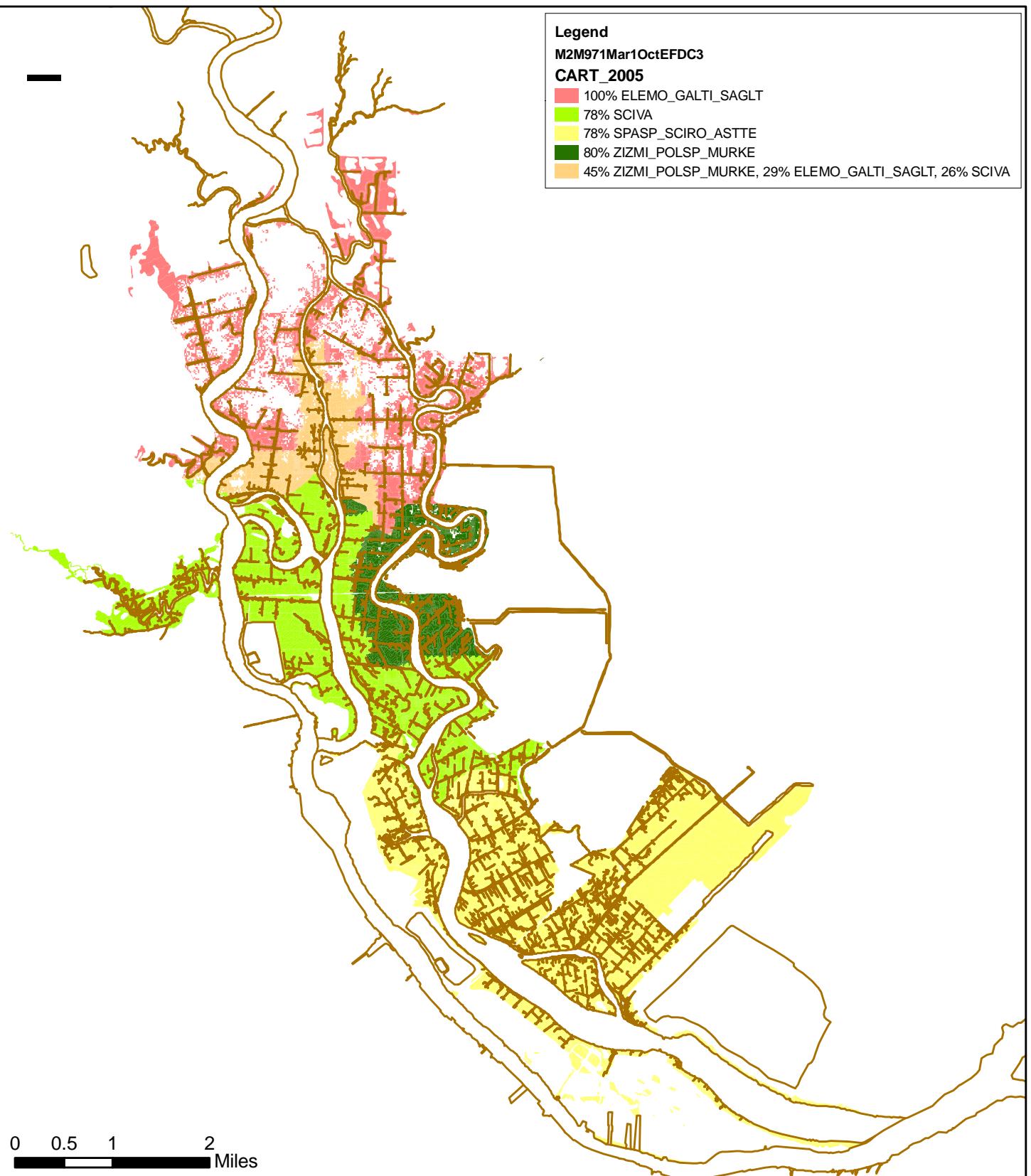


**USGS/USFWS Savannah Marsh Succession Model CART 2005 Predicted Ecological Community  
44 Foot Depth (2 Foot Deepening)**

Values Based on EFDC and M2M Output using Historic Average Flow, Temperature, and Tidal Conditions  
1 March through 1 October 1997 (1997 best represents average historic conditions from the available data set)  
Existing Sea Level Conditions

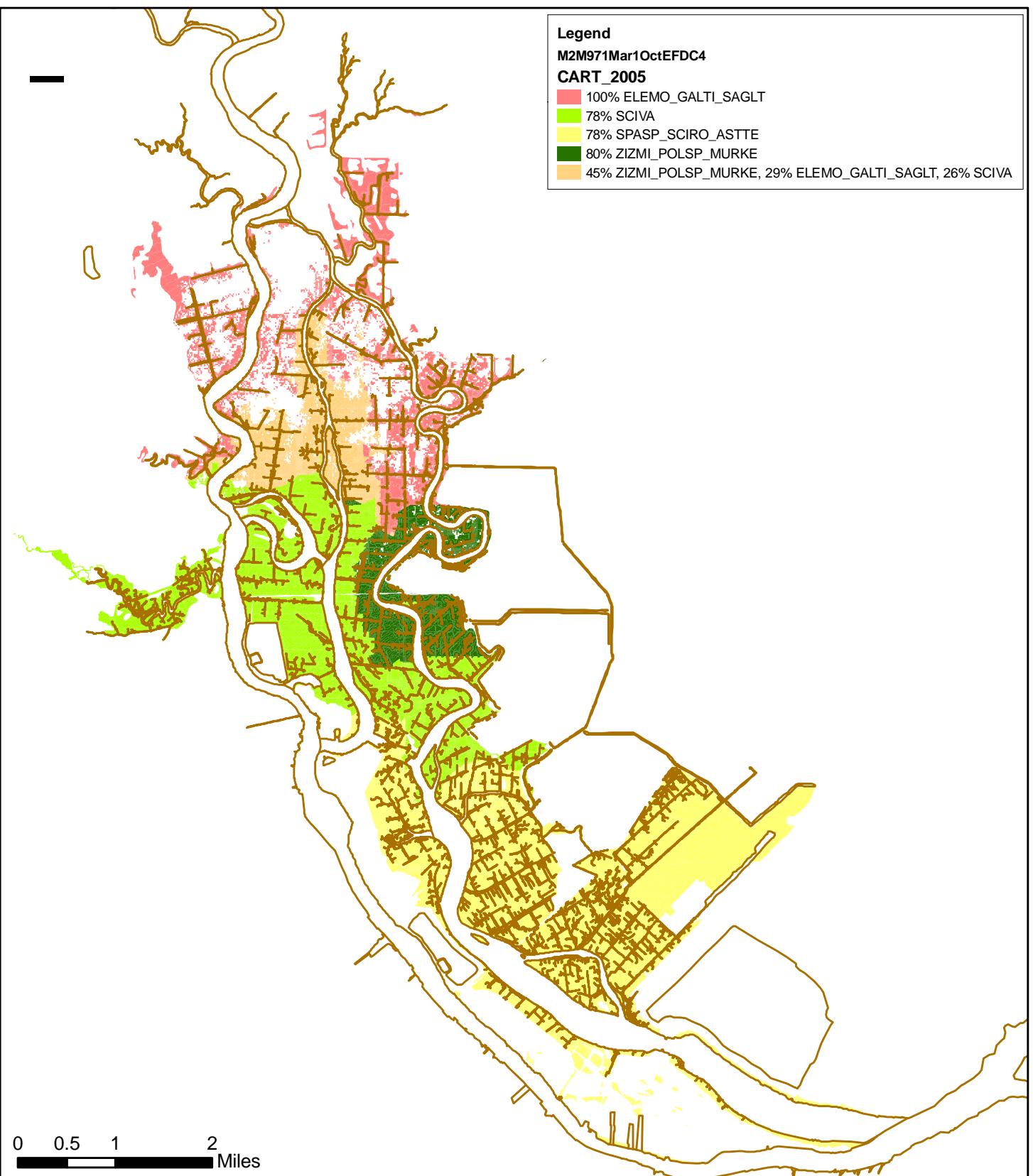
March 2007



### Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

**USGS/USFWS Savannah Marsh Succession Model CART 2005 Predicted Ecological Community  
45 Foot Depth (3 Foot Deepening)**

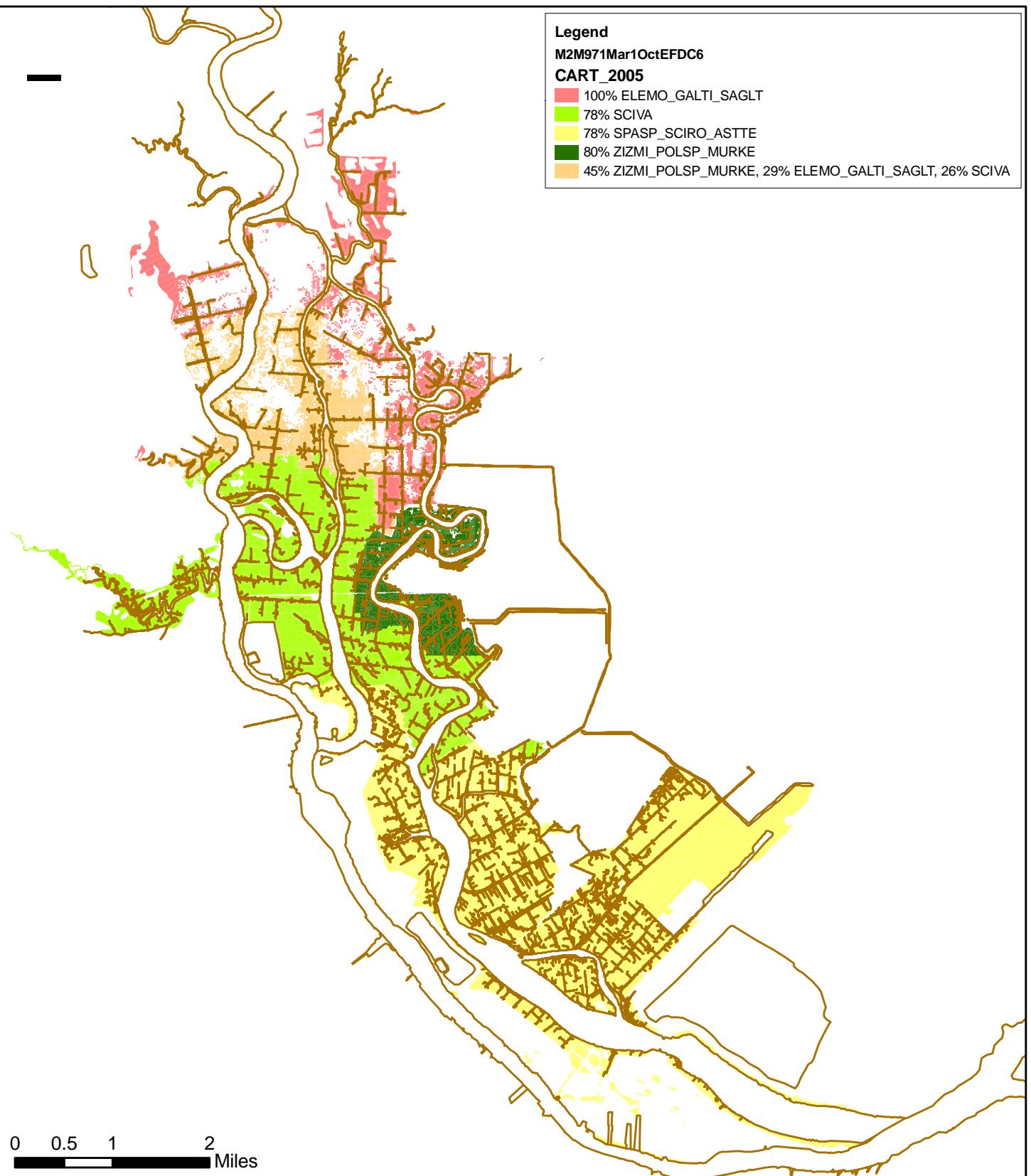
Values Based on EFDC and M2M Output using Historic Average Flow, Temperature, and Tidal Conditions  
1 March through 1 October 1997 (1997 best represents average historic conditions from the available data set)  
Existing Sea Level Conditions



**USGS/USFWS Savannah Marsh Succession Model CART 2005 Predicted Ecological Community  
46 Foot Depth (4 Foot Deepening)**

Values Based on EFDC and M2M Output using Historic Average Flow, Temperature, and Tidal Conditions  
1 March through 1 October 1997 (1997 best represents average historic conditions from the available data set)  
Existing Sea Level Conditions

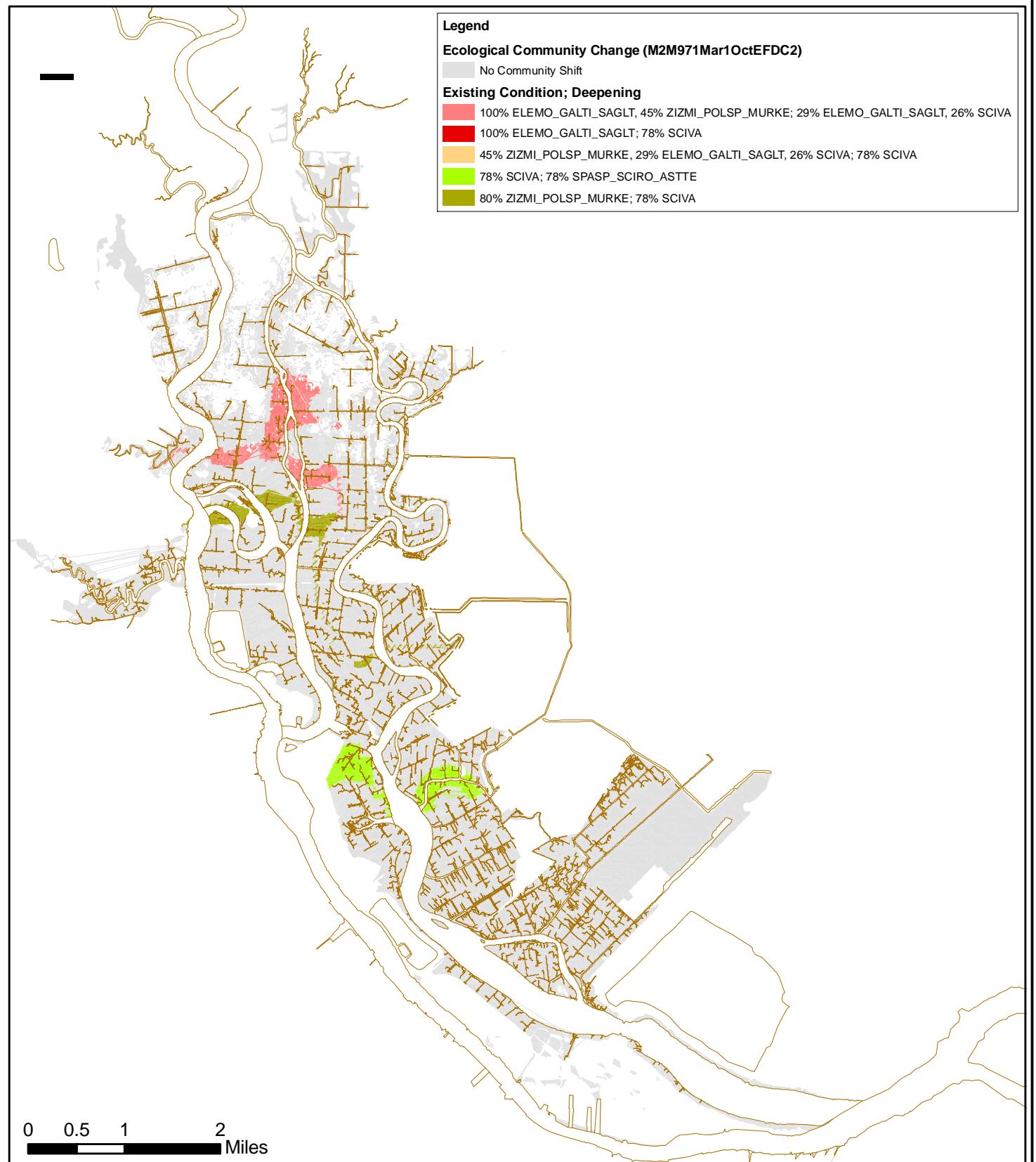
March 2007



**USGS/USFWS Savannah Marsh Succession Model CART 2005 Predicted Ecological Community  
48 Foot Depth (6 Foot Deepening)**

Values Based on EFDC and M2M Output using Historic Average Flow, Temperature, and Tidal Conditions  
1 March through 1 October 1997 (1997 best represents average historic conditions from the available data set)  
Existing Sea Level Conditions

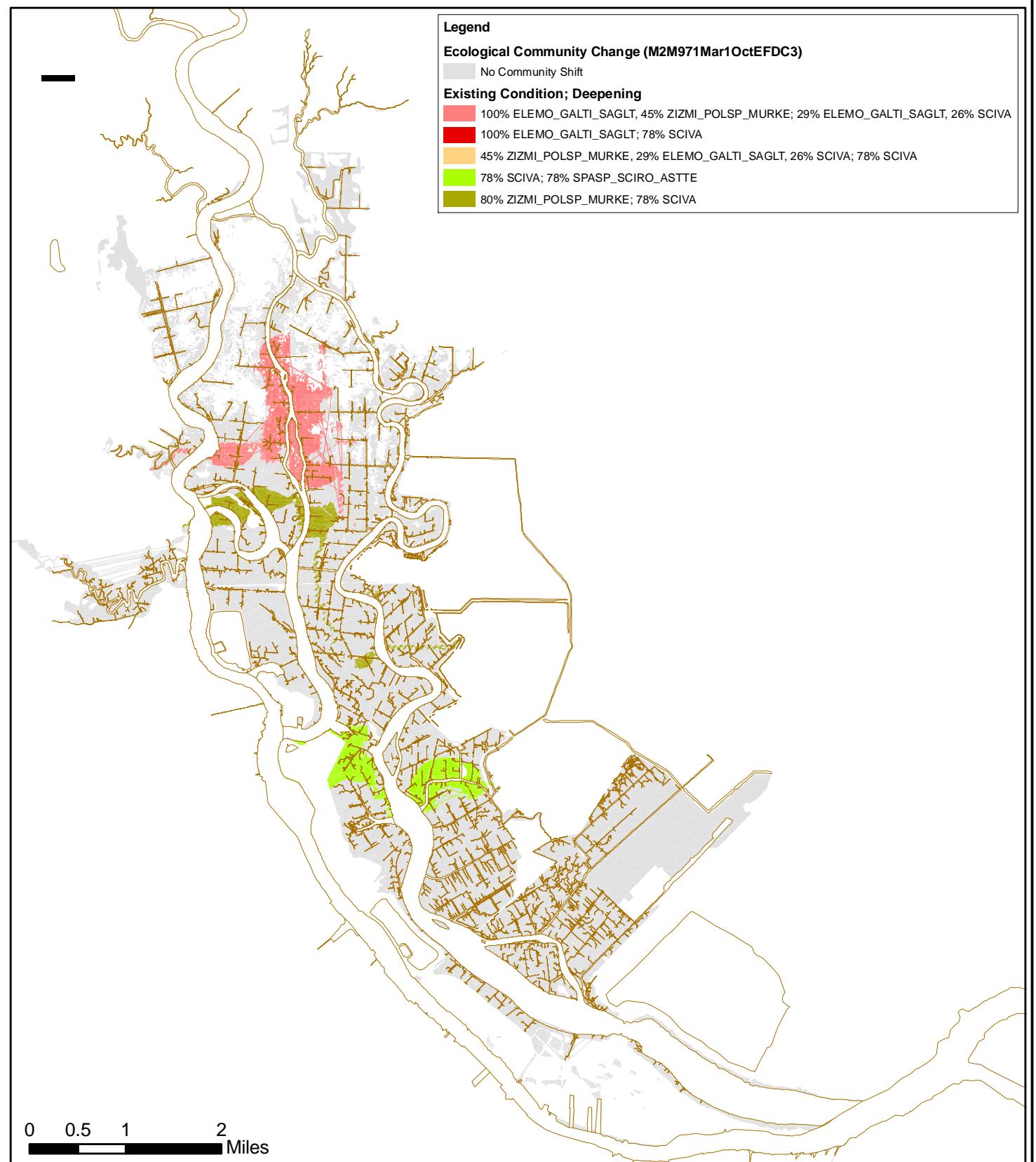
March 2007



## Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

USGS/USFWS Savannah Marsh Succession Model CART 2005 Predicted Ecological Community Shift  
44 Foot Depth (2 Foot Deepening)

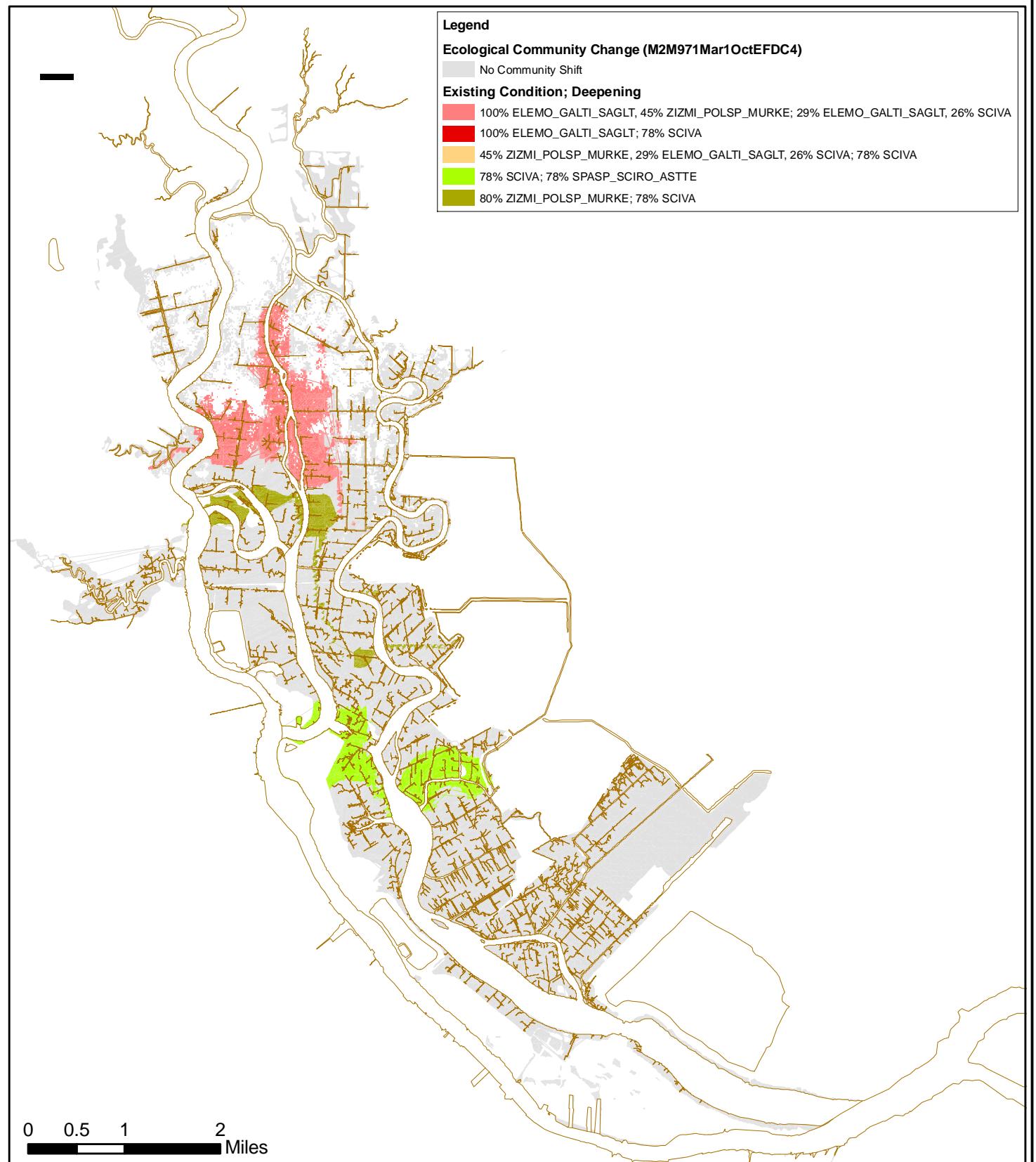
Values Based on EFDC and M2M Output using Historic Average Flow, Temperature, and Tidal Conditions  
1 March through 1 October 1997 (1997 best represents average historic conditions from the available data set)  
Existing Sea Level Conditions



## Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

USGS/USFWS Savannah Marsh Succession Model CART 2005 Predicted Ecological Community Shift  
45 Foot Depth (3 Foot Deepening)

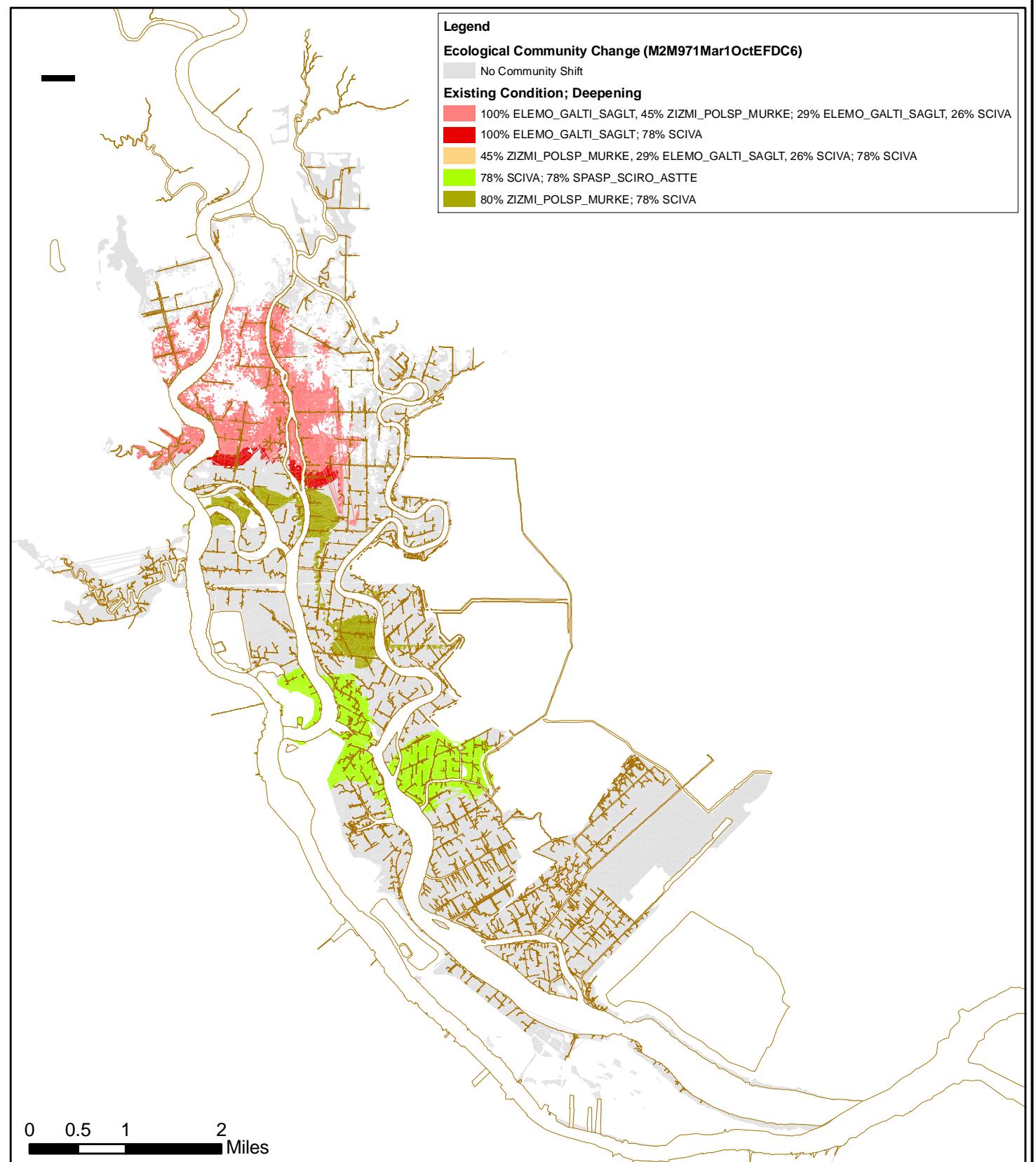
Values Based on EFDC and M2M Output using Historic Average Flow, Temperature, and Tidal Conditions  
1 March through 1 October 1997 (1997 best represents average historic conditions from the available data set)  
Existing Sea Level Conditions



## Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

**USGS/USFWS Savannah Marsh Succession Model CART 2005 Predicted Ecological Community Shift  
46 Foot Depth (4 Foot Deepening)**

Values Based on EFDC and M2M Output using Historic Average Flow, Temperature, and Tidal Conditions  
1 March through 1 October 1997 (1997 best represents average historic conditions from the available data set)  
Existing Sea Level Conditions



## Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

USGS/USFWS Savannah Marsh Succession Model CART 2005 Predicted Ecological Community Shift  
48 Foot Depth (6 Foot Deepening)

Values Based on EFDC and M2M Output using Historic Average Flow, Temperature, and Tidal Conditions  
1 March through 1 October 1997 (1997 best represents average historic conditions from the available data set)  
Existing Sea Level Conditions

# Savannah Harbor Expansion Project

USGS/USFWS MSM

## Wetland/Marsh Impact Evaluation

Predicted Vegetation Community Shifts

| Community<br>CART2005                                | No Deepening<br>Average Flow<br>Associated Acreages | 44 ft Deepening<br>Average Flow<br>Associated Acreages | Net Change<br>(net negative), net positive |
|--|---|--|--|
| 100% Elemo_Galti_Saglt                               | 2231  | 1950   | (280)                                      |
| 80% Zizmi_Polsp                                      | 959   | 814  | (145)                                      |
| 45% Zizmi_Polsp, 29%<br>Elemo_Galti_Saglt, 26% Sciva | 232   | 499  | 266  |
| 78% Sciva  | 2215  | 2183   | (32)                                       |
| 78% Spasp_Sciro_Astte                                | 3209  | 3400   | 191  |
| TOTAL  | 8847  | 8847   |  |

| Community<br>CART2005                                | No Deepening<br>Average Flow<br>Associated Acreages | 45 ft Deepening<br>Average Flow<br>Associated Acreages | Net Change<br>(net negative), net positive |
|--|---|--|--|
| 100% Elemo_Galti_Saglt                               | 2231  | 1746   | (485)                                      |
| 80% Zizmi_Polsp                                      | 959   | 748  | (211)                                      |
| 45% Zizmi_Polsp, 29%<br>Elemo_Galti_Saglt, 26% Sciva | 232   | 659  | 427  |
| 78% Sciva  | 2215  | 2193   | (22)                                       |
| 78% Spasp_Sciro_Astte                                | 3209  | 3501   | 291  |
| TOTAL  | 8847  | 8847   |  |

| Community<br>CART2005                                | No Deepening<br>Average Flow<br>Associated Acreages | 46 ft Deepening<br>Average Flow<br>Associated Acreages | Net Change<br>(net negative), net positive |
|--|---|--|--|
| 100% Elemo_Galti_Saglt                               | 2231  | 1510   | (721)                                      |
| 80% Zizmi_Polsp                                      | 959   | 715  | (244)                                      |
| 45% Zizmi_Polsp, 29%<br>Elemo_Galti_Saglt, 26% Sciva | 232   | 812  | 579  |
| 78% Sciva  | 2215  | 2179   | (36)                                       |
| 78% Spasp_Sciro_Astte                                | 3209  | 3631   | 422  |
| TOTAL  | 8847  | 8847   |  |

| Community<br>CART2005                                | No Deepening<br>Average Flow<br>Associated Acreages | 48 ft Deepening<br>Average Flow<br>Associated Acreages | Net Change<br>(net negative), net positive |
|--|---|--|--|
| 100% Elemo_Galti_Saglt                               | 2231  | 1176   | (1055)                                     |
| 80% Zizmi_Polsp                                      | 959   | 579  | (380)                                      |
| 45% Zizmi_Polsp, 29%<br>Elemo_Galti_Saglt, 26% Sciva | 232   | 979  | 747  |
| 78% Sciva  | 2215  | 2238   | 23   |
| 78% Spasp_Sciro_Astte                                | 3209  | 3874   | 665  |
| TOTAL  | 8847  | 8847   |  |

\* Values Based on EFDC and M2M Marsh Pore Water Salinity Input for Historic Average Flow, Temperature, and Tidal Conditions.

1 March through 1 October 1997 (1997 best represents average historic conditions from the available data set).

Existing Sea Level Conditions.

**APPENDIX B  
SENSITIVITY ANALYSIS #1  
ECOLOGICAL COMMUNITY MAPS &  
ECOLOGICAL COMMUNITY SHIFT MAPS**