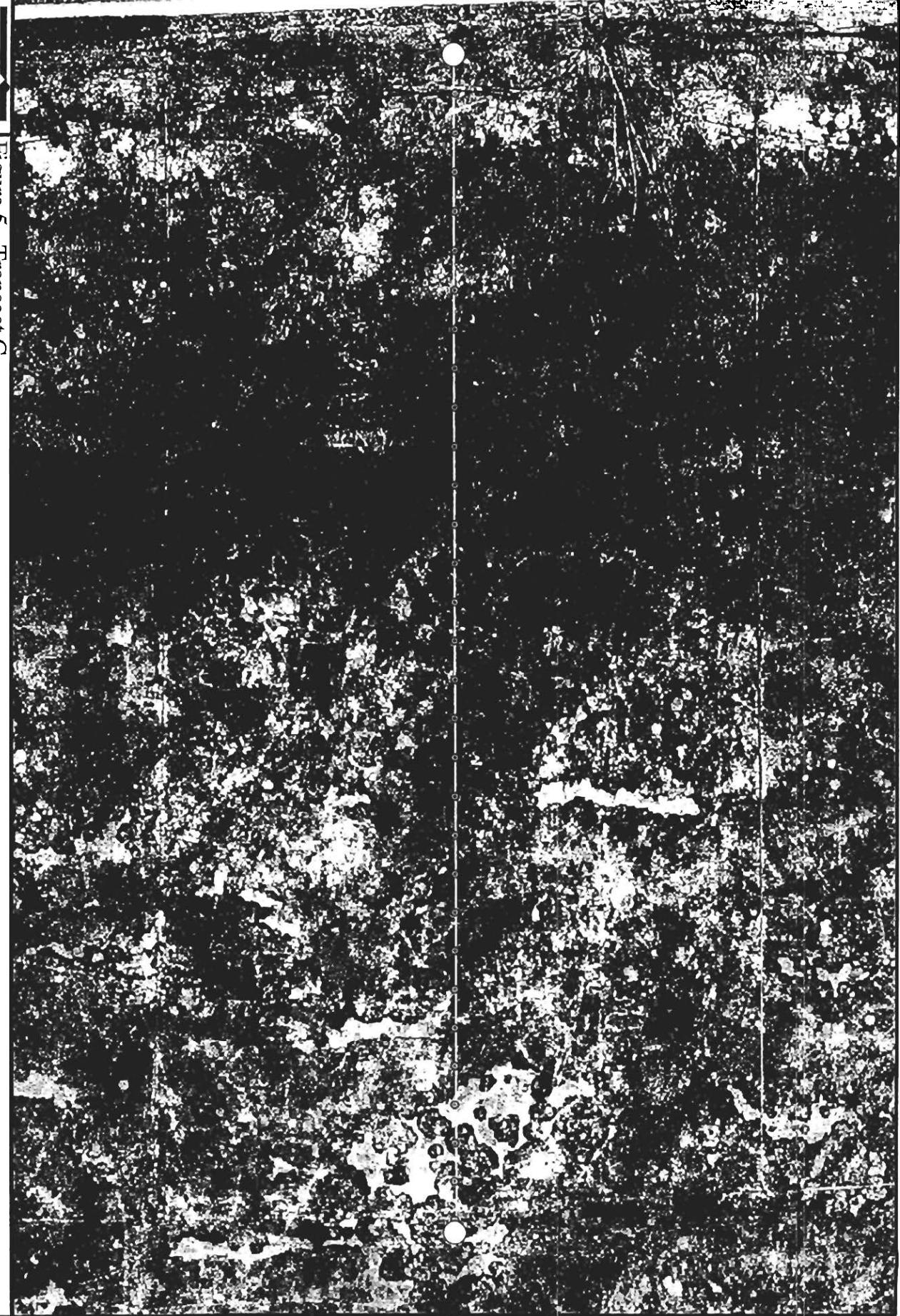


Figure 5. Transect C



Figure 6. Transect DR

- End Points of Segment
- Data Collection Points