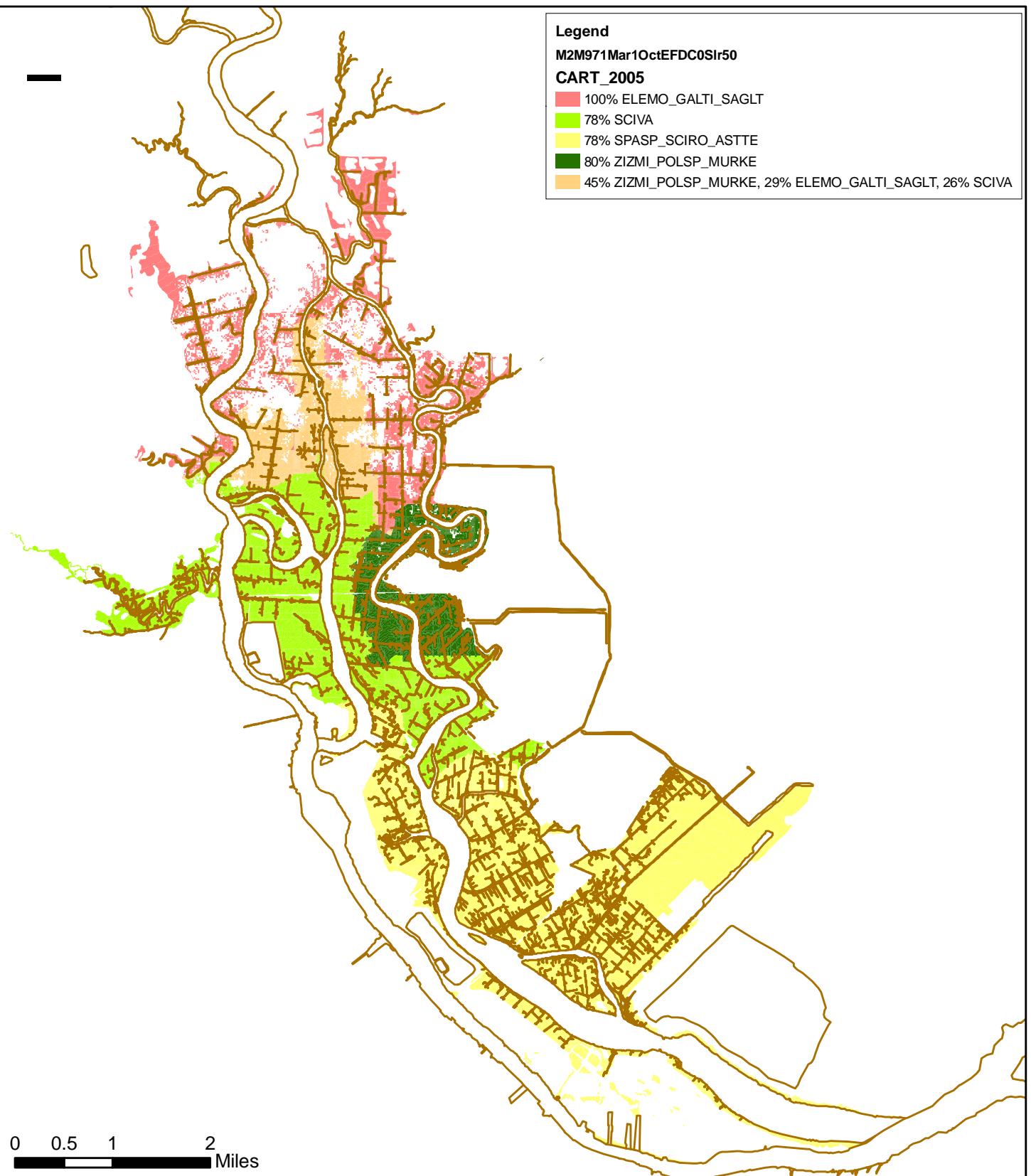


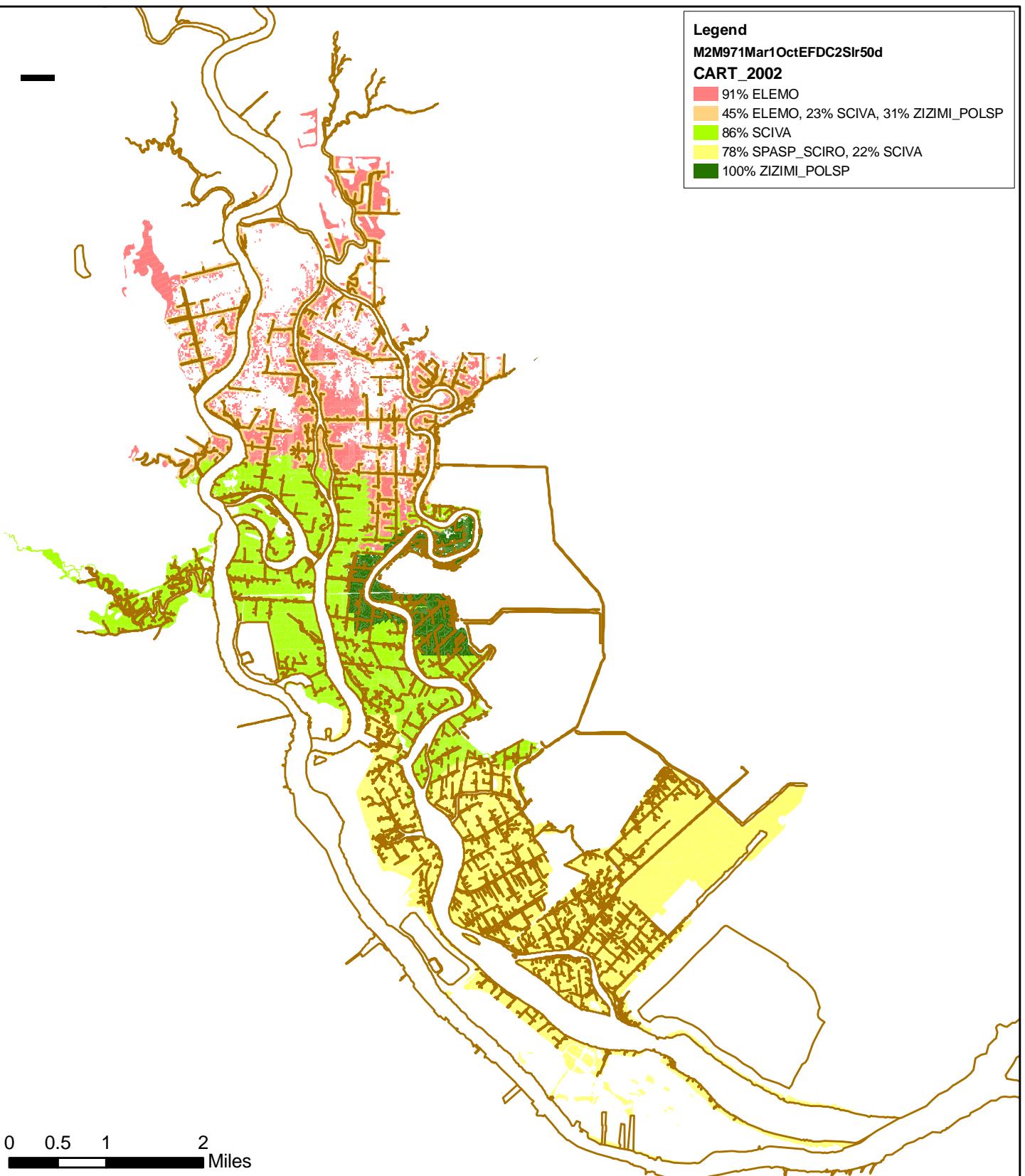
**APPENDIX D
SENSITIVITY ANALYSIS #2B
ECOLOGICAL COMMUNITY MAPS &
ECOLOGICAL COMMUNITY SHIFT MAPS**



Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

USGS/USFWS Savannah Marsh Succession Model CART 2005 Predicted Ecological Community
Existing Depth

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)
50 cm Sea Level Rise Conditions



Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

**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)
50 cm Sea Level Rise Conditions*

Legend

M2M971Mar1OctEFDC3S1r50d

CART_2002

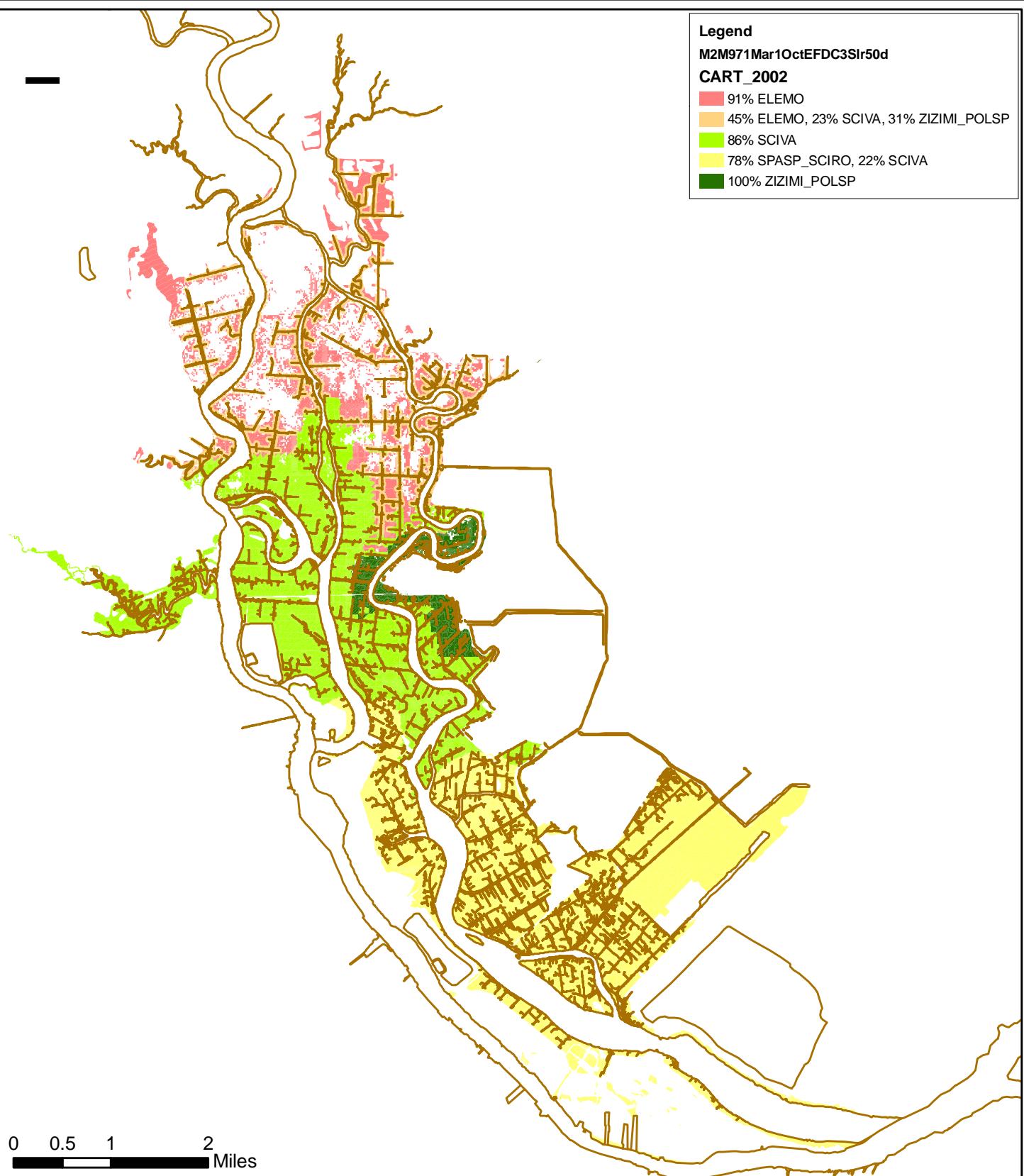
91% ELEMO

45% ELEMO, 23% SCIVA, 31% ZIZIMI_POLSP

86% SCIVA

78% SPASP_SCIRO, 22% SCIVA

100% ZIZIMI_POLSP

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

**USGS/USFWS Savannah Marsh Succession Model CART 2002 Predicted Ecological Community
45 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)
50 cm Sea Level Rise Conditions

March 2007

Legend

M2M971Mar1OctEFDC4S1r50d

CART_2002

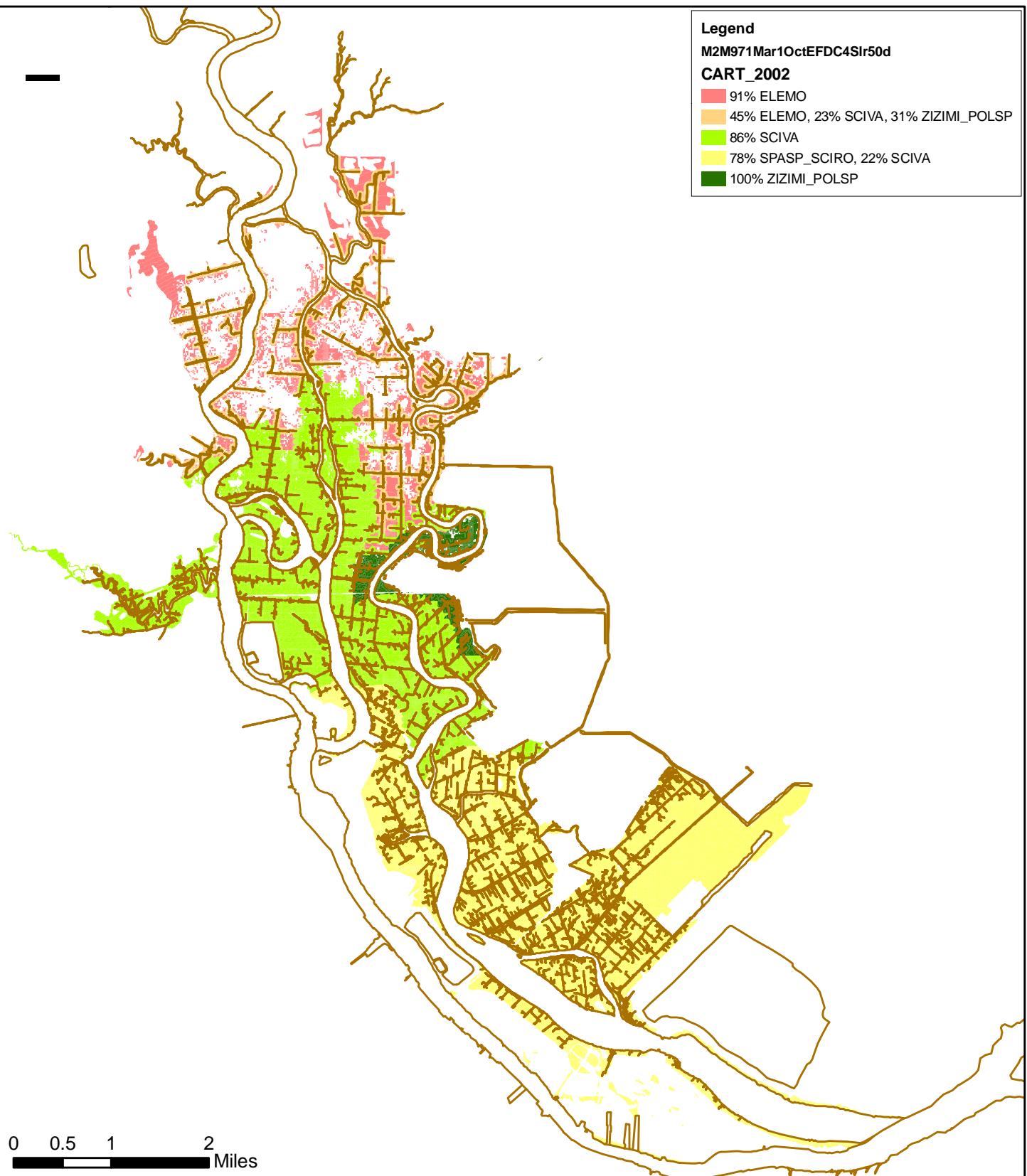
91% ELEMO

45% ELEMO, 23% SCIVA, 31% ZIZIMI_POLSP

86% SCIVA

78% SPASP_SCIRO, 22% SCIVA

100% ZIZIMI_POLSP

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

**USGS/USFWS Savannah Marsh Succession Model CART 2002 Predicted Ecological Community
46 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)
50 cm Sea Level Rise Conditions

Legend

M2M971Mar1OctEFDC6S1r50d

CART_2002

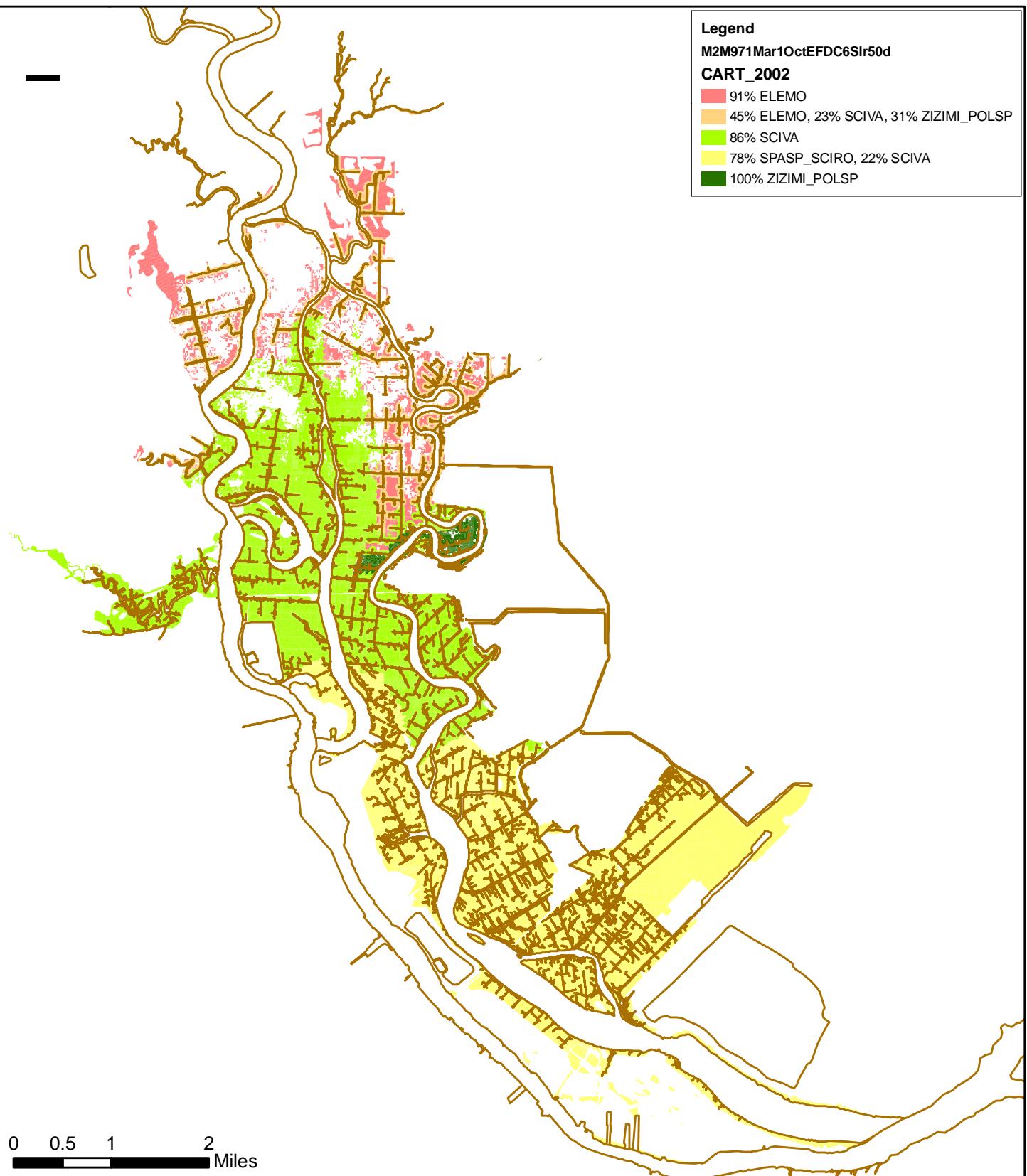
91% ELEMO

45% ELEMO, 23% SCIVA, 31% ZIZIMI_POLSP

86% SCIVA

78% SPASP_SCIRO, 22% SCIVA

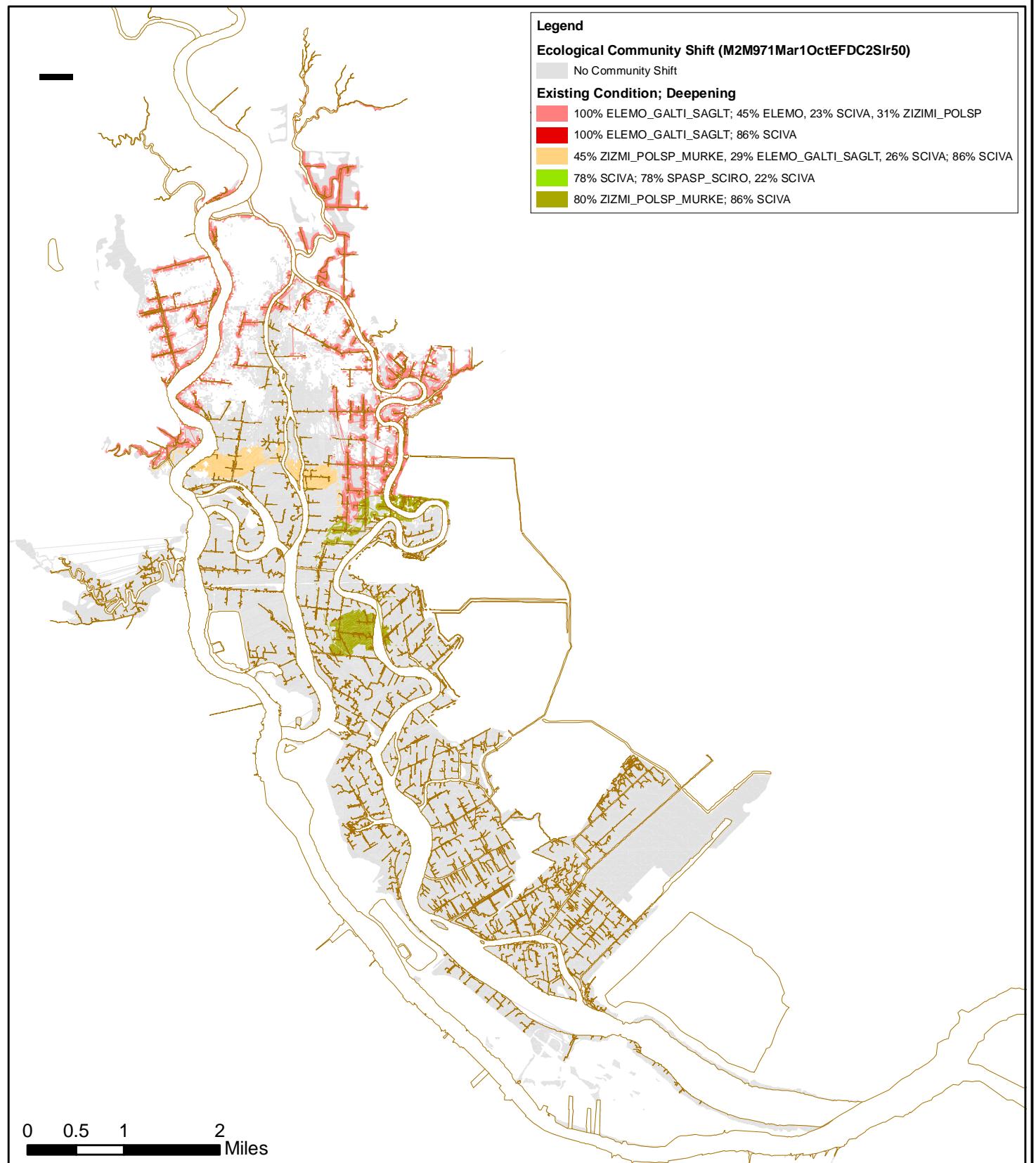
100% ZIZIMI_POLSP

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

**USGS/USFWS Savannah Marsh Succession Model CART 2002 Predicted Ecological Community
48 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)
50 cm Sea Level Rise Conditions

March 2007

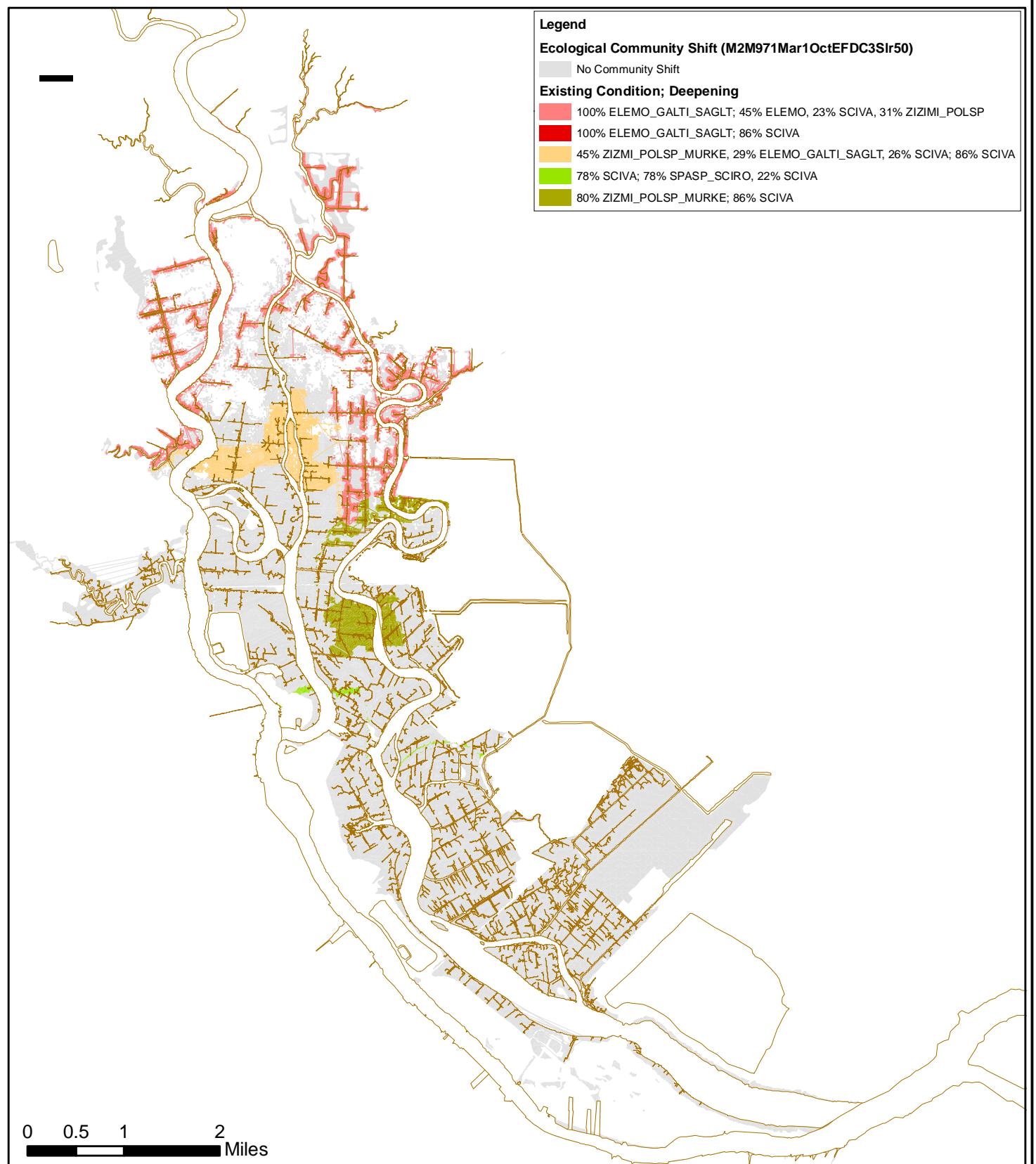


Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

USGS/USFWS Savannah Marsh Succession Model CART 2005/2002 Predicted Ecological Community Shift
44 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)
50 cm Sea Level Rise Conditions

March 2007

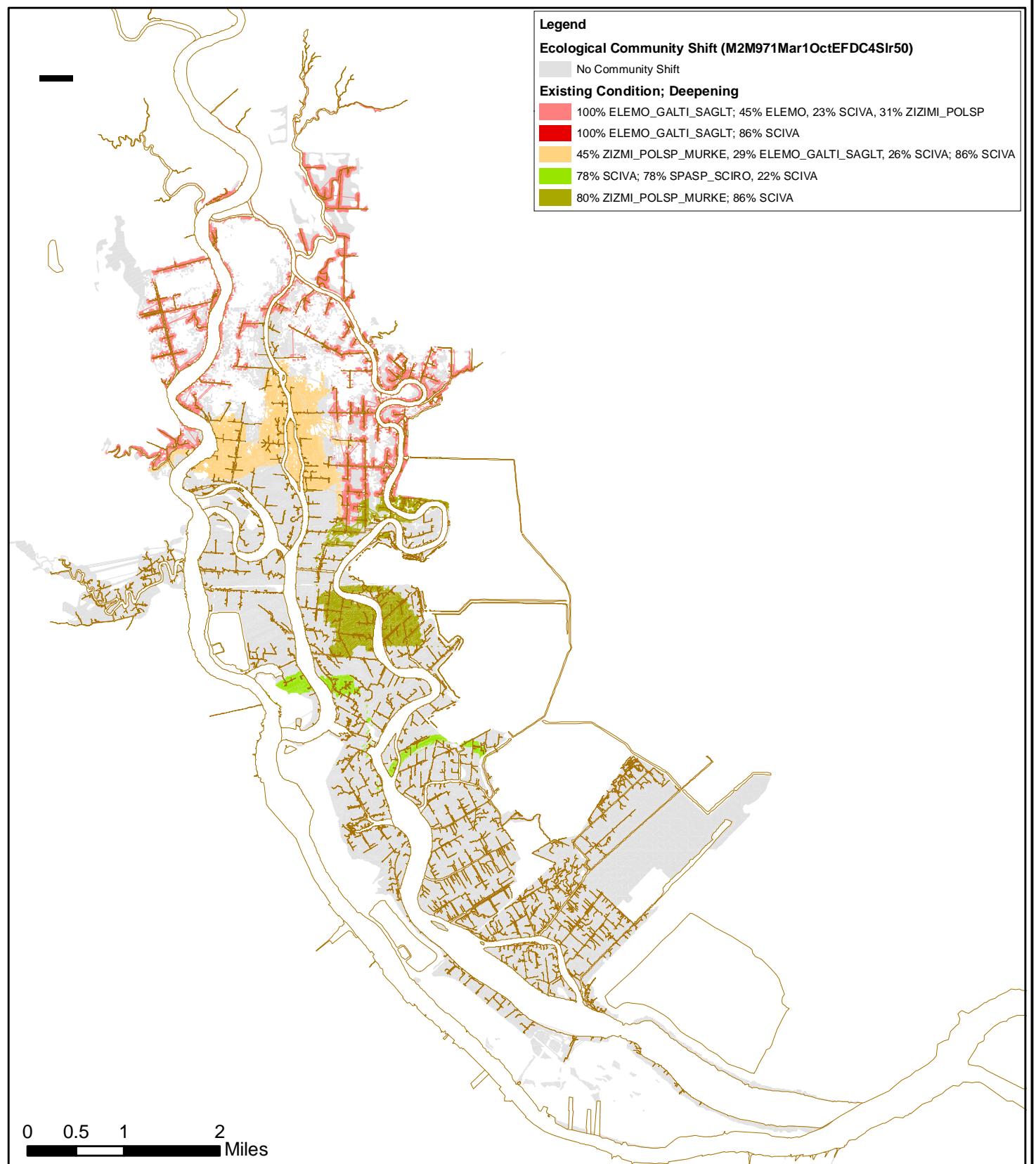


Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

**USGS/USFWS Savannah Marsh Succession Model CART 2005/2002 Predicted Ecological Community Shift
45 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)
50 cm Sea Level Rise Conditions

March 2007

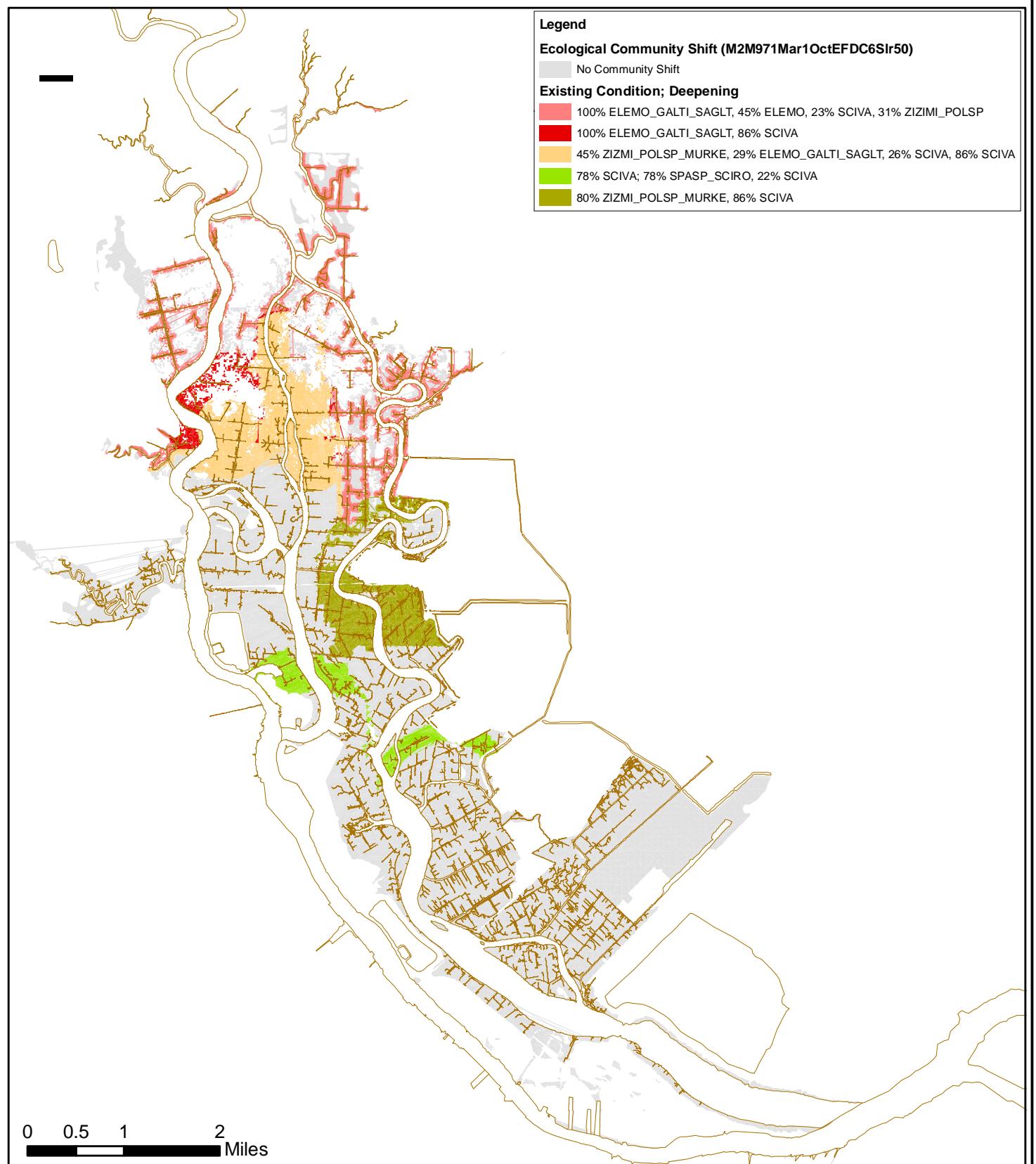


Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

USGS/USFWS Savannah Marsh Succession Model CART 2005/2002 Predicted Ecological Community Shift
46 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)
50 cm Sea Level Rise Conditions

March 2007



Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

USGS/USFWS Savannah Marsh Succession Model CART 2005/2002 Predicted Ecological Community Shift
48 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)
50 cm Sea Level Rise Conditions

March 2007

Savannah Harbor Expansion Project
USGS/USFWS MSM Wetland/Marsh Impact Evaluation
 Vegetation Community Shifts

Community CART2005/2002	Existing Depth 50 cm Sea Level Rise Associated Acreages	44 ft Depth 50 cm Sea Level Rise Associated Acreages	Net Change (net negative), net positive
100% Elemo_Galti_Saglt/ 91% Elemo	1519	975	(544)
80% Zizmi_Polsp/ 100% Zizmi_Polsp	702	457	(245)
45% Zizmi_Polsp, 29% Elemo_Galti_Saglt, 26% Sciva/ 45% Elemo, 23% Sciva, 31% Zizmi_Polsp	788	1181	393
78% Sciva/ 86% Sciva	2114	2510	395
78% Spasp_Sciro_Astte/ 78% Spasp_Sciro, 22% Sciva	3723	3723	0
TOTAL	8847	8847	

Community CART2005/2002	Existing Depth 50 cm Sea Level Rise Associated Acreages	45 ft Depth 50 cm Sea Level Rise Associated Acreages	Net Change (net negative), net positive
100% Elemo_Galti_Saglt/ 91% Elemo	1519	883	(637)
80% Zizmi_Polsp/ 100% Zizmi_Polsp	702	359	(343)
45% Zizmi_Polsp, 29% Elemo_Galti_Saglt, 26% Sciva/ 45% Elemo, 23% Sciva, 31% Zizmi_Polsp	788	1064	275
78% Sciva/ 86% Sciva	2114	2792	678
78% Spasp_Sciro_Astte/ 78% Spasp_Sciro, 22% Sciva	3723	3750	27
TOTAL	8847	8847	

Community CART2005/2002	Existing Depth 50 cm Sea Level Rise Associated Acreages	46 ft Depth 50 cm Sea Level Rise Associated Acreages	Net Change (net negative), net positive
100% Elemo_Galti_Saglt/ 91% Elemo	1519	785	(734)
80% Zizmi_Polsp/ 100% Zizmi_Polsp	702	255	(447)
45% Zizmi_Polsp, 29% Elemo_Galti_Saglt, 26% Sciva/ 45% Elemo, 23% Sciva, 31% Zizmi_Polsp	788	972	184
78% Sciva/ 86% Sciva	2114	2985	870
78% Spasp_Sciro_Astte/ 78% Spasp_Sciro, 22% Sciva	3723	3850	127
TOTAL	8847	8847	

Community CART2005/2002	Existing Depth 50 cm Sea Level Rise Associated Acreages	48 ft Depth 50 cm Sea Level Rise Associated Acreages	Net Change (net negative), net positive
100% Elemo_Galti_Saglt/ 91% Elemo	1519	632	(887)
80% Zizmi_Polsp/ 100% Zizmi_Polsp	702	135	(567)
45% Zizmi_Polsp, 29% Elemo_Galti_Saglt, 26% Sciva/ 45% Elemo, 23% Sciva, 31% Zizmi_Polsp	788	801	12
78% Sciva/ 86% Sciva	2114	3275	1161
78% Spasp_Sciro_Astte/ 78% Spasp_Sciro, 22% Sciva	3723	4004	282
TOTAL	8847	8847	

* Values Based 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).

50 cm Sea Level Rise Conditions.

** 50 cm sea level rise conditons with deepening were modeled using the CART 2002 MSM due to predicted salinity increases showing similarities to drought conditons.