

Legend

Ecological Community Shift

■ No Community Shift

Existing Condition, Deepening

■	EM+, EM/ZM
■	EM+, MK/ZM
■	EM+, SA/SV
■	EM+, SV+
■	EM+, SV/EM
■	EM+, SV/ZM
■	EM+, ZM+
■	EM/ZM, EM+
■	EM/ZM, MK/ZM
■	EM/ZM, SA/SV
■	EM/ZM, SV+
■	EM/ZM, SV/EM
■	EM/ZM, SV/ZM
■	EM/ZM, ZM+
■	MK/ZM, EM+
■	MK/ZM, EM/ZM
■	MK/ZM, SA/SV
■	MK/ZM, SV+
■	MK/ZM, SV/EM
■	MK/ZM, SV/ZM
■	MK/ZM, ZM+
■	SA/SV, EM+
■	SA/SV, EM/ZM
■	SA/SV, MK/ZM
■	SA/SV, SV+
■	SA/SV, SV/EM
■	SA/SV, SV/ZM
■	SA/SV, ZM+
■	SV+, EM+
■	SV+, EM/ZM
■	SV+, MK/ZM
■	SV+, SA/SV
■	SV+, SV/EM
■	SV+, SV/ZM
■	SV+, ZM+
■	SV/EM, EM+
■	SV/EM, EM/ZM
■	SV/EM, MK/ZM
■	SV/EM, SA/SV
■	SV/EM, SV+
■	SV/EM, SV/ZM
■	SV/EM, ZM+
■	SV/ZM, EM+
■	SV/ZM, EM/ZM
■	SV/ZM, MK/ZM
■	SV/ZM, SA/SV
■	SV/ZM, SV+
■	SV/ZM, SV/EM
■	SV/ZM, ZM+
■	ZM+, EM+
■	ZM+, EM/ZM
■	ZM+, MK/ZM
■	ZM+, SA/SV
■	ZM+, SV+
■	ZM+, SV/EM
■	ZM+, SV/ZM

0 0.5 1 2
Miles



Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

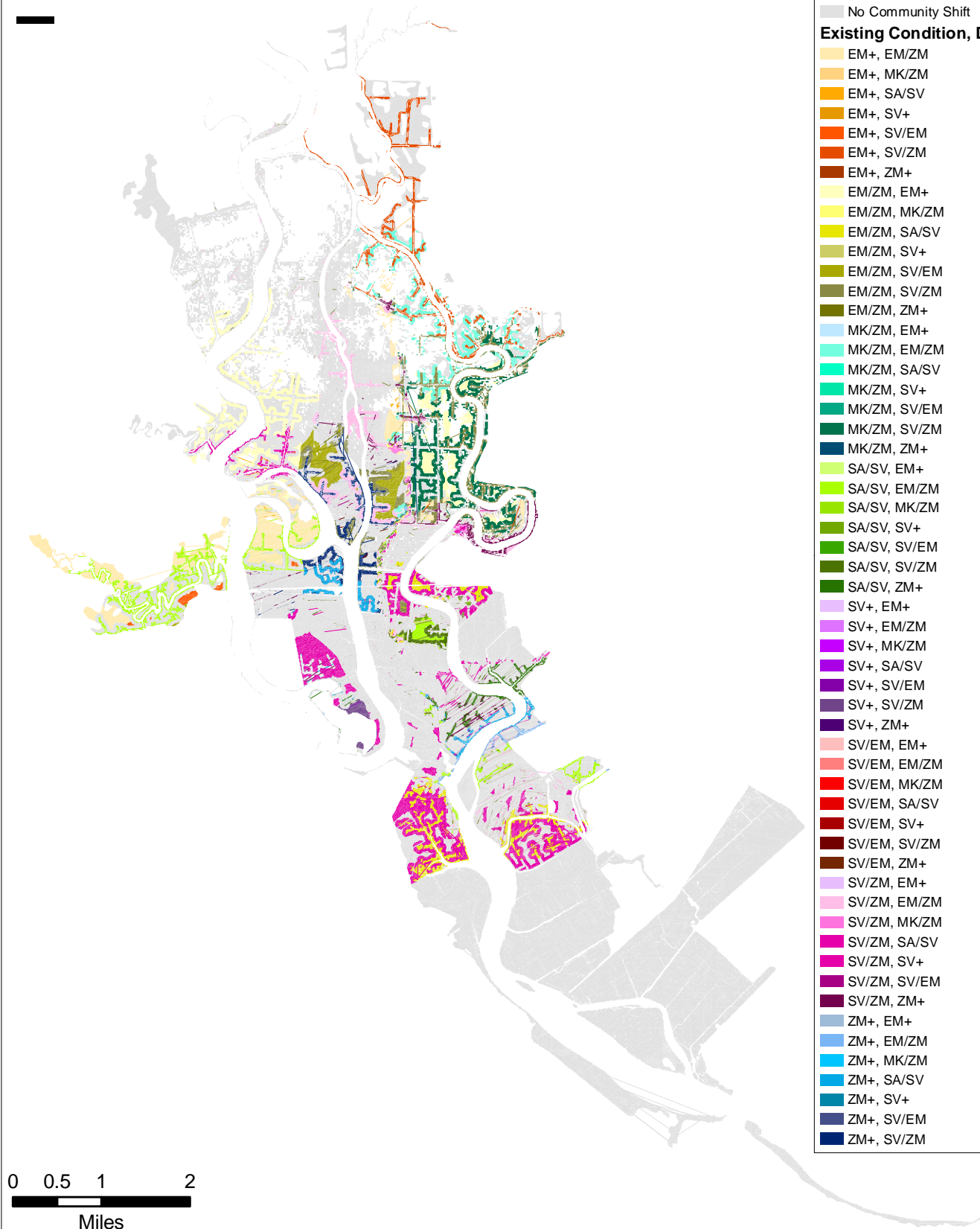
ATM Savannah Marsh Succession Model Predicted Ecological Community Shift 45 Foot Depth (3 Foot Deepening)

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

March 2007



Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

ATM Savannah Marsh Succession Model Predicted Ecological Community Shift

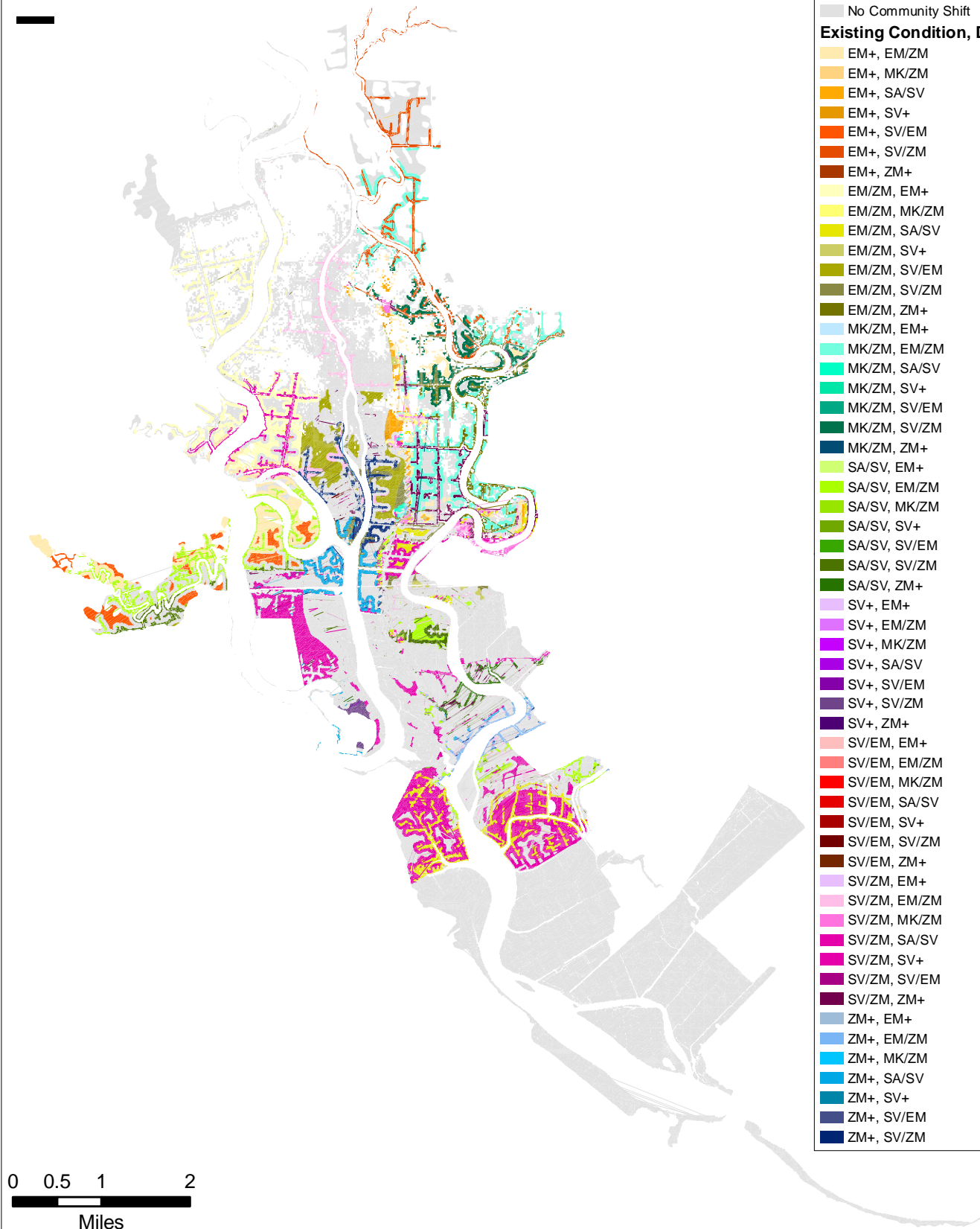
46 Foot Depth (4 Foot Deepening)

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

March 2007



- Legend**
- Ecological Community Shift**
- No Community Shift
- Existing Condition, Deepening**
- EM+, EM/ZM
 - EM+, MK/ZM
 - EM+, SA/SV
 - EM+, SV+
 - EM+, SV/EM
 - EM+, SV/ZM
 - EM+, ZM+
 - EM/ZM, EM+
 - EM/ZM, MK/ZM
 - EM/ZM, SA/SV
 - EM/ZM, SV+
 - EM/ZM, SV/EM
 - EM/ZM, SV/ZM
 - EM/ZM, ZM+
 - MK/ZM, EM+
 - MK/ZM, EM/ZM
 - MK/ZM, SA/SV
 - MK/ZM, SV+
 - MK/ZM, SV/EM
 - MK/ZM, SV/ZM
 - MK/ZM, ZM+
 - SA/SV, EM+
 - SA/SV, EM/ZM
 - SA/SV, MK/ZM
 - SA/SV, SV+
 - SA/SV, SV/EM
 - SA/SV, SV/ZM
 - SA/SV, ZM+
 - SV+, EM+
 - SV+, EM/ZM
 - SV+, MK/ZM
 - SV+, SA/SV
 - SV+, SV/EM
 - SV+, SV/ZM
 - SV+, ZM+
 - SV/EM, EM+
 - SV/EM, EM/ZM
 - SV/EM, MK/ZM
 - SV/EM, SA/SV
 - SV/EM, SV+
 - SV/EM, SV/ZM
 - SV/EM, ZM+
 - SV/ZM, EM+
 - SV/ZM, EM/ZM
 - SV/ZM, MK/ZM
 - SV/ZM, SA/SV
 - SV/ZM, SV+
 - SV/ZM, SV/EM
 - SV/ZM, ZM+
 - ZM+, EM+
 - ZM+, EM/ZM
 - ZM+, MK/ZM
 - ZM+, SA/SV
 - ZM+, SV+
 - ZM+, SV/EM
 - ZM+, SV/ZM

0 0.5 1 2
Miles



Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

ATM Savannah Marsh Succession Model 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

March 2007

Savannah Harbor Expansion Project
ATM MSM Wetland/Marsh Impact Evaluation
 Predicted Vegetation Community Shifts

Community	No Deepening Average Flow Associated Acreages	44 ft Deepening Average Flow Associated Acreages	Net Change (net negative), net positive
EM+	690	534	(156)
EM/ZM	1729	1880	151
MK/ZM	424	216	(208)
ZM+	259	228	(30)
SV/EM	85	122	37
SV/ZM	1938	1983	45
SV+	15	27	12
SA/SV	2861	3011	149
TOTAL	8001	8001	

Community	No Deepening Average Flow Associated Acreages	45 ft Deepening Average Flow Associated Acreages	Net Change (net negative), net positive
EM+	690	521	(170)
EM/ZM	1729	1946	218
MK/ZM	424	145	(279)
ZM+	259	213	(46)
SV/EM	85	146	62
SV/ZM	1938	1924	(14)
SV+	15	42	26
SA/SV	2861	3064	203
TOTAL	8001	8001	

Community	No Deepening Average Flow Associated Acreages	46 ft Deepening Average Flow Associated Acreages	Net Change (net negative), net positive
EM+	690	532	(158)
EM/ZM	1729	1812	83
MK/ZM	424	125	(299)
ZM+	259	197	(62)
SV/EM	85	180	96
SV/ZM	1938	1953	15
SV+	15	52	37
SA/SV	2861	3149	287
TOTAL	8001	8001	

Community	No Deepening Average Flow Associated Acreages	48 ft Deepening Average Flow Associated Acreages	Net Change (net negative), net positive
EM+	690	463	(227)
EM/ZM	1729	1794	66
MK/ZM	424	100	(324)
ZM+	259	249	(9)
SV/EM	85	303	219
SV/ZM	1938	1606	(332)
SV+	15	102	87
SA/SV	2861	3383	522
TOTAL	8001	8001	

* 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.



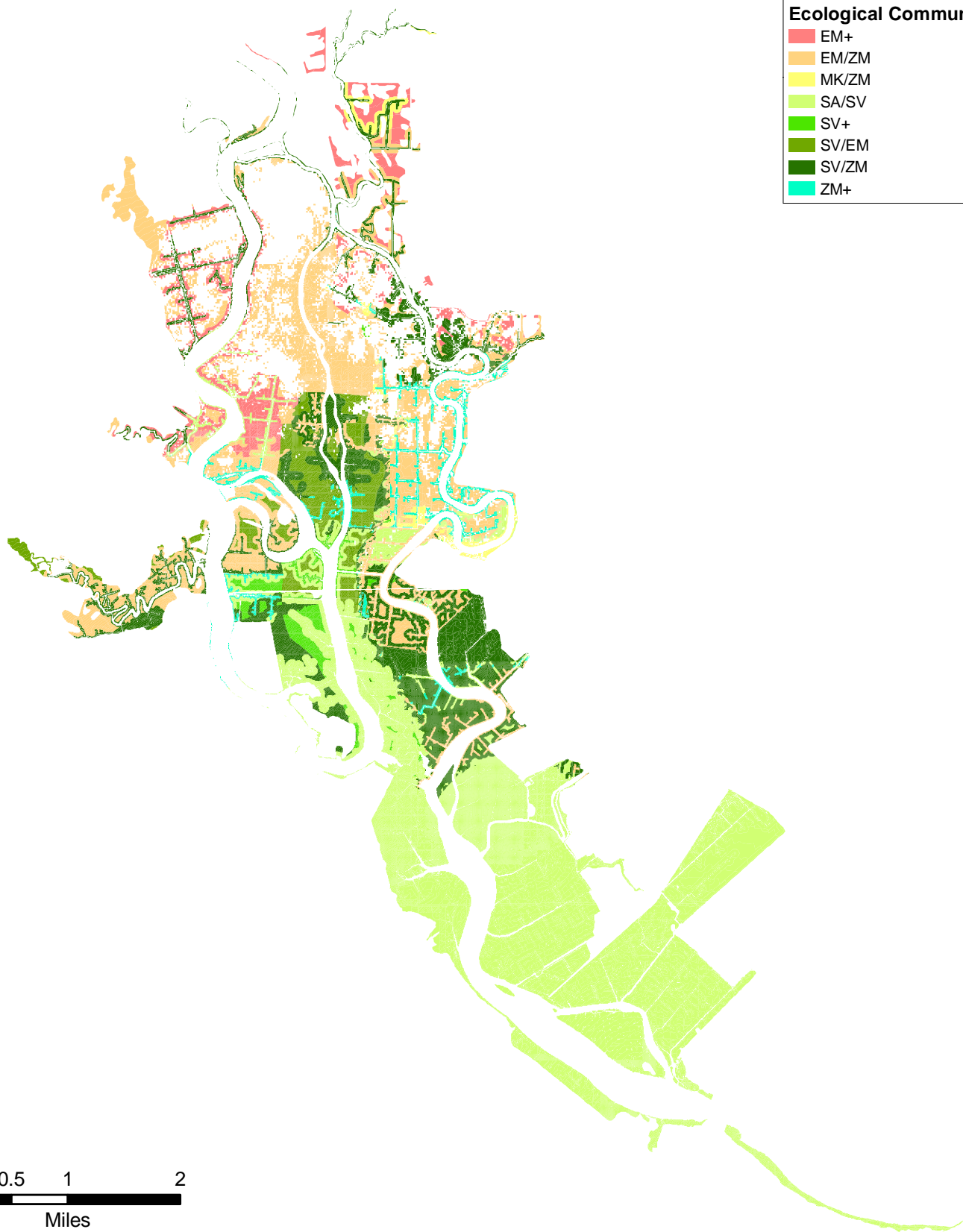
APPENDIX B
SENSITIVITY ANYSIS #1
ECOLOGICAL COMMUNITY MAPS &
ECOLOGICAL COMMUNITY SHIFT MAPS

Legend

M2M011Mar1Octage

Ecological Communities

- EM+
- EM/ZM
- MK/ZM
- SA/SV
- SV+
- SV/EM
- SV/ZM
- ZM+



Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

ATM Savannah Marsh Succession Model Predicted Ecological Community

Existing Depth

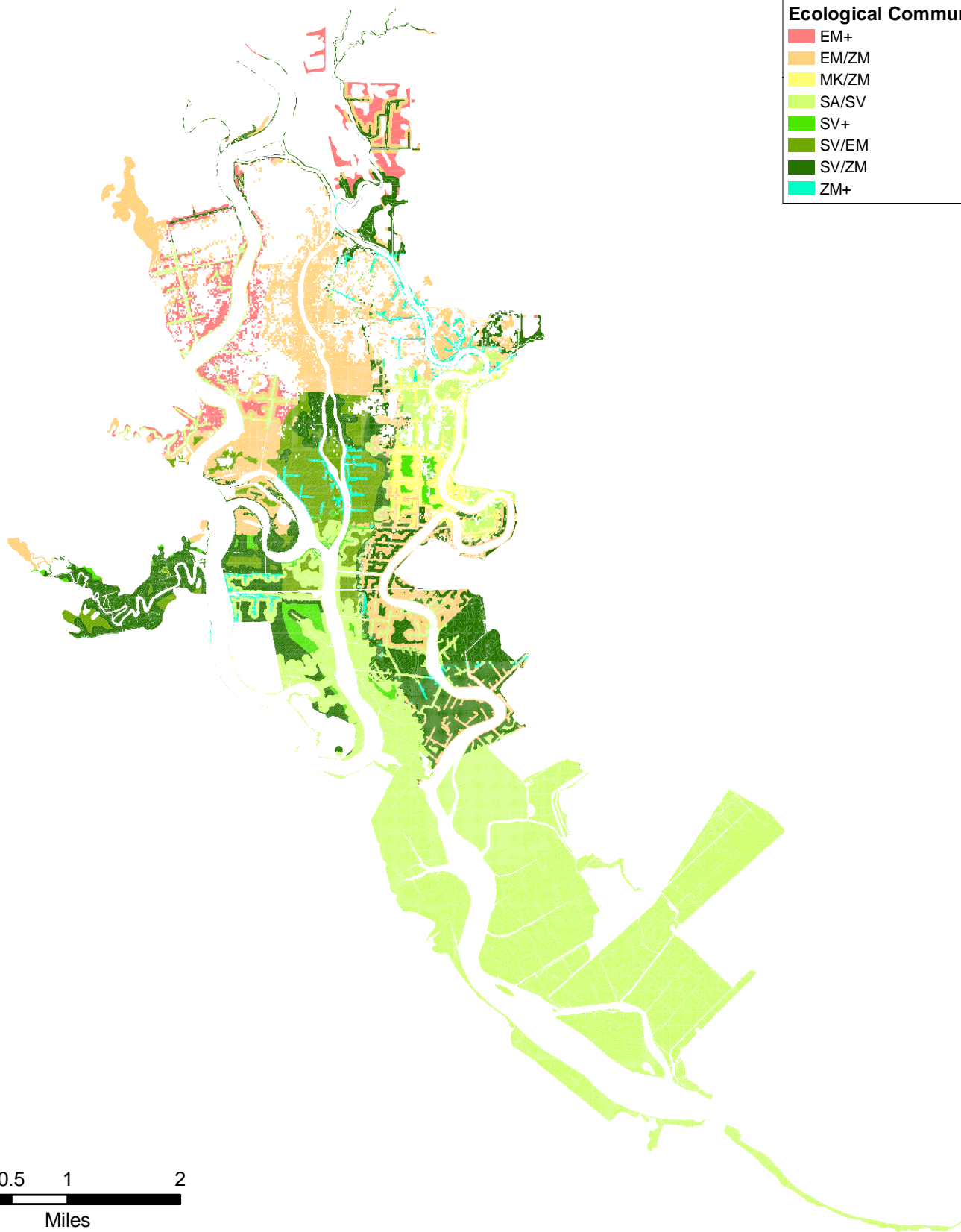
Values Based on EFDC and M2M Output using Historic Low Flow, Average Temperature, and Average Tidal Conditions
1 March through 1 October 2001 (2001 best represents low historic conditions from the available data set)

Existing Sea Level Conditions

March 2007

Legend
M2M011Mar1OctEFDC2
Ecological Communities

- EM+
- EM/ZM
- MK/ZM
- SA/SV
- SV+
- SV/EM
- SV/ZM
- ZM+

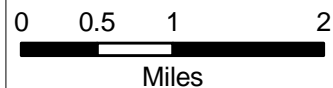
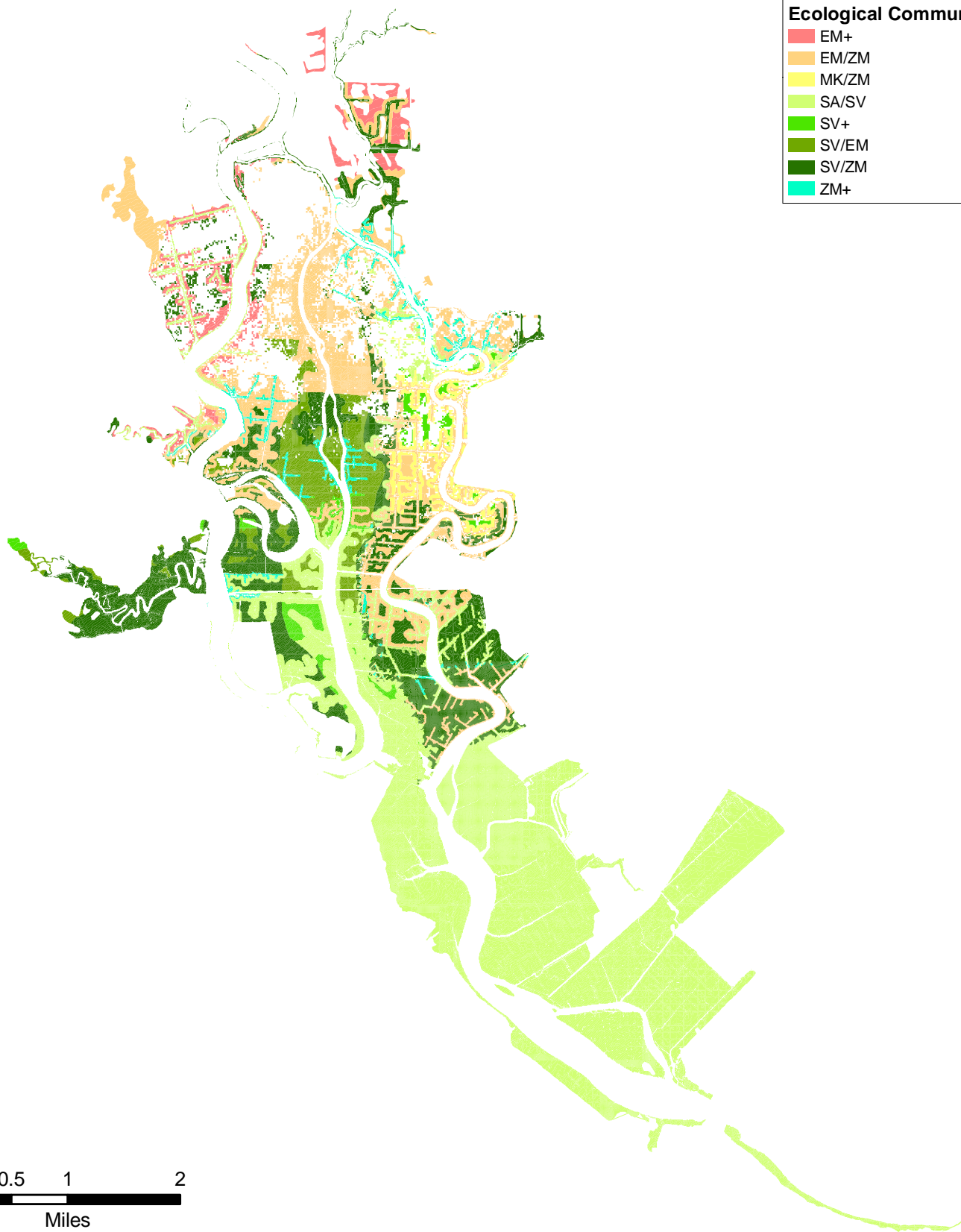


Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

ATM Savannah Marsh Succession Model Predicted Ecological Community
44 Foot Depth (2 Foot Deepening)
Values Based on EFDC and M2M Output using Historic Low Flow, Average Temperature, and Average Tidal Conditions
1 March through 1 October 2001 (2001 best represents low historic conditions from the available data set)
Existing Sea Level Conditions

Legend
M2M011Mar1OctEFDC3
Ecological Communities

- EM+
- EM/ZM
- MK/ZM
- SA/SV
- SV+
- SV/EM
- SV/ZM
- ZM+

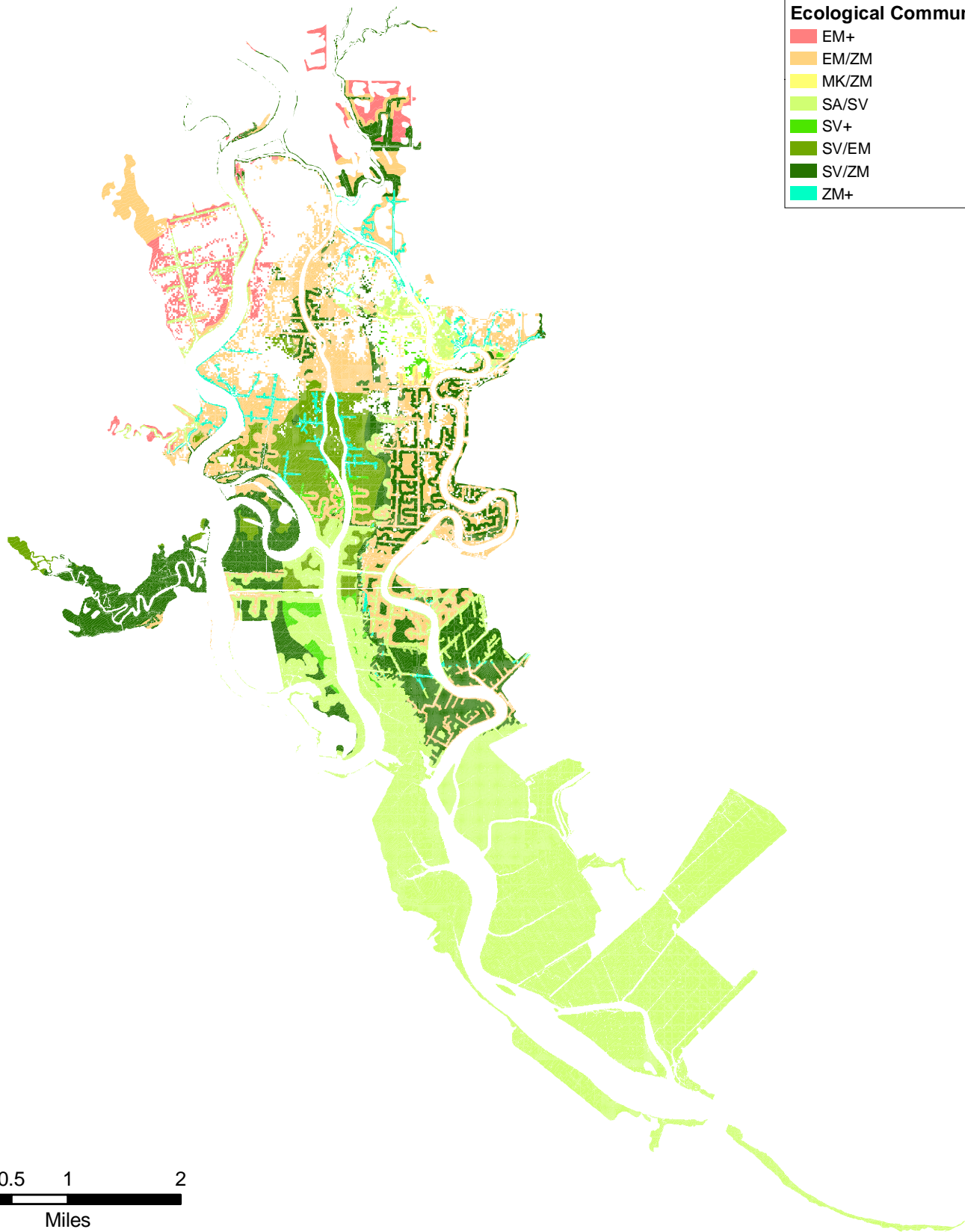


Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

ATM Savannah Marsh Succession Model Predicted Ecological Community
45 Foot Depth (3 Foot Deepening)
Values Based on EFDC and M2M Output using Historic Low Flow, Average Temperature, and Average Tidal Conditions
1 March through 1 October 2001 (2001 best represents low historic conditions from the available data set)
Existing Sea Level Conditions

Legend
M2M011Mar1OctEFDC4
Ecological Communities

- EM+
- EM/ZM
- MK/ZM
- SA/SV
- SV+
- SV/EM
- SV/ZM
- ZM+

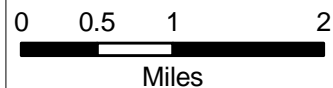
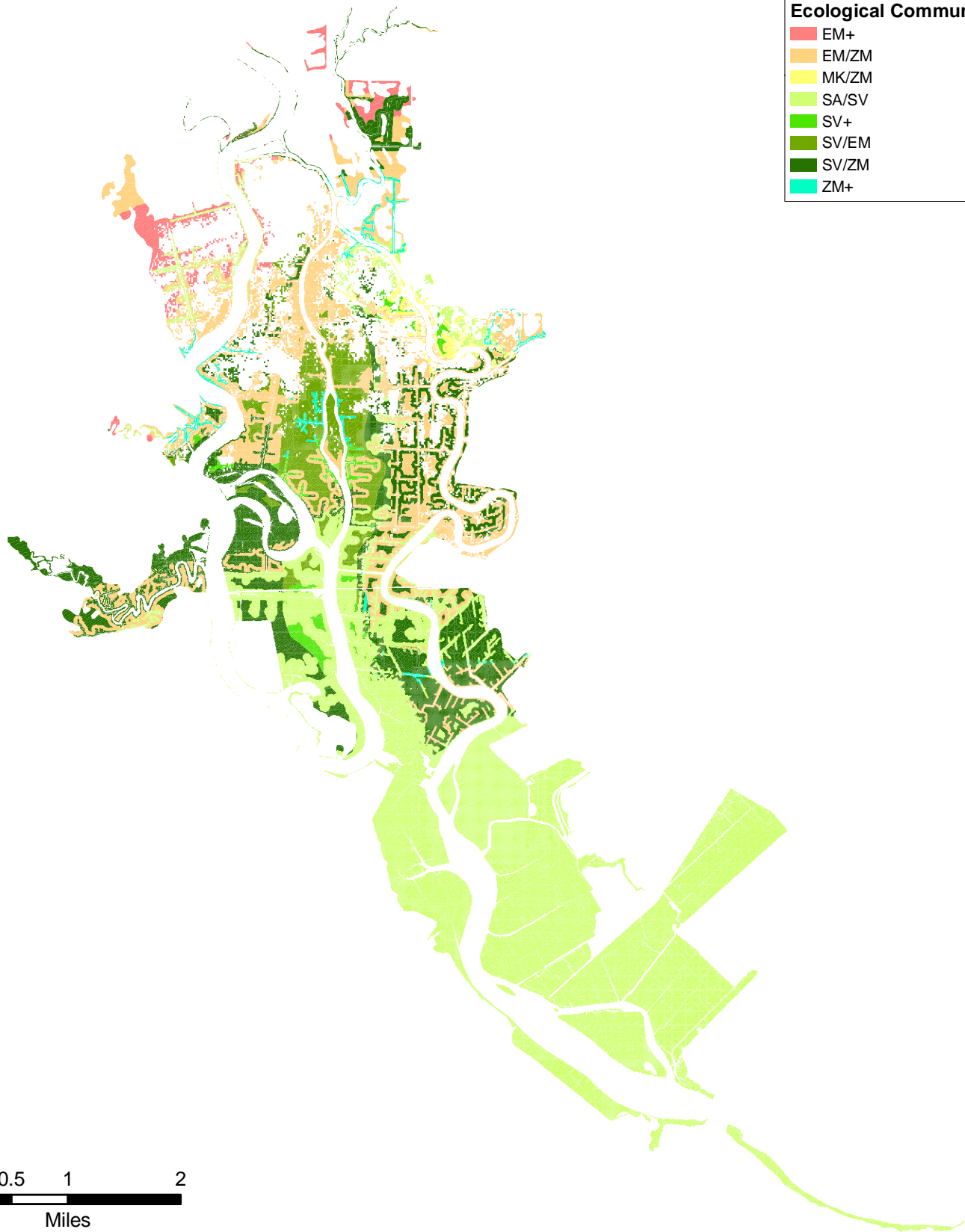


Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

ATM Savannah Marsh Succession Model Predicted Ecological Community
46 Foot Depth (4 Foot Deepening)
Values Based on EFDC and M2M Output using Historic Low Flow, Average Temperature, and Average Tidal Conditions
1 March through 1 October 2001 (2001 best represents low historic conditions from the available data set)
Existing Sea Level Conditions

Legend
M2M011Mar1OctEFDC6
Ecological Communities

- EM+
- EM/ZM
- MK/ZM
- SA/SV
- SV+
- SV/EM
- SV/ZM
- ZM+



Savannah Harbor Expansion Project - Wetland/Marsh Impact Evaluation

ATM Savannah Marsh Succession Model Predicted Ecological Community
48 Foot Depth (6 Foot Deepening)
Values Based on EFDC and M2M Output using Historic Low Flow, Average Temperature, and Average Tidal Conditions
1 March through 1 October 2001 (2001 best represents low historic conditions from the available data set)
Existing Sea Level Conditions