



Savannah Harbor Expansion Project

Evaluation of Marsh/Wetland Impacts with the Proposed Mitigation
Plan (Addendum)

July 2011

This document should be considered an addendum to the report titled *Evaluation of Marsh/Wetland Impacts with the Proposed Mitigation Plan* dated November 2007. Details of the 47 ft project depth wetland impacts were not included in the November 2007 document but are included here. Values shown in the table below were derived from the EFDC model runs for the Basic Evaluation. The output from these model runs are depicted graphically on maps included in this document.

Table 1: Basic Evaluation Wetland Acreages for Existing Conditions and the 47 ft Project Depth with and without Mitigation Plan 6a

Salinity Range (ppt)	Existing No Deepening No Mitigation	47 ft Depth Deepening Only No Mitigation	47 ft Depth & Mitigation Plan 6a
0.0 – 0.5	4072	2895	3849
0.6 – 1.0	864	1009	1641
1.1 – 2.0	555	1355	889
2.1 – 4.0	834	1365	687
> 4.0	2506	2208	1766

Savannah Harbor Expansion Wetland Impacts

47 ft Deepening

Surface Salinity- 50% Exceedance Values

Existing Sea Level Rise Conditions

Average Historic Flow, Temperature and
Tidal Conditions- March through October 1997

Salinity (ppt)

0.0 - 0.5

0.6 - 1.0

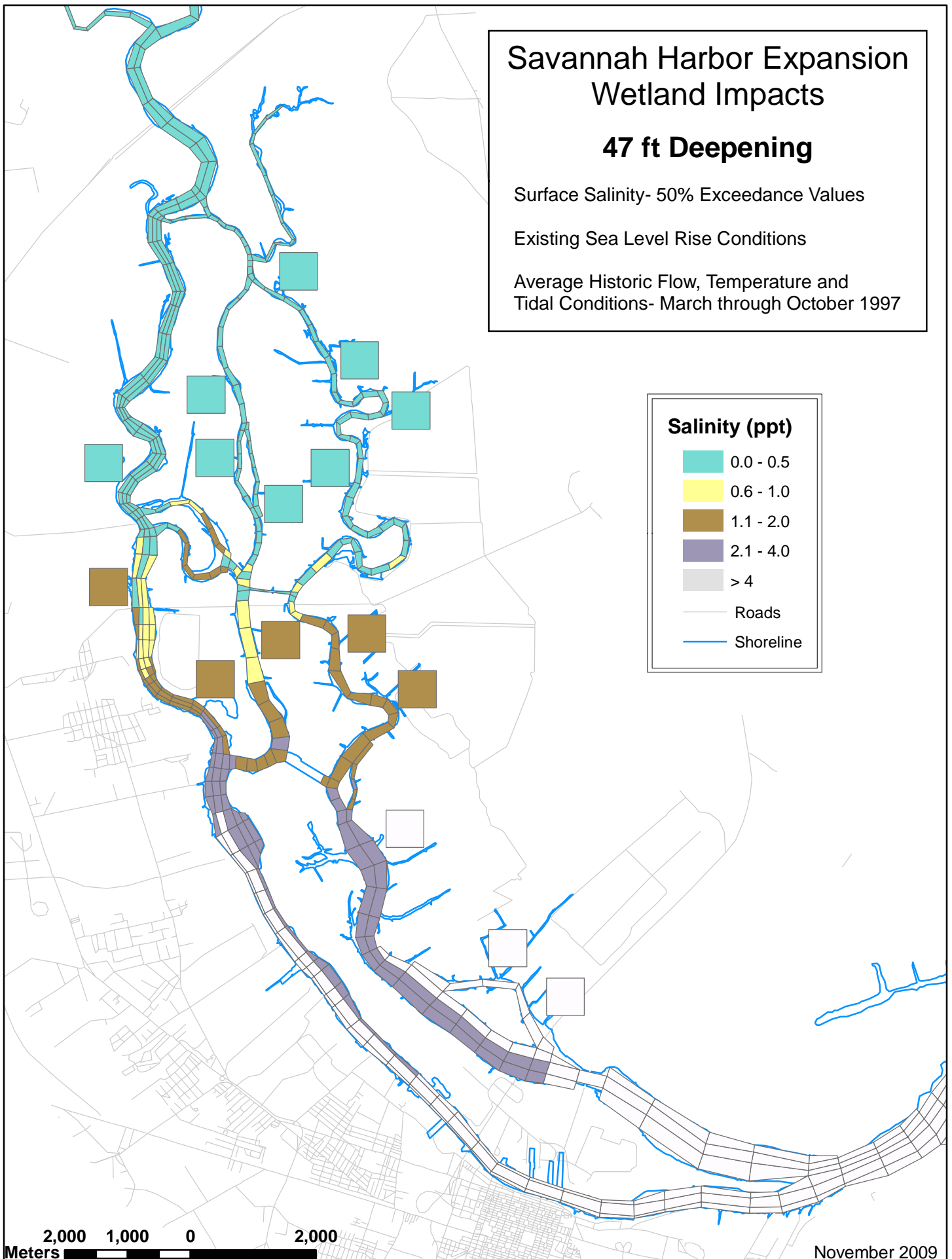
1.1 - 2.0

2.1 - 4.0

> 4

Roads

Shoreline



Savannah Harbor Expansion Wetland Impacts

47 ft Deepening

Surface Salinity- 50% Exceedance Values

Existing Sea Level Rise Conditions

Average Historic Flow, Temperature and
Tidal Conditions- March through October 1997

Estimated Marsh Salinity (ppt)

0.0 - 0.5

0.6 - 1.0

1.1 - 2.0

2.1 - 4.0

> 4

Shoreline

2,000 1,000 0 2,000
Meters

November 2009

Savannah Harbor Expansion Wetland Impacts

47 ft Deepening

Surface Salinity- 50% Exceedance Values

Existing Sea Level Rise Conditions

Average Historic Flow, Temperature and
Tidal Conditions- March through October 1997

Surface Salinity 0.5 ppt Indicator

- Cells Greater Than 0.5 ppt
- Cells Changed from GT 0.5 ppt to LT 0.5 ppt
- Cells Less Than 0.5 ppt
- Cells Changed from LT 0.5 ppt to GT 0.5 ppt
- Roads
- Shoreline

988.4
acres

345.8
acres

2,000 1,000 0 2,000
Meters

November 2009

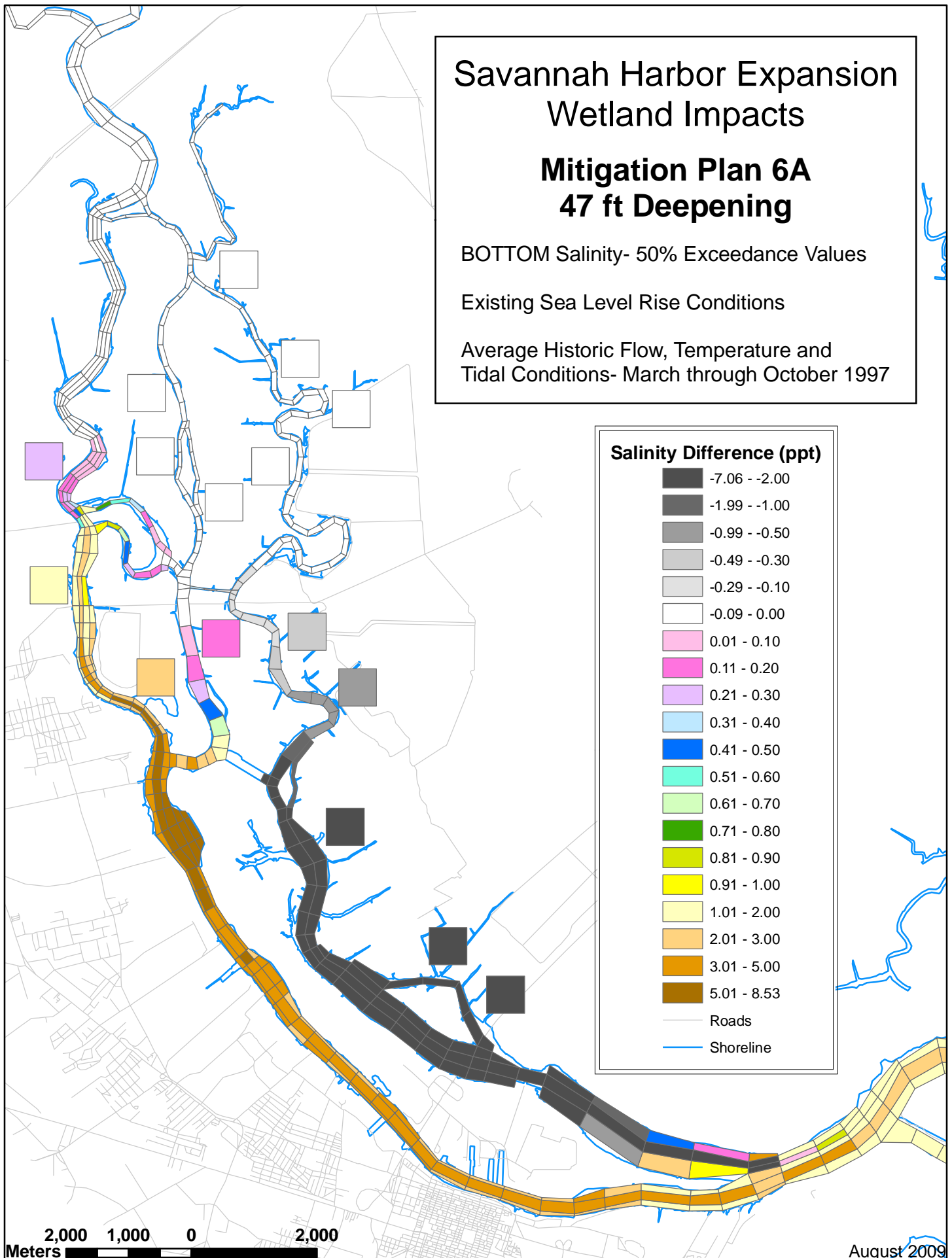
Savannah Harbor Expansion Wetland Impacts

Mitigation Plan 6A 47 ft Deepening

BOTTOM Salinity- 50% Exceedance Values

Existing Sea Level Rise Conditions

Average Historic Flow, Temperature and
Tidal Conditions- March through October 1997



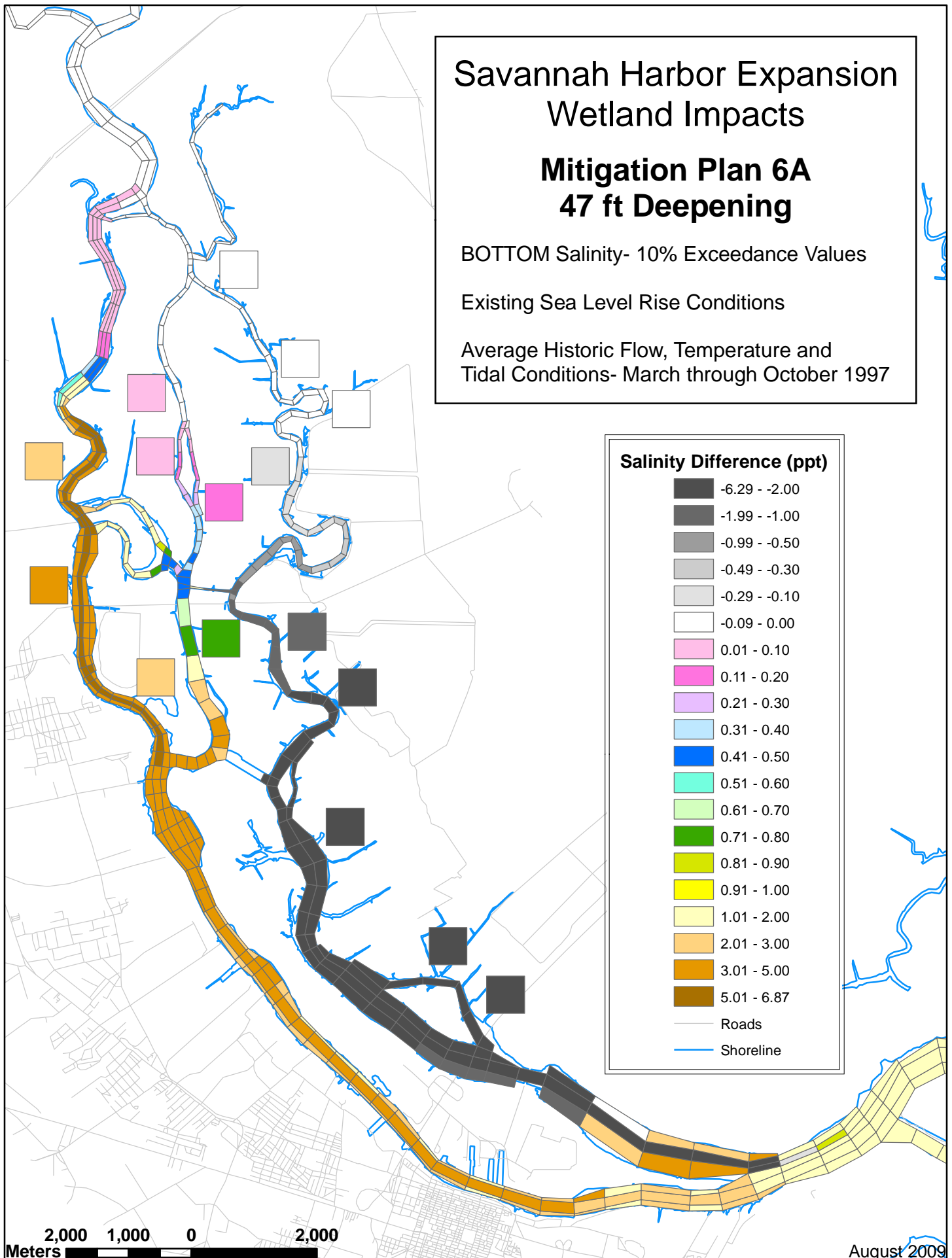
Savannah Harbor Expansion Wetland Impacts

Mitigation Plan 6A 47 ft Deepening

BOTTOM Salinity- 10% Exceedance Values

Existing Sea Level Rise Conditions

Average Historic Flow, Temperature and
Tidal Conditions- March through October 1997



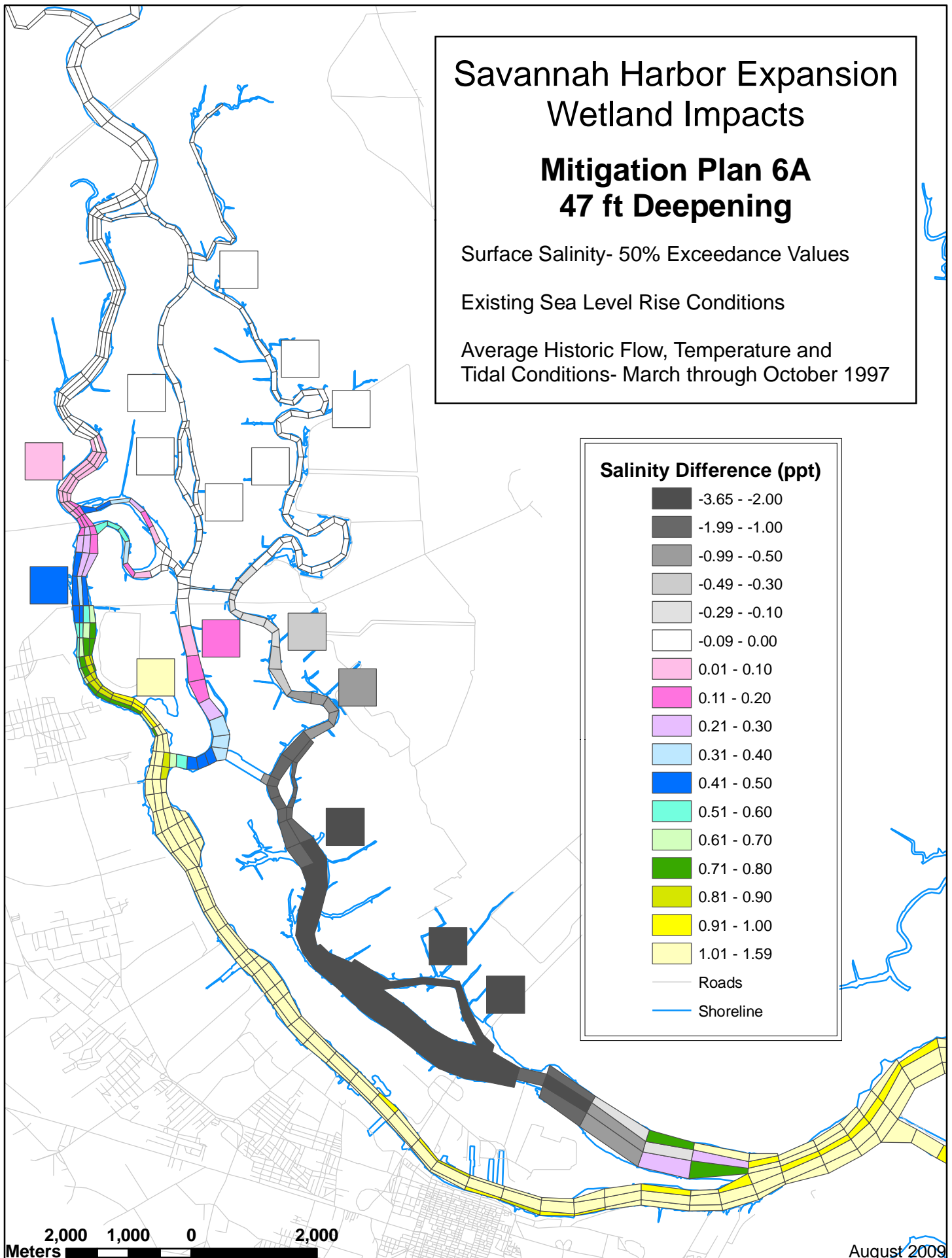
Savannah Harbor Expansion Wetland Impacts

Mitigation Plan 6A 47 ft Deepening

Surface Salinity- 50% Exceedance Values

Existing Sea Level Rise Conditions

Average Historic Flow, Temperature and
Tidal Conditions- March through October 1997



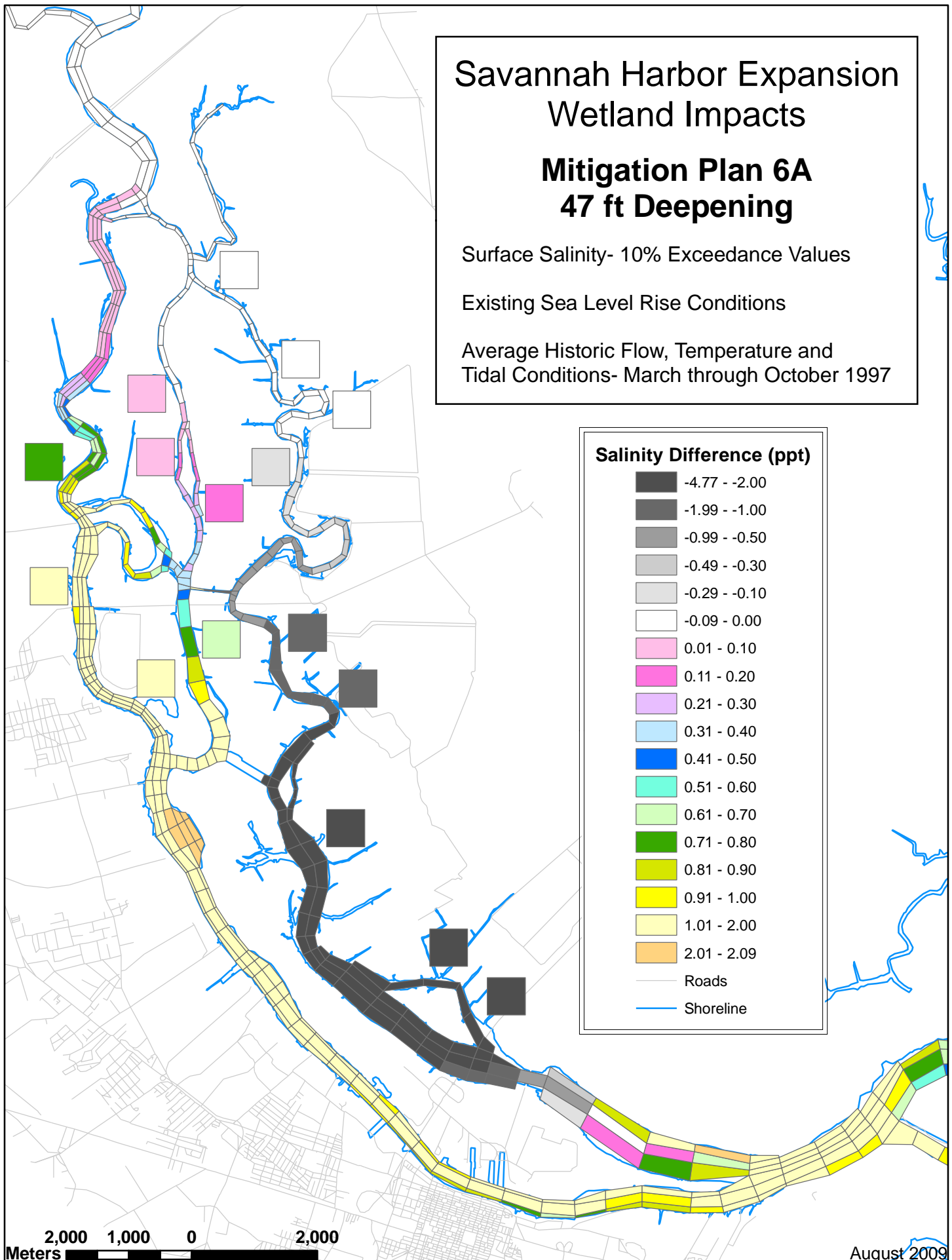
Savannah Harbor Expansion Wetland Impacts

Mitigation Plan 6A 47 ft Deepening

Surface Salinity- 10% Exceedance Values

Existing Sea Level Rise Conditions

Average Historic Flow, Temperature and
Tidal Conditions- March through October 1997



Savannah Harbor Expansion Wetland Impacts

Mitigation Plan 6A 47 ft Deepening

Surface Salinity- 50% Exceedance Values

Existing Sea Level Rise Conditions

Average Historic Flow, Temperature and
Tidal Conditions- March through October 1997

Salinity (ppt)

0.0 - 0.5

0.6 - 1.0

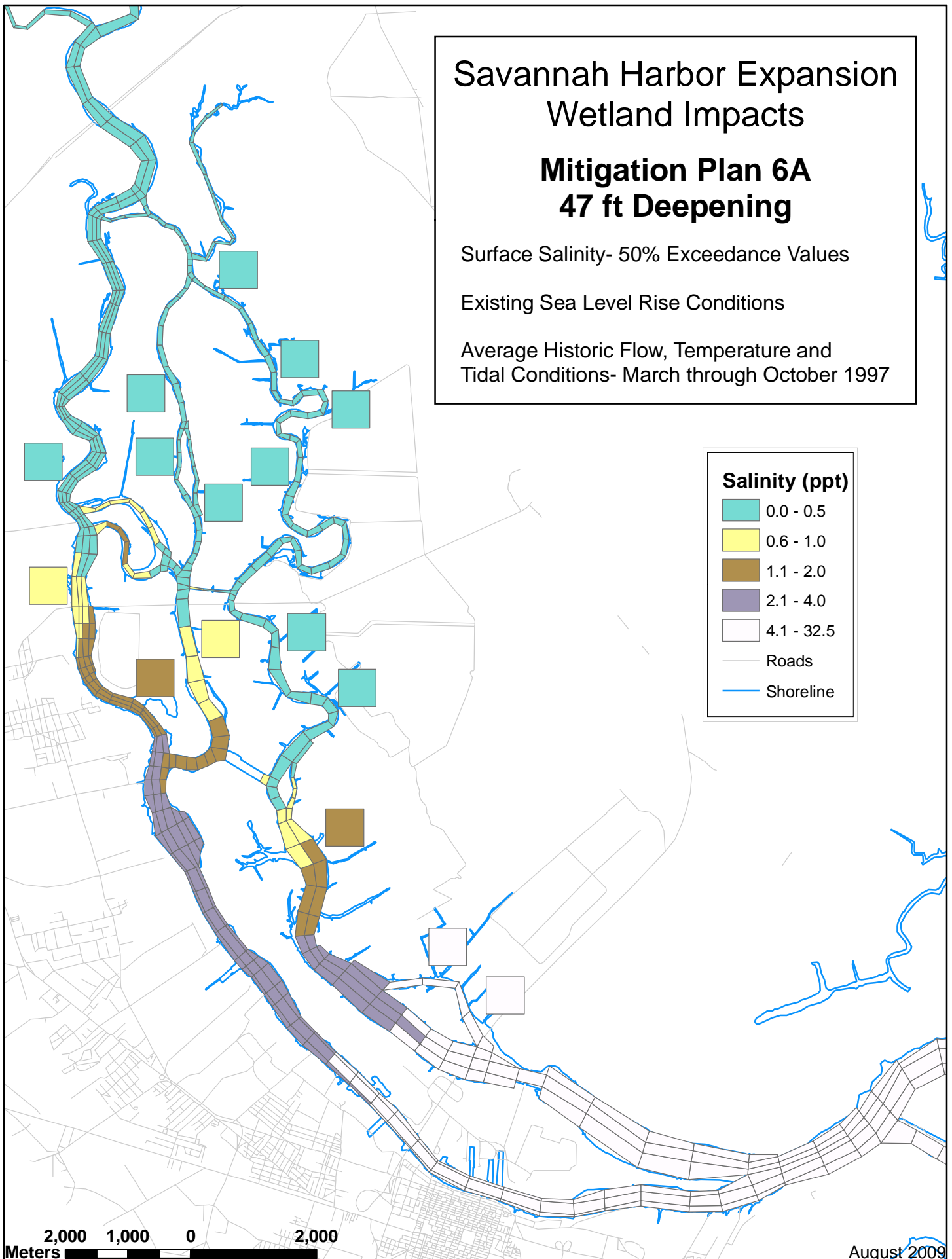
1.1 - 2.0

2.1 - 4.0

4.1 - 32.5

Roads

Shoreline



Savannah Harbor Expansion Wetland Impacts Mitigation Plan 6A 47 ft Deepening

Surface Salinity- 50% Exceedance Values

Existing Sea Level Rise Conditions

Average Historic Flow, Temperature and
Tidal Conditions- March through October 1997

Estimated Marsh Salinity (ppt)

0.0 - 0.5

0.6 - 1.0

1.1 - 2.0

2.1 - 4.0

> 4

Shoreline

2,000 1,000 0 2,000
Meters

August 2009

Savannah Harbor Expansion Wetland Impacts

Mitigation Plan 6A 47 ft Deepening

Surface Salinity- 50% Exceedance Values

Existing Sea Level Rise Conditions

Average Historic Flow, Temperature and
Tidal Conditions- March through October 1997

Surface Salinity 0.5 ppt Indicator

- Cells Greater Than 0.5 ppt
- Cells Changed from GT 0.5 ppt to LT 0.5 ppt
- Cells Less Than 0.5 ppt
- Cells Changed from LT 0.5 ppt to GT 0.5 ppt
- Roads
- Shoreline

