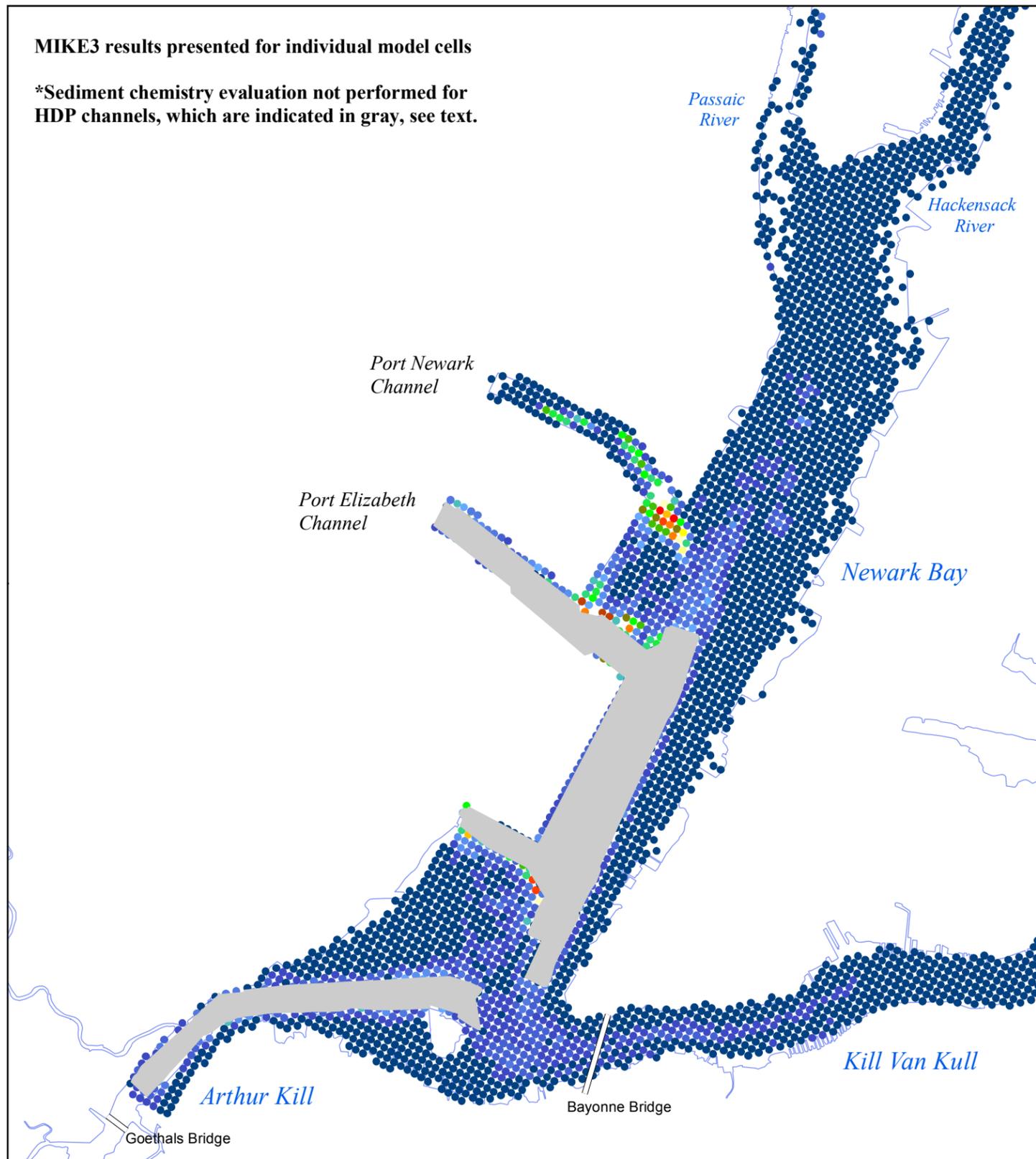


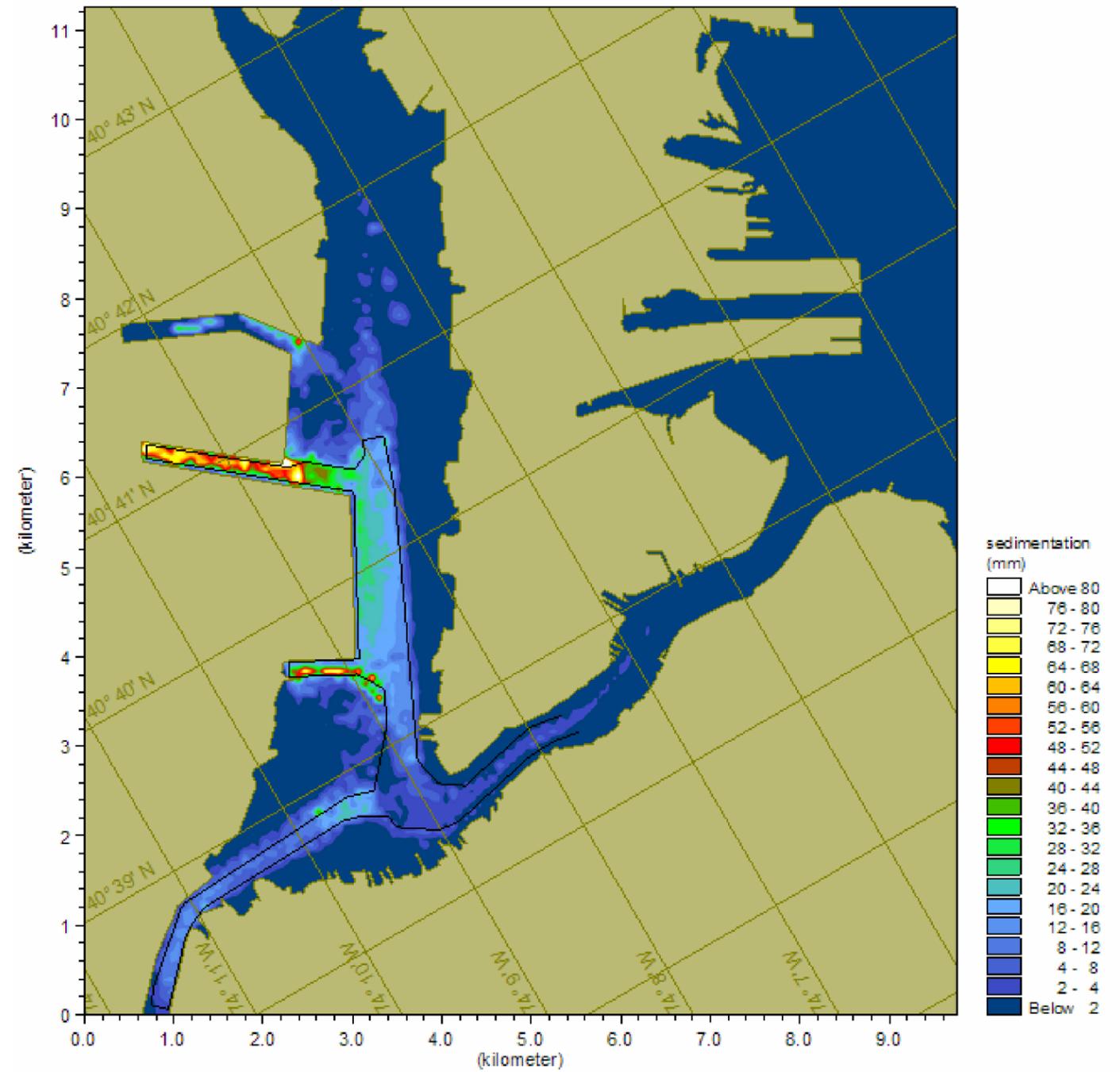
MIKE3 results presented for individual model cells

\*Sediment chemistry evaluation not performed for HDP channels, which are indicated in gray, see text.



Interpolated MIKE3 Model Results

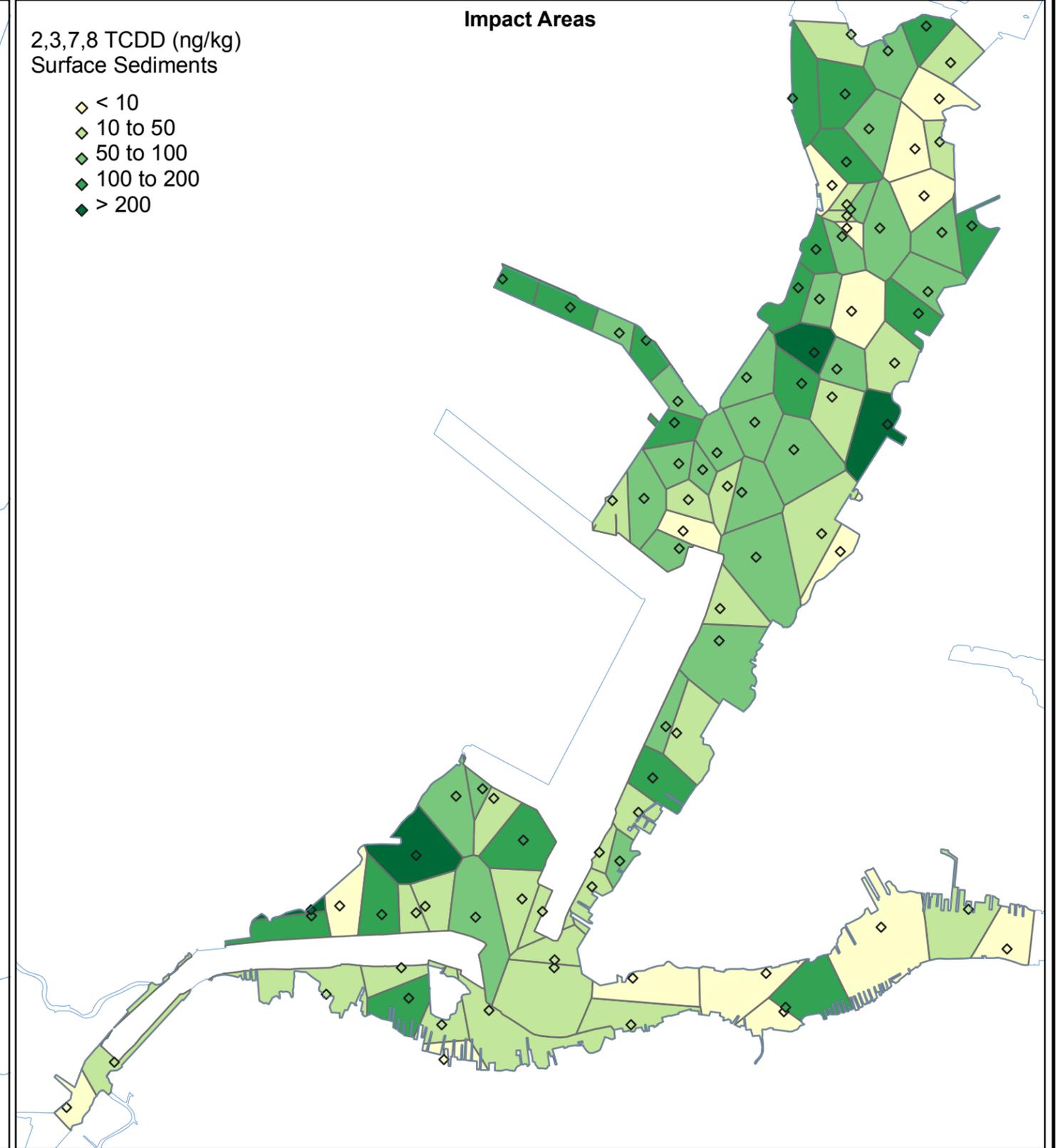
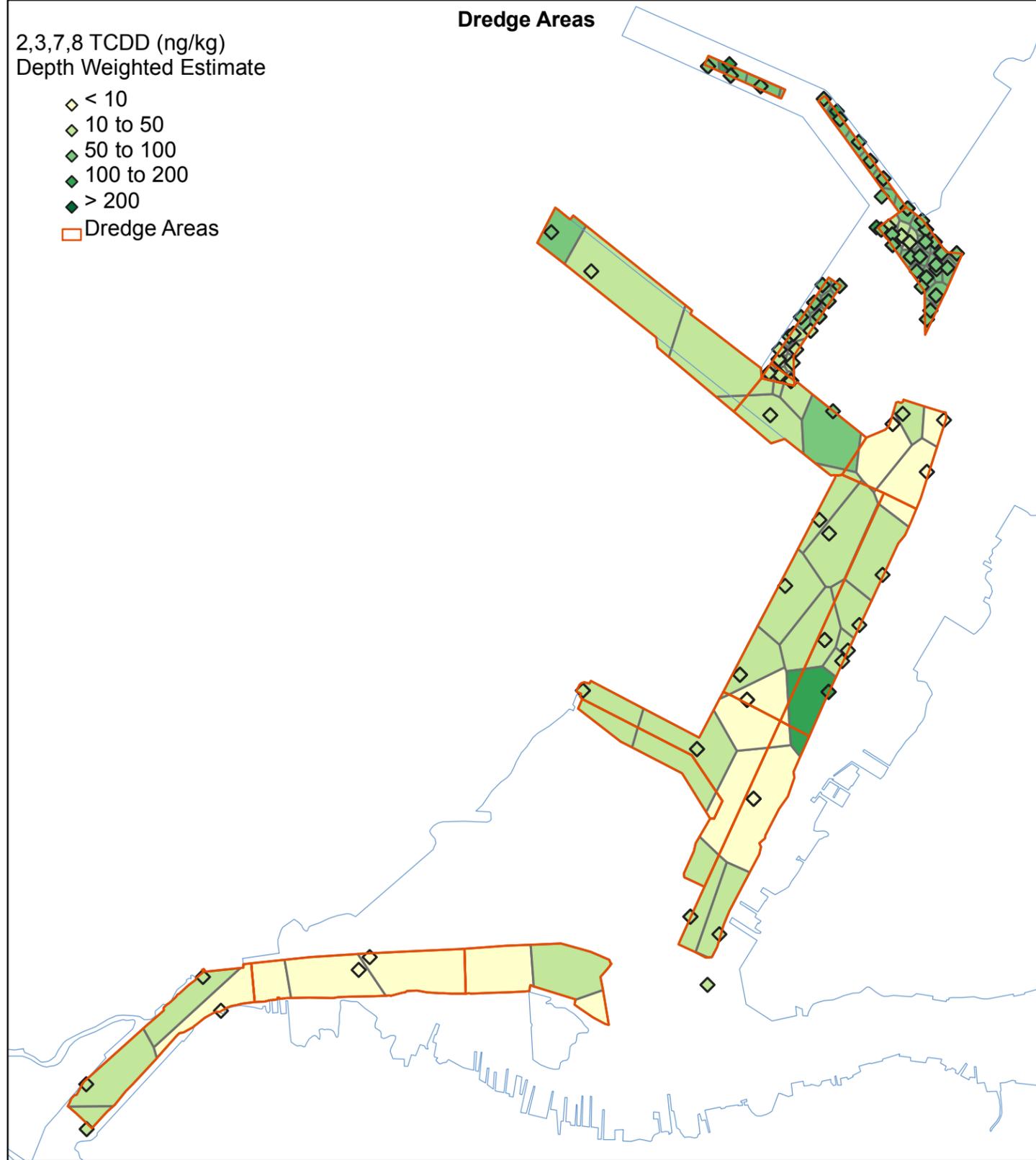
Source: Appendix 1, Figure 38



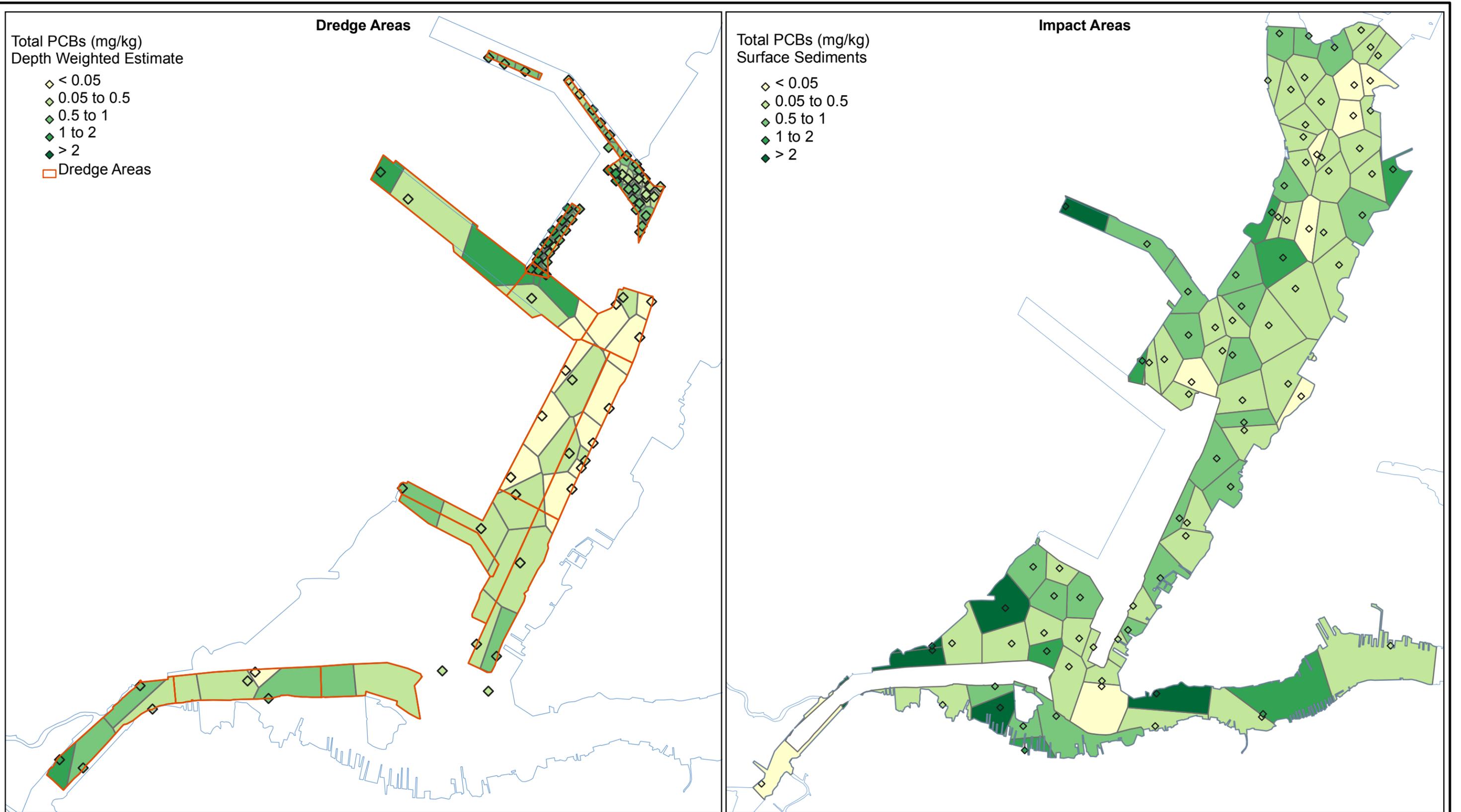
US Army Corps of Engineers  
New York District

Figure 18.

Cumulative 5-year Sedimentation Due to Resuspension  
Caused by the HDP and Other Dredging



**Figure 18a**  
**2,3,7,8 TCDD in the sediments of Newark Bay under current conditions: Thiessen polygons, cumulative assessment**



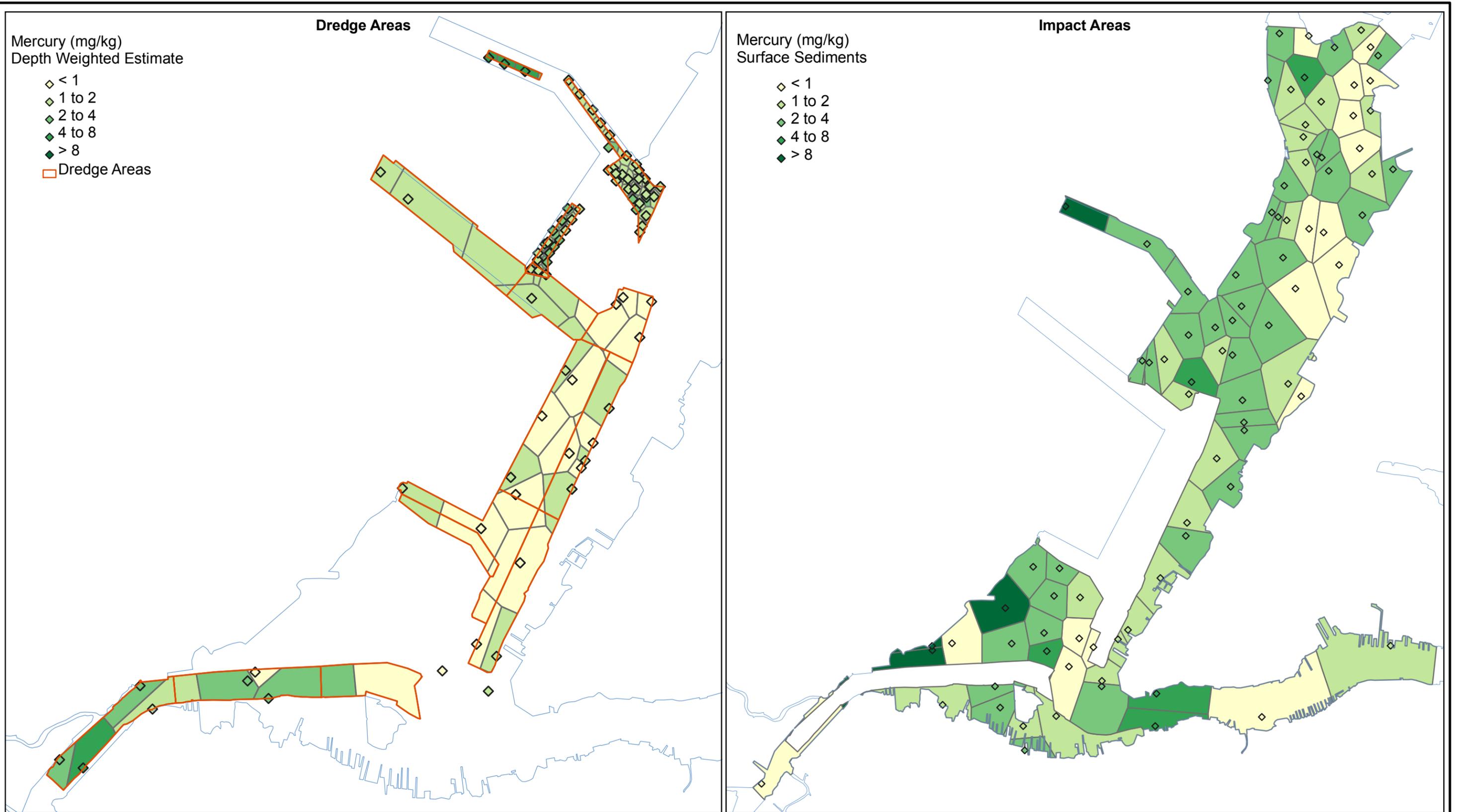
**Figure 18b**  
Total PCBs in the sediments of Newark Bay under current conditions: Thiessen polygons, cumulative assessment



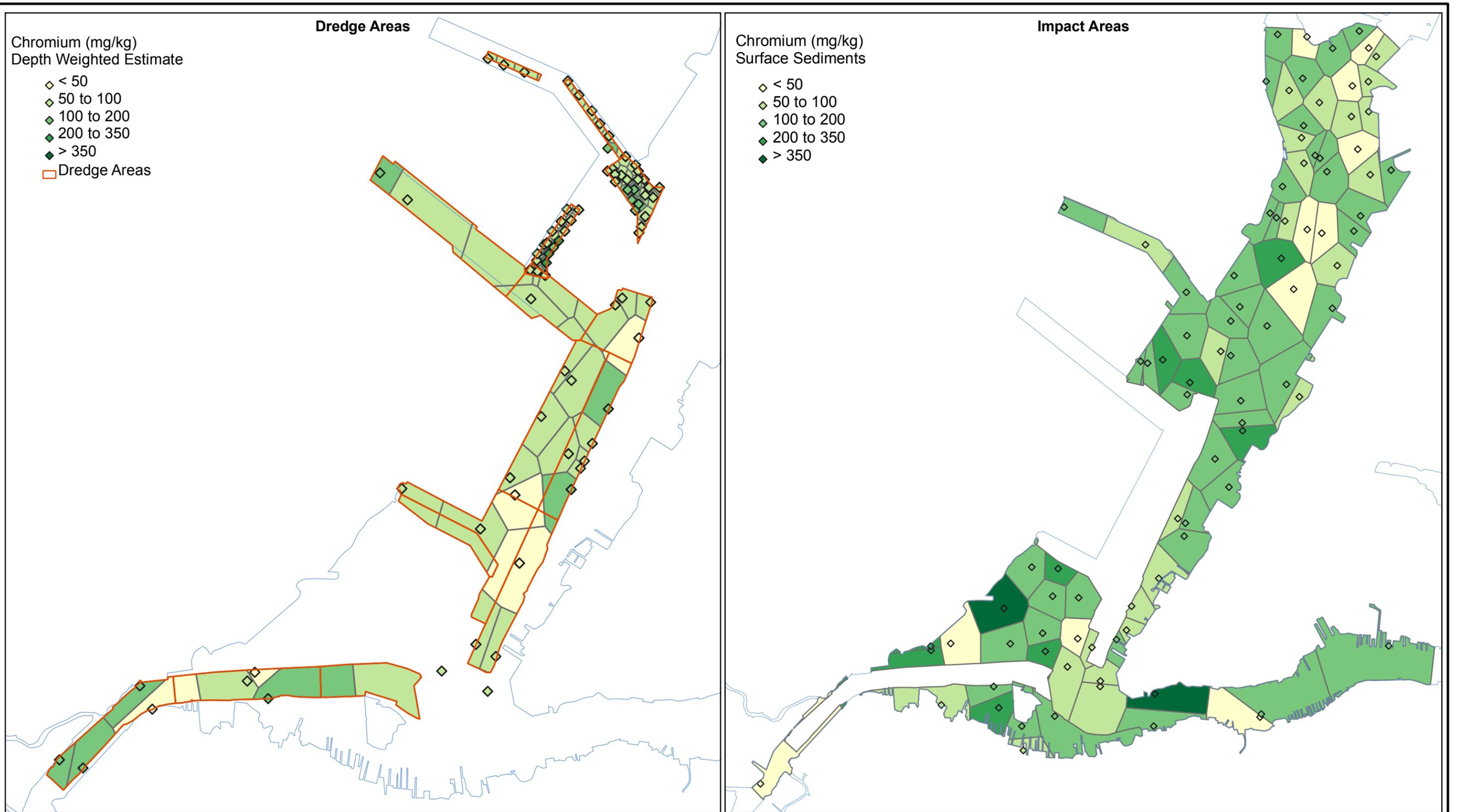
**Figure 18c**  
DDTs in the sediments of Newark Bay under current conditions: Thiessen polygons, cumulative assessment



**Figure 18d**  
**Benzo(a)pyrene in the sediments of Newark Bay under current conditions: Thiessen polygons, cumulative assessment**



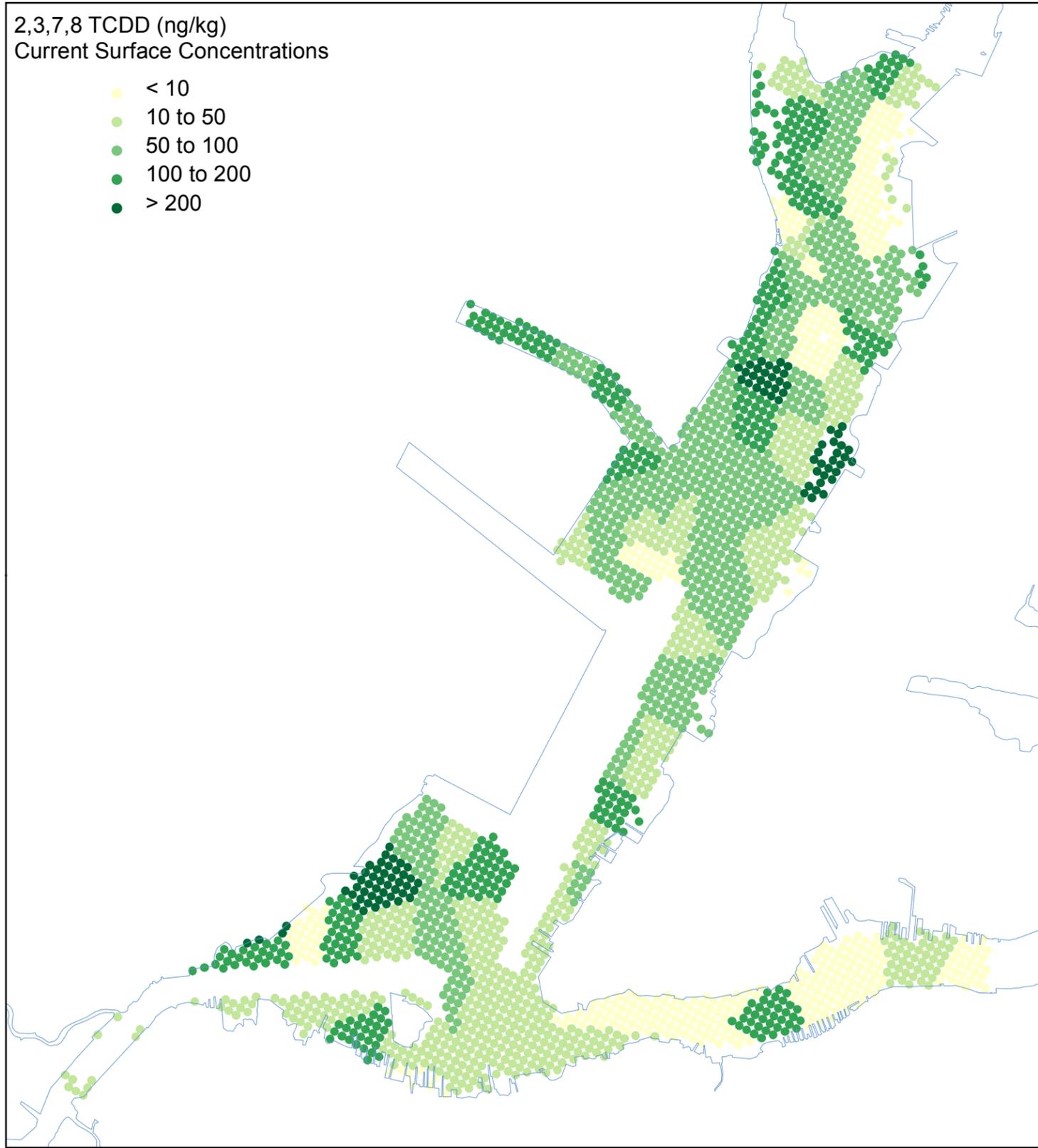
**Figure 18e**  
**Mercury in the sediments of Newark Bay under current conditions: Thiessen polygons, cumulative assessment**



**Figure 18f**  
**Chromium in the sediments of Newark Bay under current conditions: Thiessen polygons, cumulative assessment**

2,3,7,8 TCDD (ng/kg)  
Current Surface Concentrations

- < 10
- 10 to 50
- 50 to 100
- 100 to 200
- > 200



2,3,7,8 TCDD (ng/kg)  
Post Dredge Surface Concentrations

- < 10
- 10 to 50
- 50 to 100
- 100 to 200
- > 200

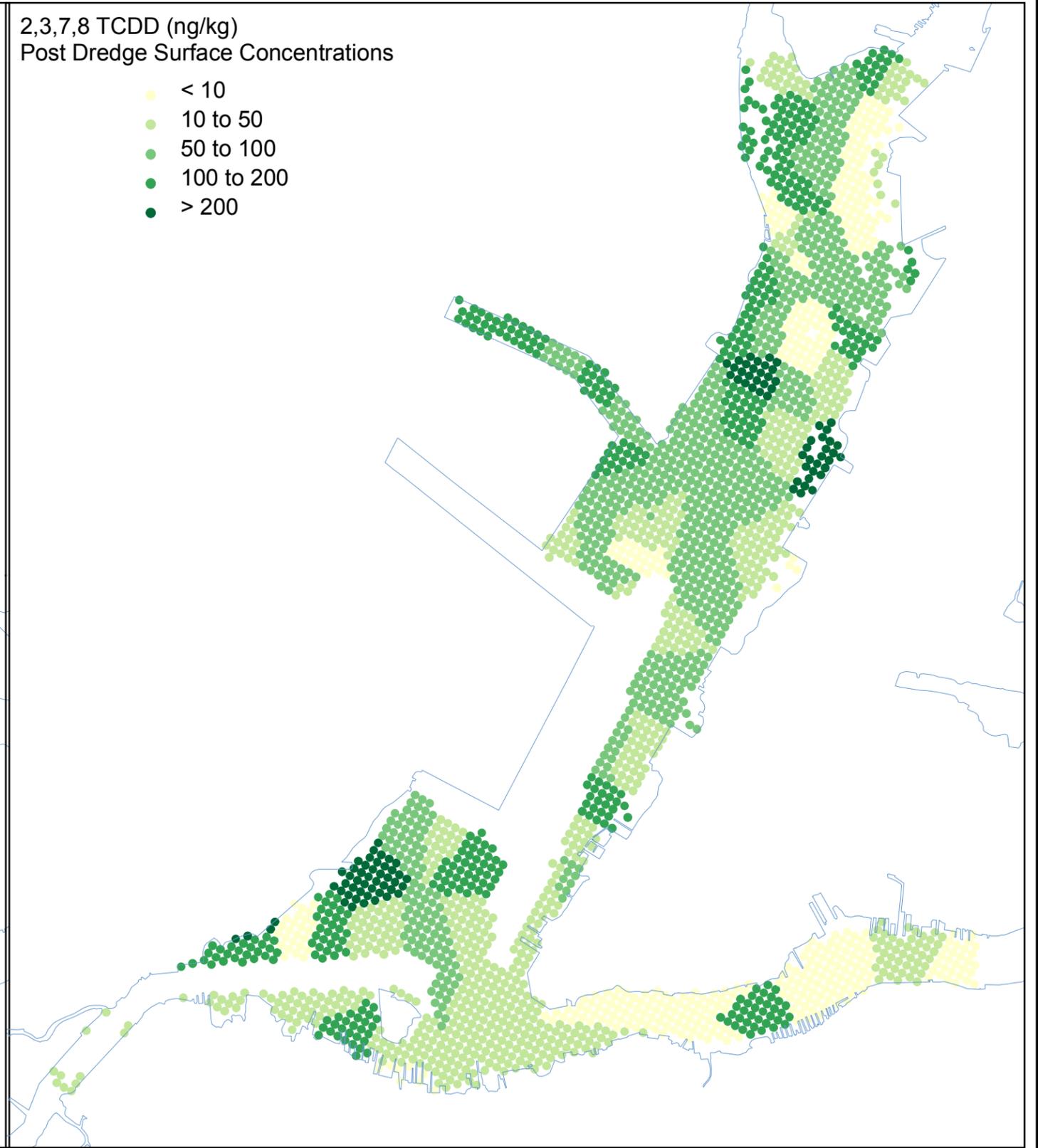
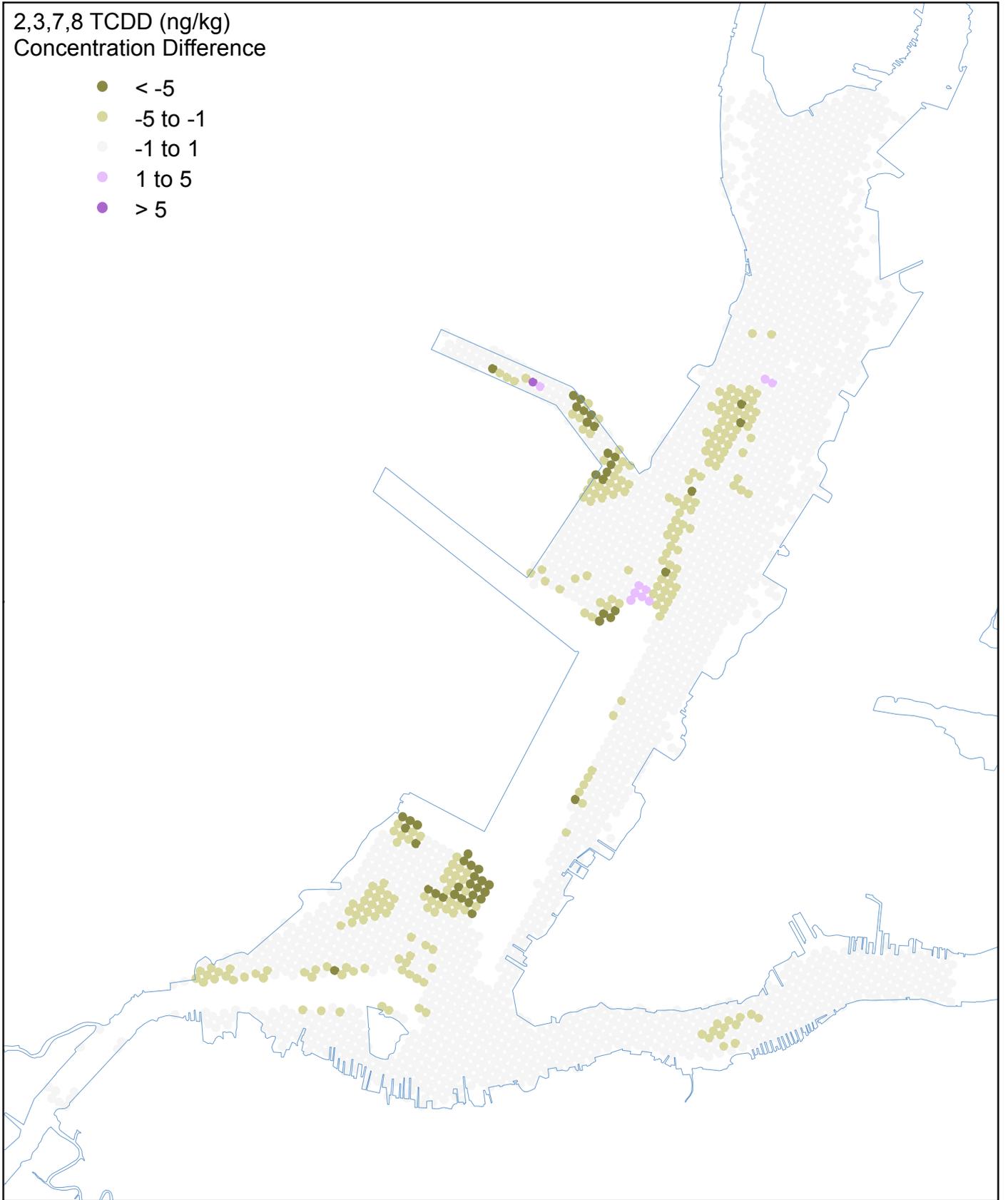


Figure 19a  
2,3,7,8 TCDD: comparison of existing surface sediment concentrations with  
post dredging concentrations predicted by the model, cumulative assessment

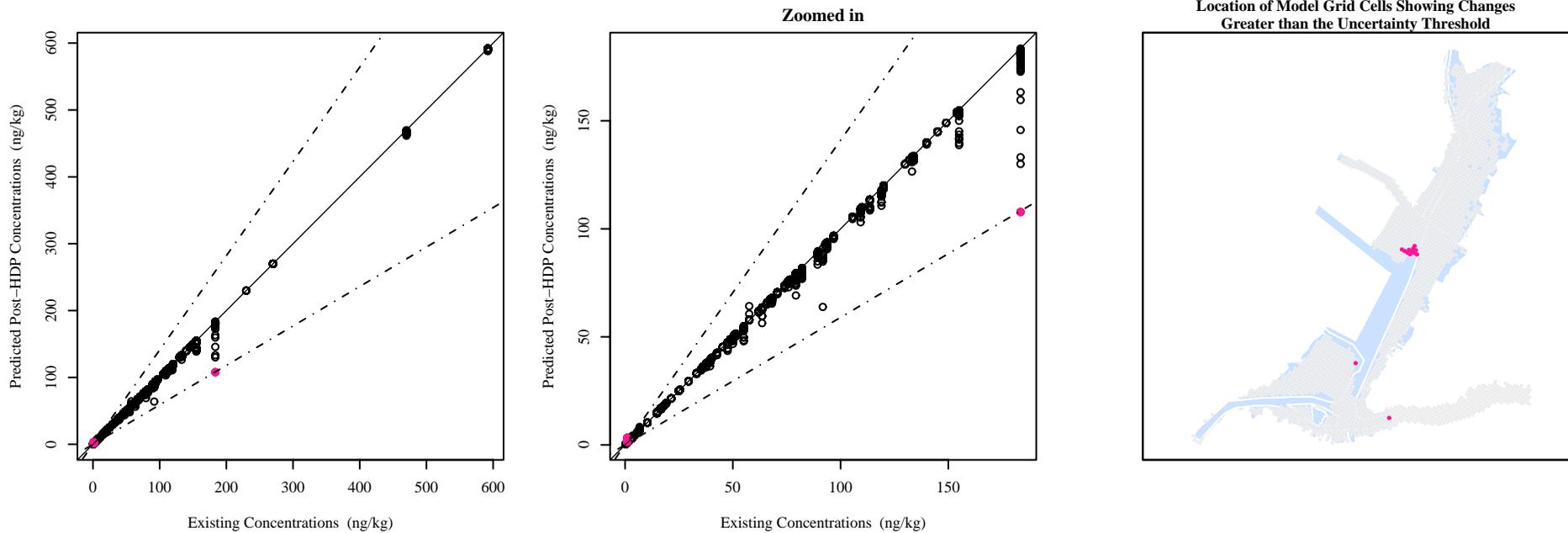
2,3,7,8 TCDD (ng/kg)  
Concentration Difference

- < -5
- -5 to -1
- -1 to 1
- 1 to 5
- > 5



US Army Corps of Engineers  
New York District

**Figure 19b**  
**2,3,7,8 TCDD: change in surface sediment**  
**concentrations due to dredging as predicted**  
**by the model, cumulative assessment**

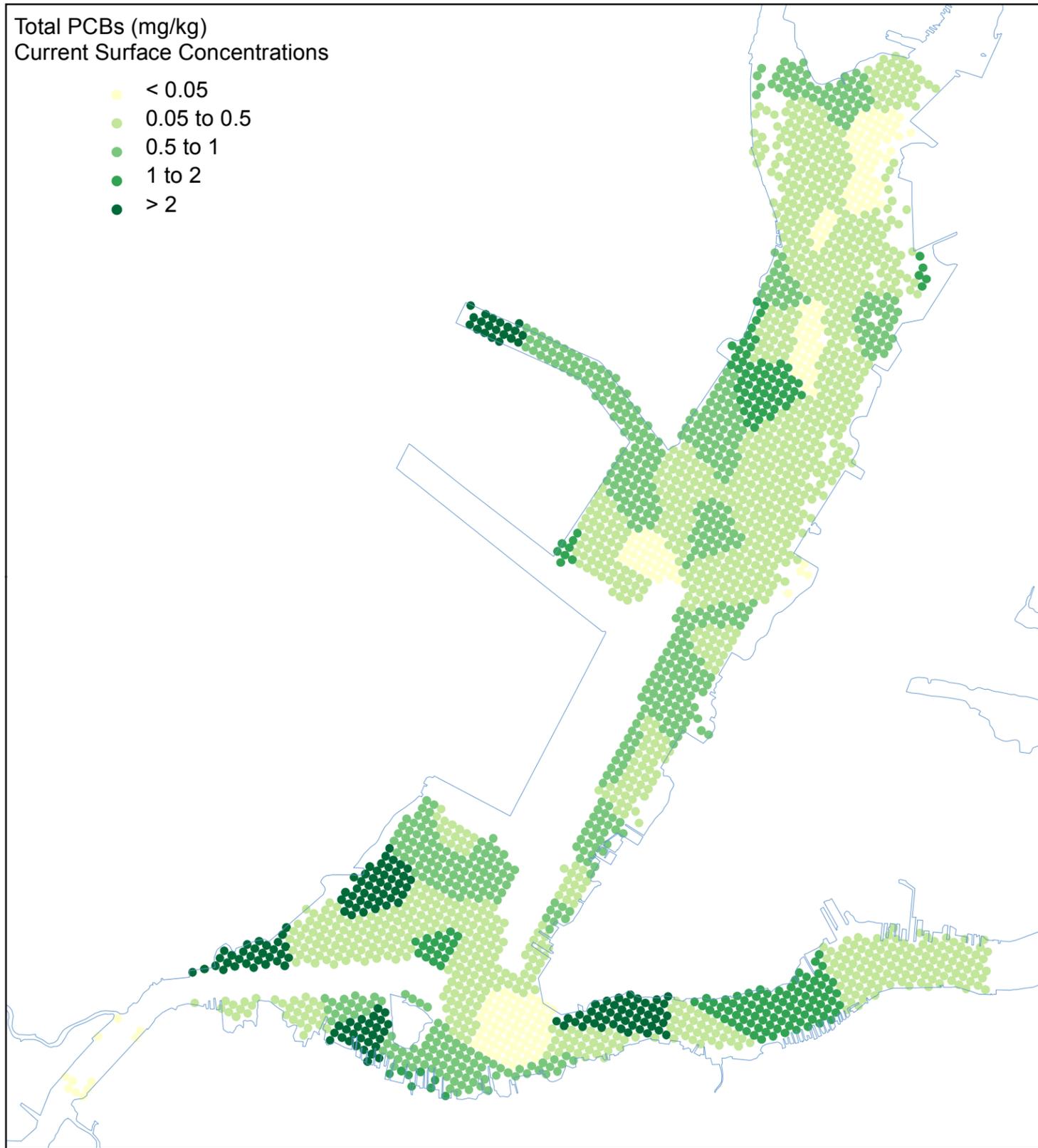


**Figure 19c. 2,3,7,8 TCDD : Predicted changes in surface sediment concentrations that are greater than the uncertainty threshold cumulative assessment**

*Predicted changes were greater than the uncertainty threshold in points colored pink. Dashed line represents the boundaries of the uncertainty threshold. See text for more details.*

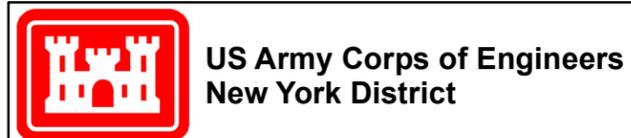
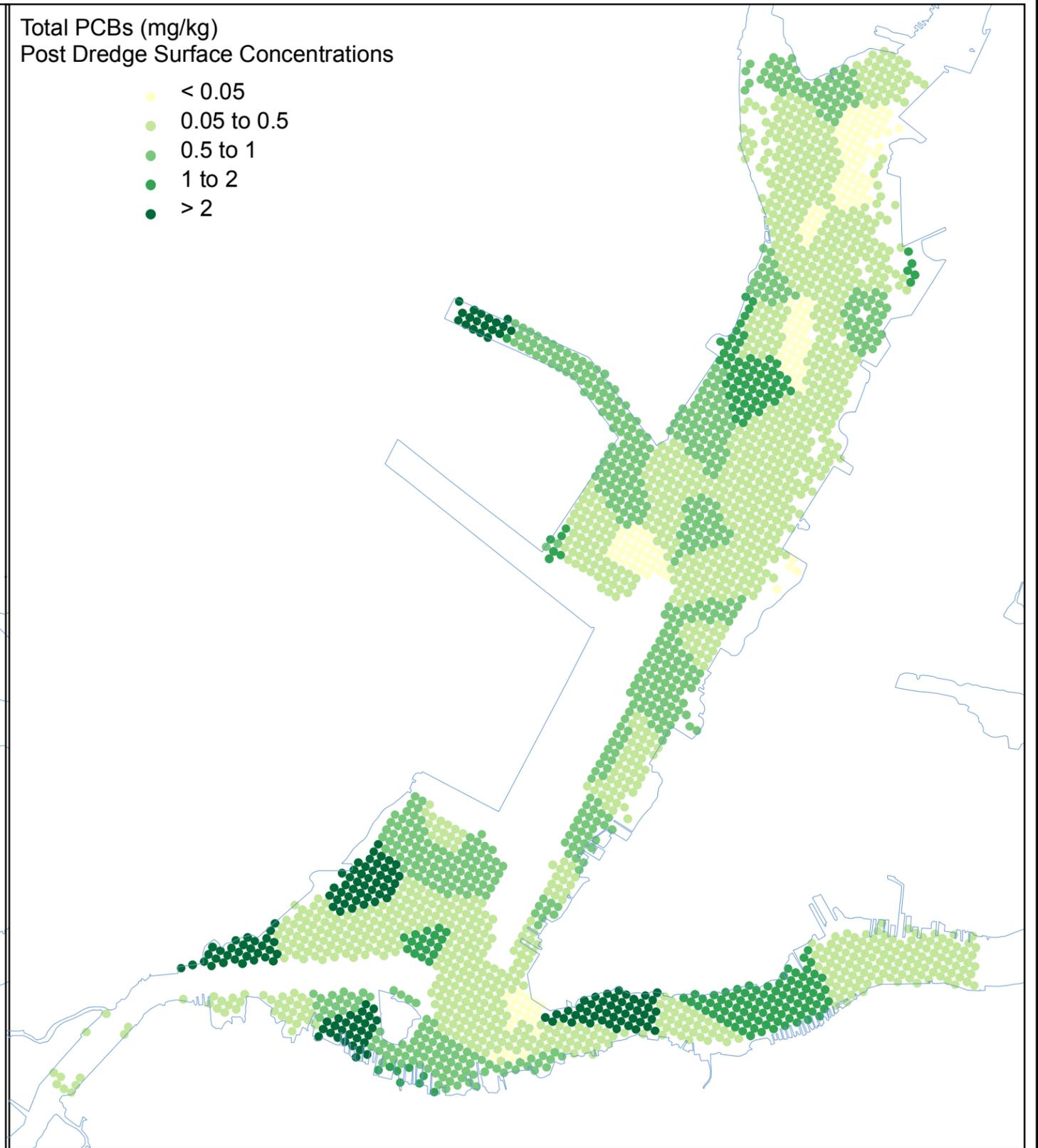
Total PCBs (mg/kg)  
Current Surface Concentrations

- < 0.05
- 0.05 to 0.5
- 0.5 to 1
- 1 to 2
- > 2



Total PCBs (mg/kg)  
Post Dredge Surface Concentrations

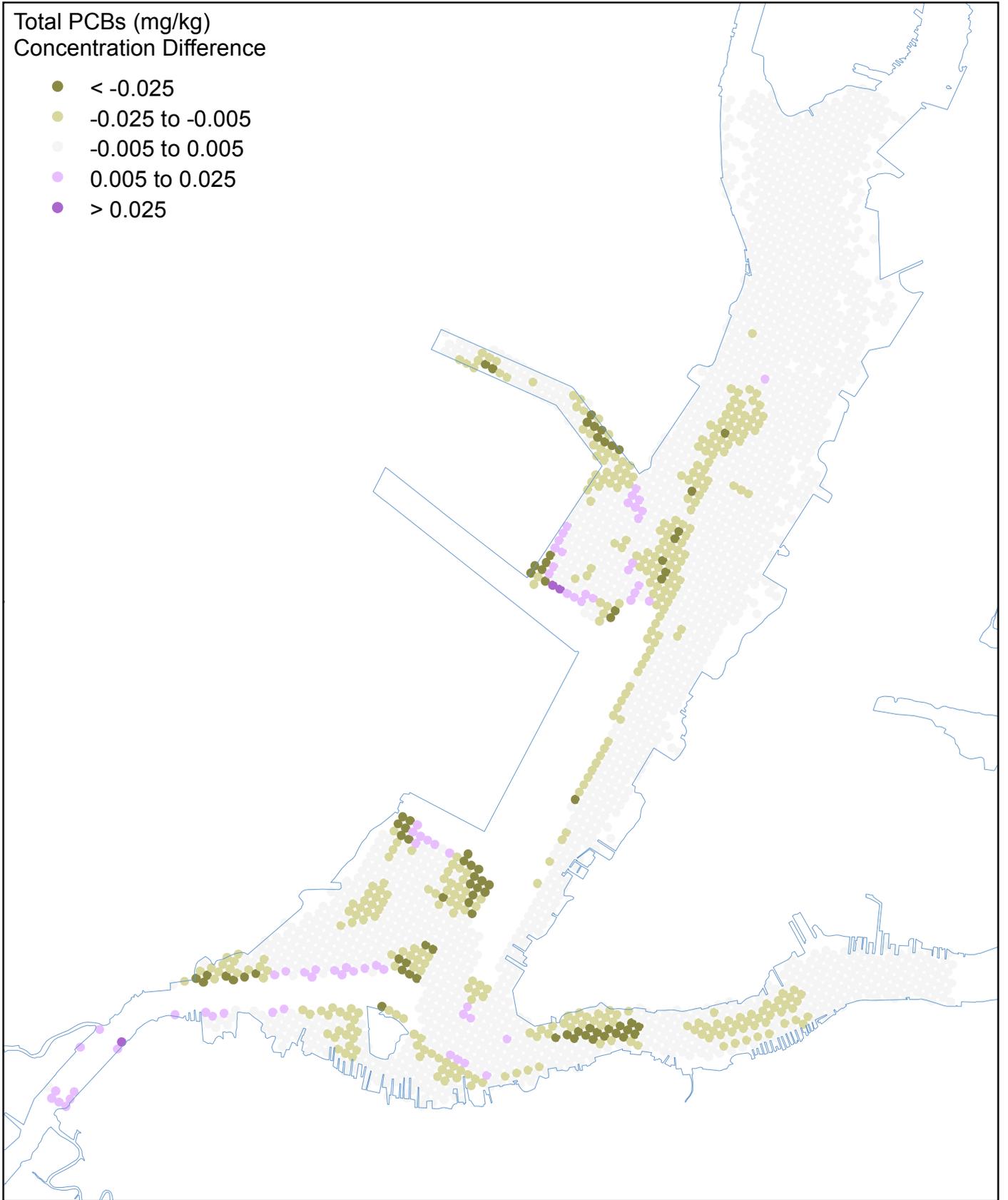
- < 0.05
- 0.05 to 0.5
- 0.5 to 1
- 1 to 2
- > 2



**Figure 20a**  
**Total PCBs: comparison of existing surface sediment concentrations with post dredging concentrations predicted by the model, cumulative assessment**

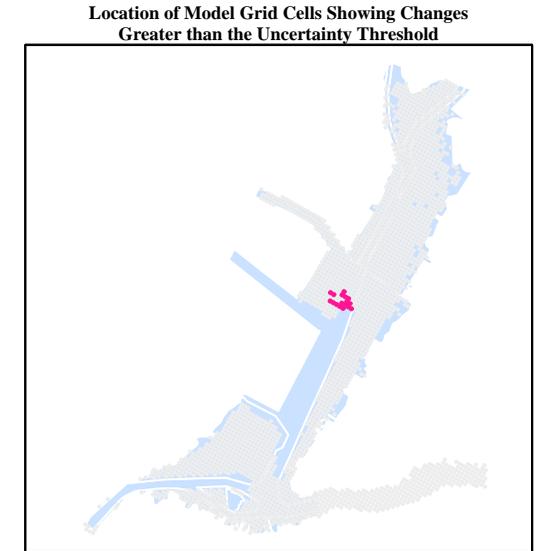
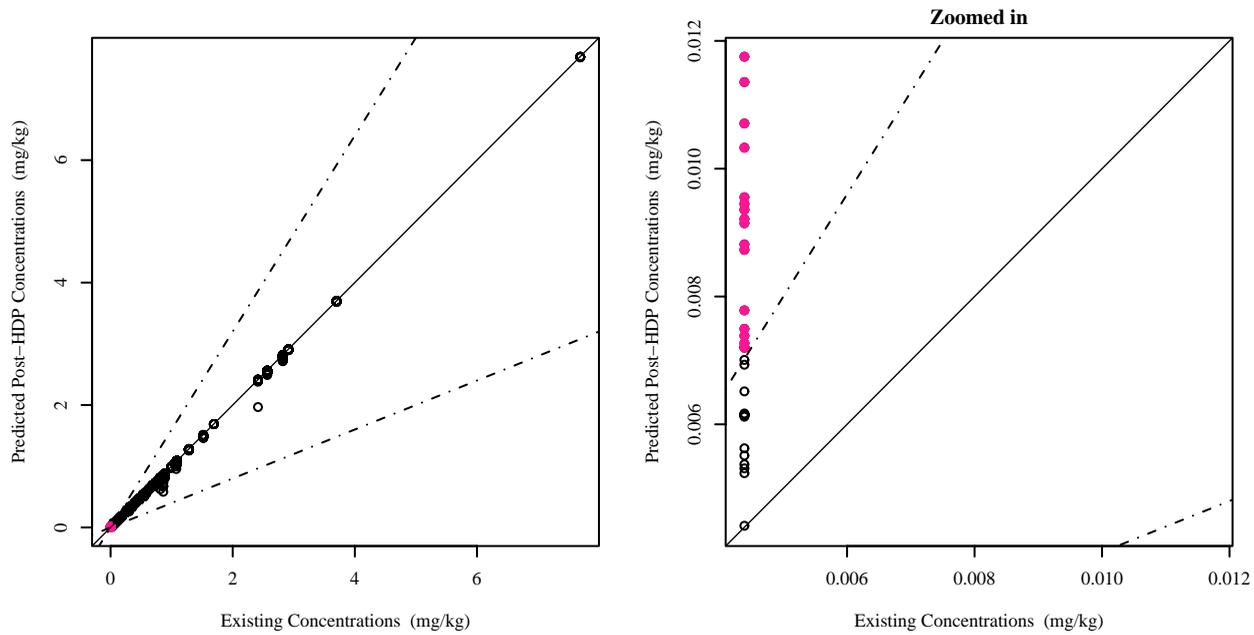
Total PCBs (mg/kg)  
Concentration Difference

- < -0.025
- -0.025 to -0.005
- -0.005 to 0.005
- 0.005 to 0.025
- > 0.025



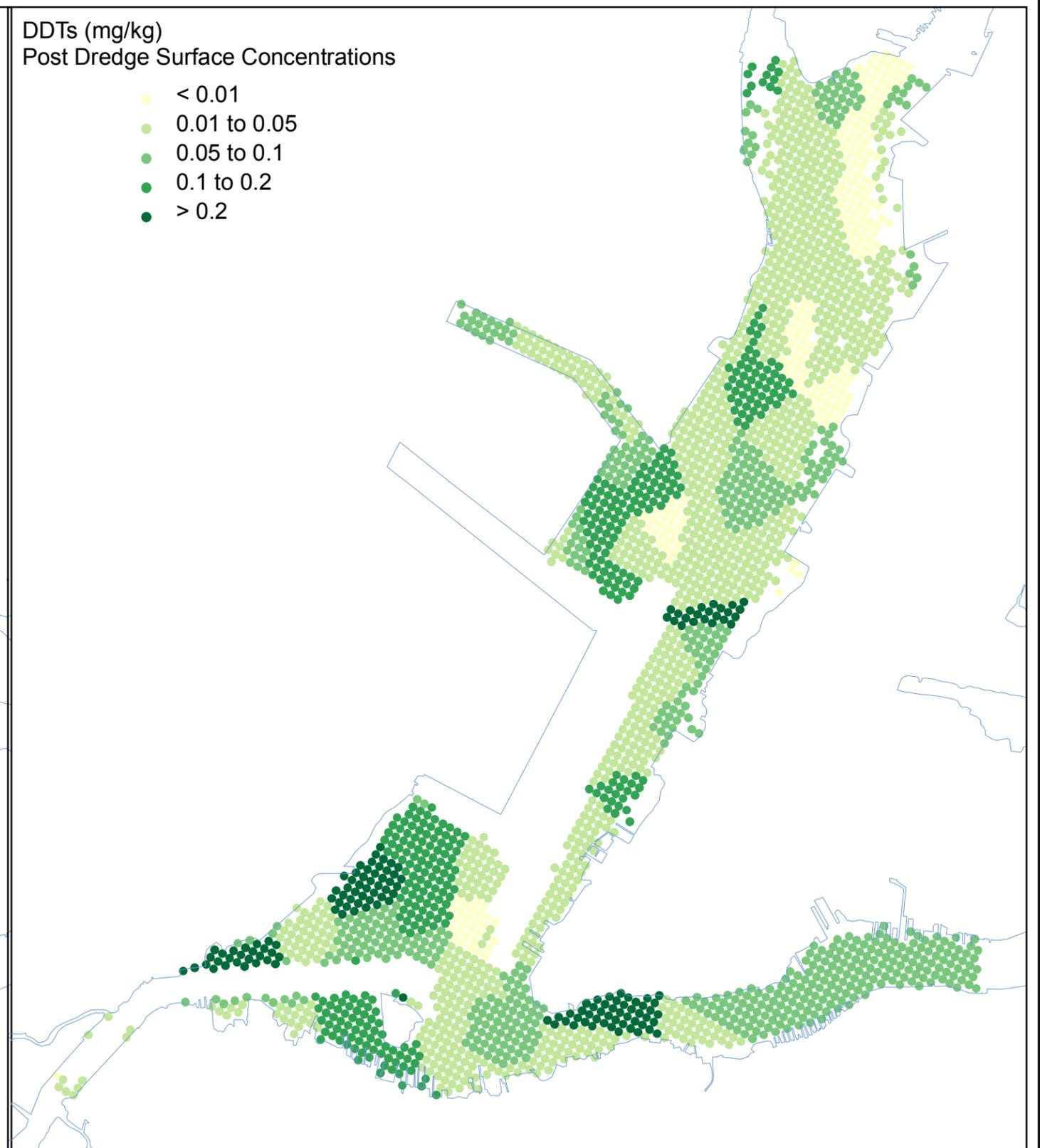
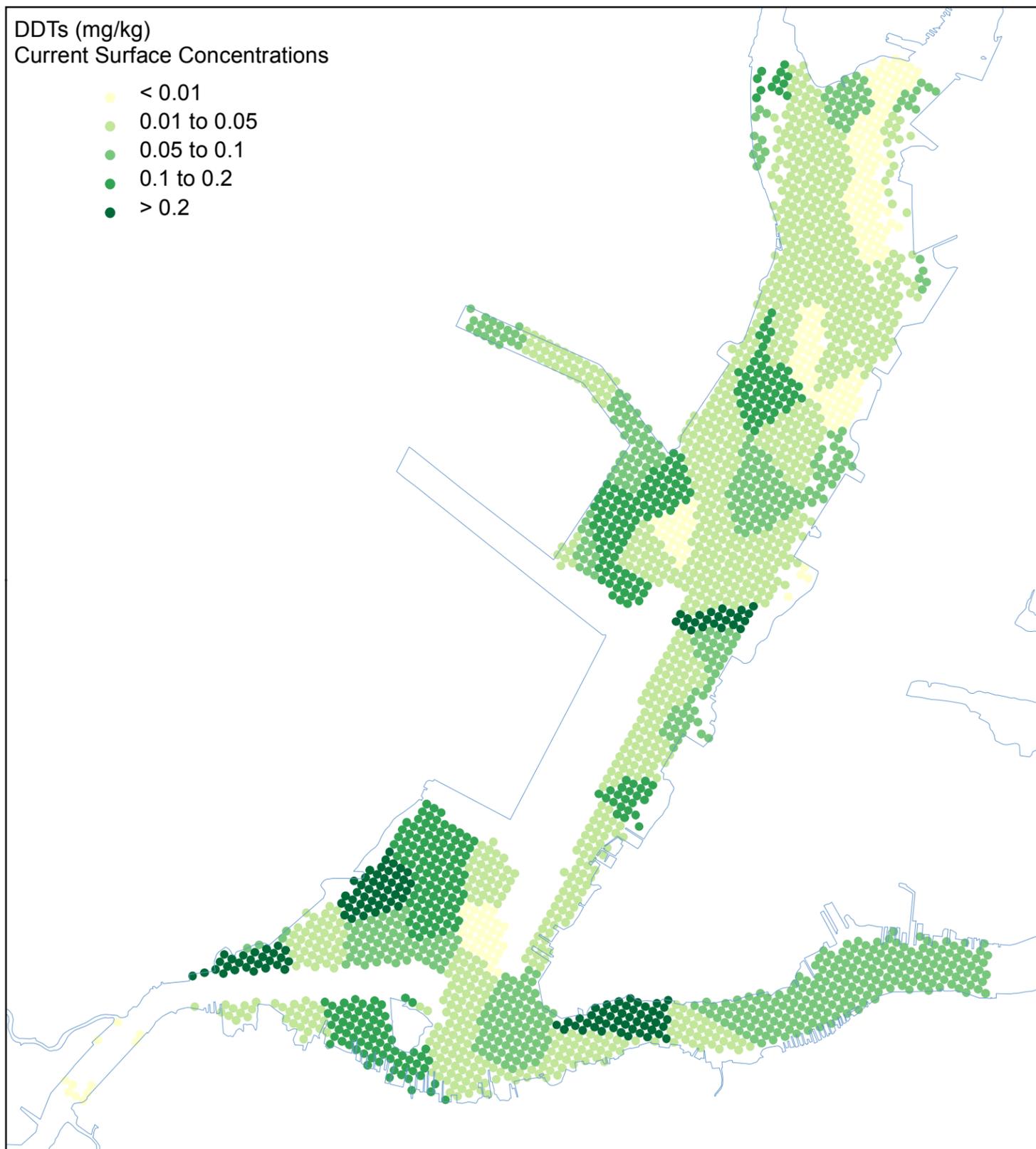
US Army Corps of Engineers  
New York District

**Figure 20b**  
**Total PCBs: change in surface sediment**  
**concentrations due to dredging as predicted**  
**by the model, cumulative assessment**



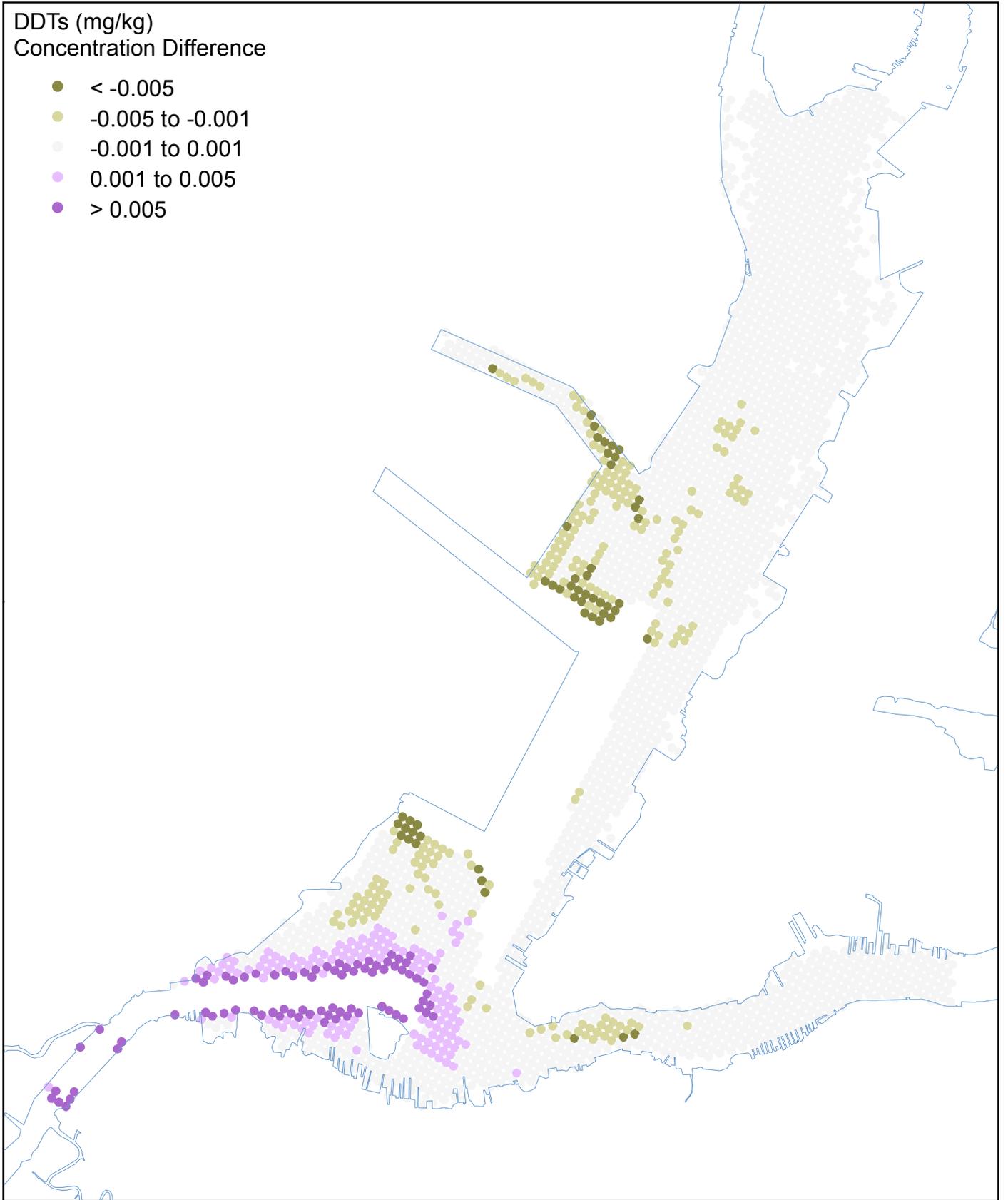
**Figure 20c. Total PCBs : Predicted changes in surface sediment concentrations that are greater than the uncertainty threshold cumulative assessment**

*Predicted changes were greater than the uncertainty threshold in points colored pink. Dashed line represents the boundaries of the uncertainty threshold. See text for more details.*



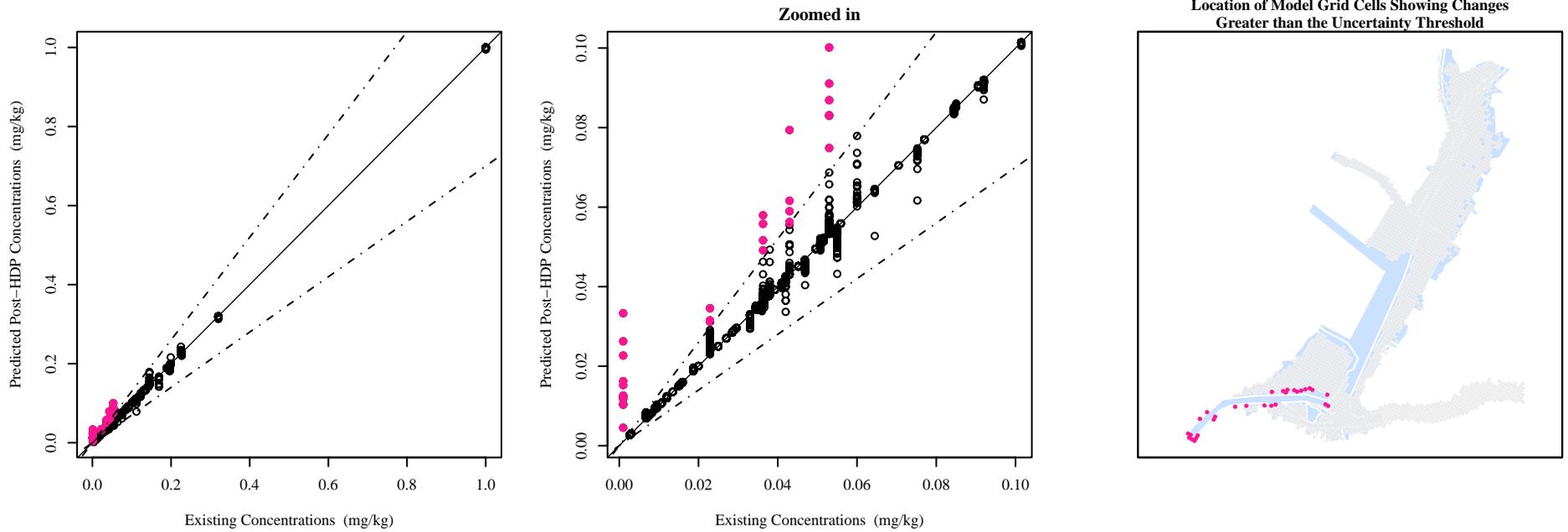
DDTs (mg/kg)  
Concentration Difference

- < -0.005
- -0.005 to -0.001
- -0.001 to 0.001
- 0.001 to 0.005
- > 0.005



US Army Corps of Engineers  
New York District

**Figure 21b**  
**DDTs: change in surface sediment**  
**concentrations due to dredging as predicted**  
**by the model, cumulative assessment**

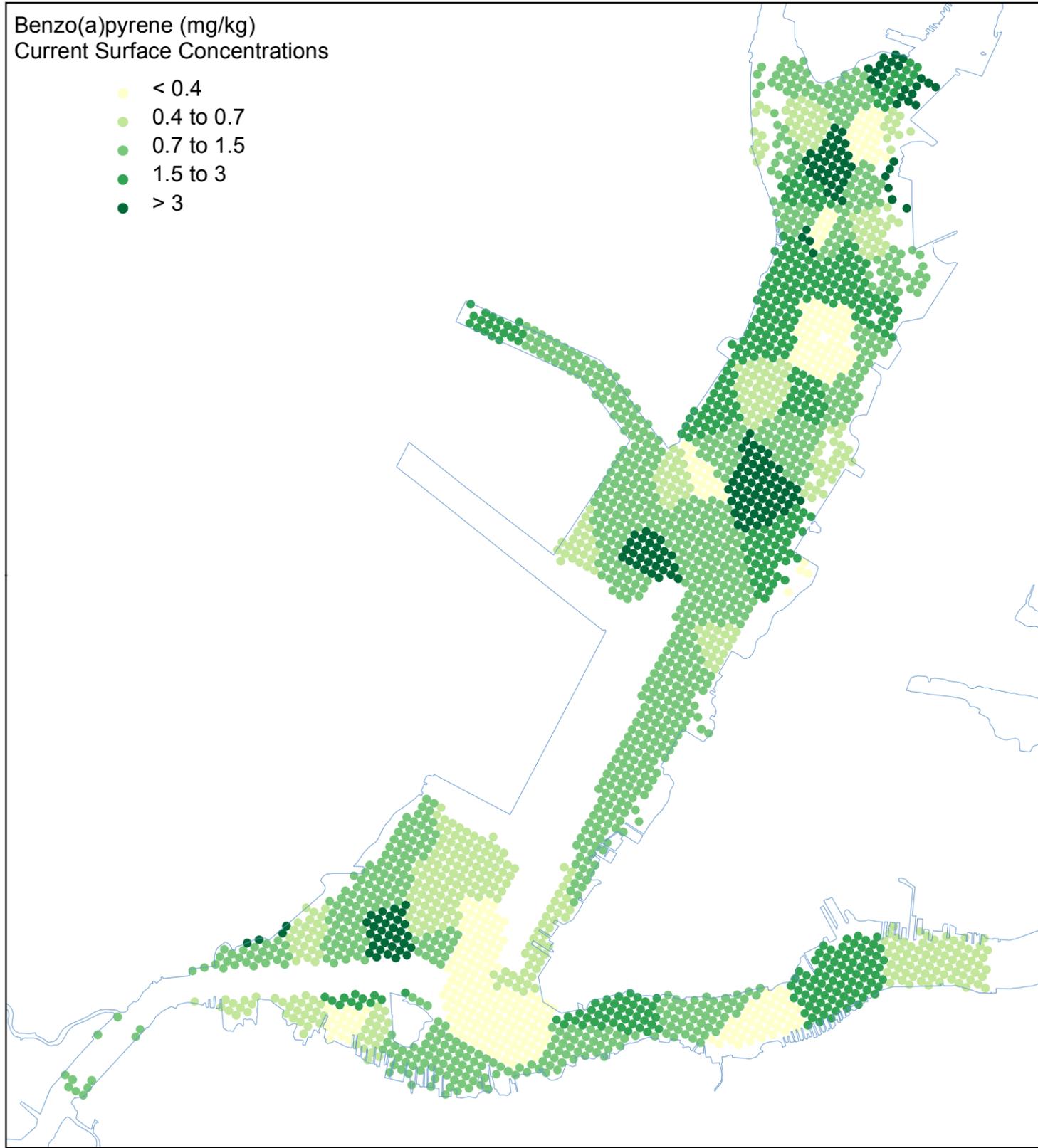


**Figure 21c. DDT : Predicted changes in surface sediment concentrations that are greater than the uncertainty threshold cumulative assessment**

*Predicted changes were greater than the uncertainty threshold in points colored pink. Dashed line represents the boundaries of the uncertainty threshold. See text for more details.*

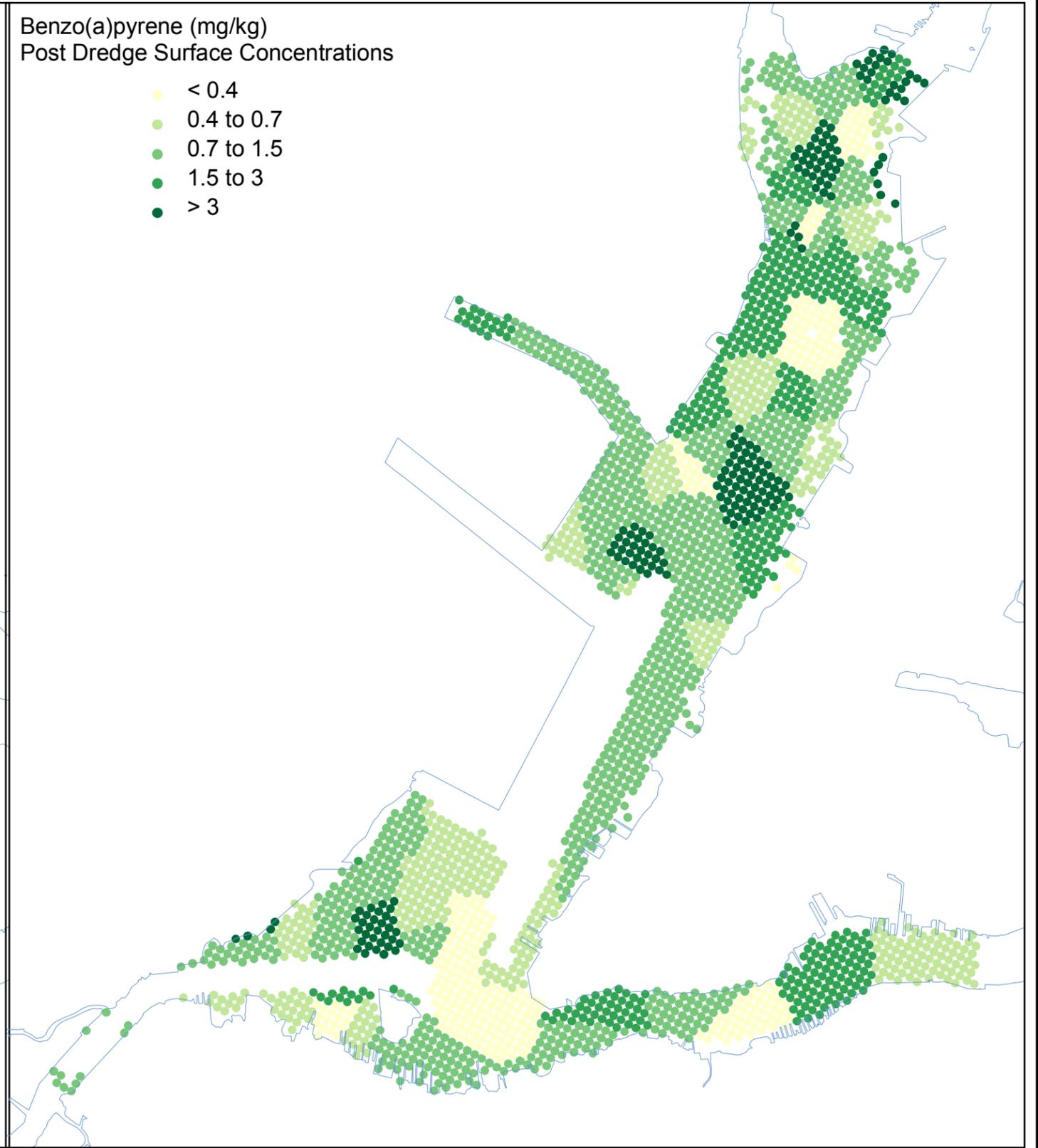
Benzo(a)pyrene (mg/kg)  
Current Surface Concentrations

- < 0.4
- 0.4 to 0.7
- 0.7 to 1.5
- 1.5 to 3
- > 3



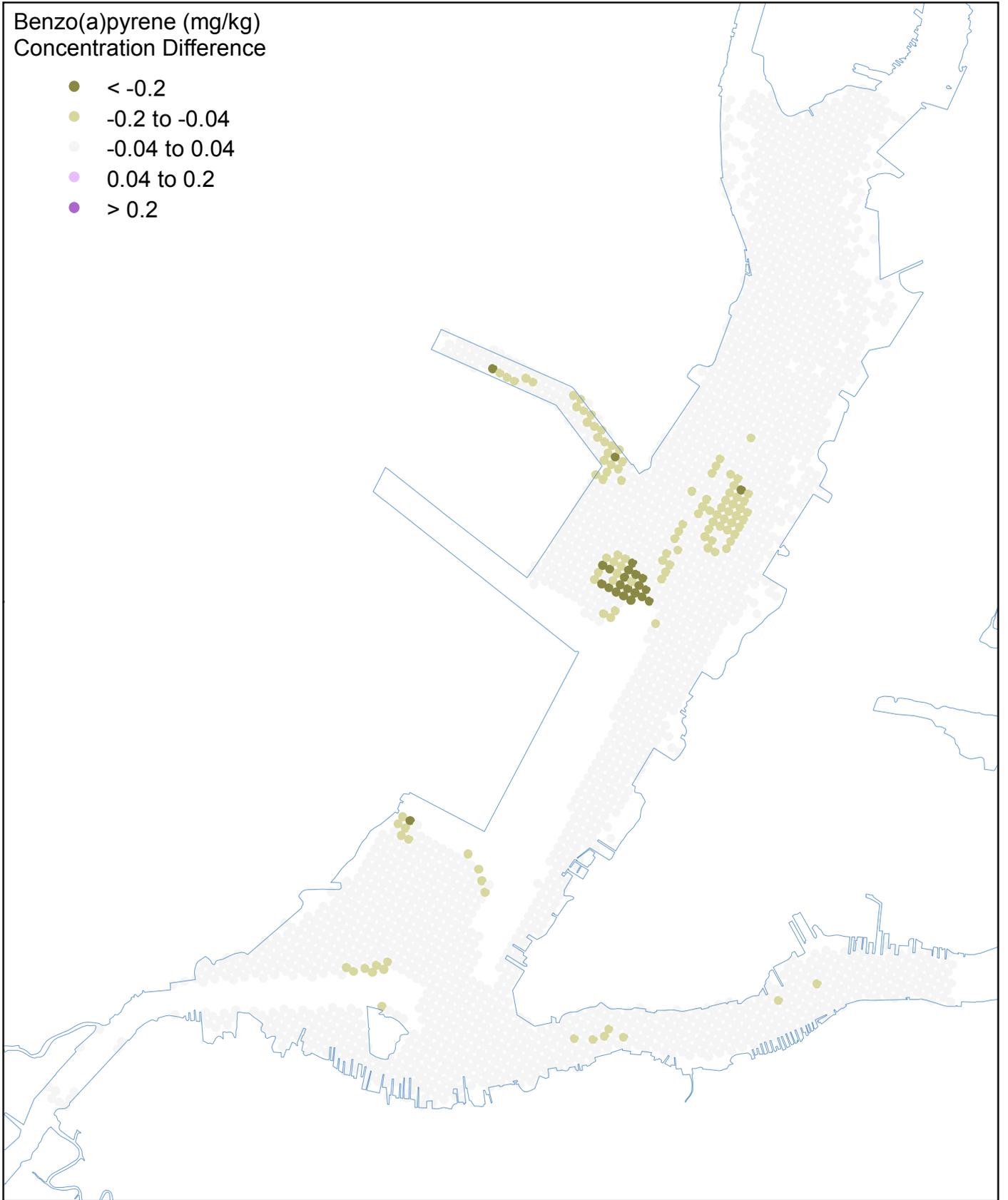
Benzo(a)pyrene (mg/kg)  
Post Dredge Surface Concentrations

- < 0.4
- 0.4 to 0.7
- 0.7 to 1.5
- 1.5 to 3
- > 3



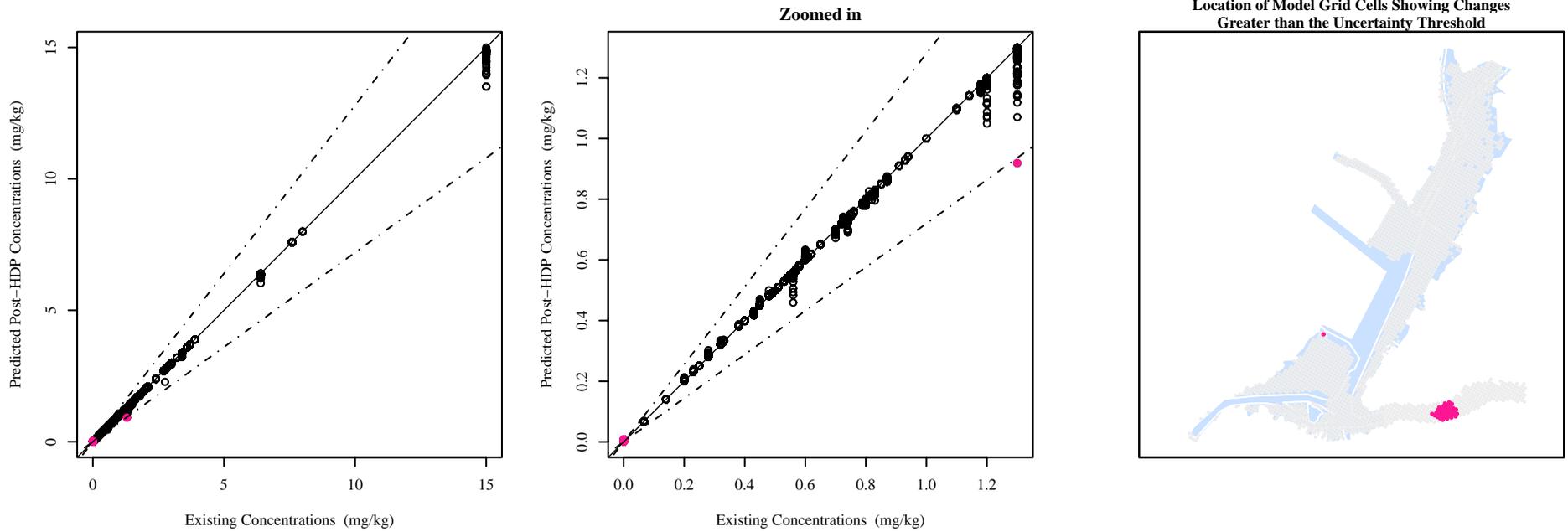
Benzo(a)pyrene (mg/kg)  
Concentration Difference

- < -0.2
- -0.2 to -0.04
- -0.04 to 0.04
- 0.04 to 0.2
- > 0.2



US Army Corps of Engineers  
New York District

**Figure 22b**  
**Benzo(a)pyrene: change in surface sediment**  
**concentrations due to dredging as predicted**  
**by the model, cumulative assessment**

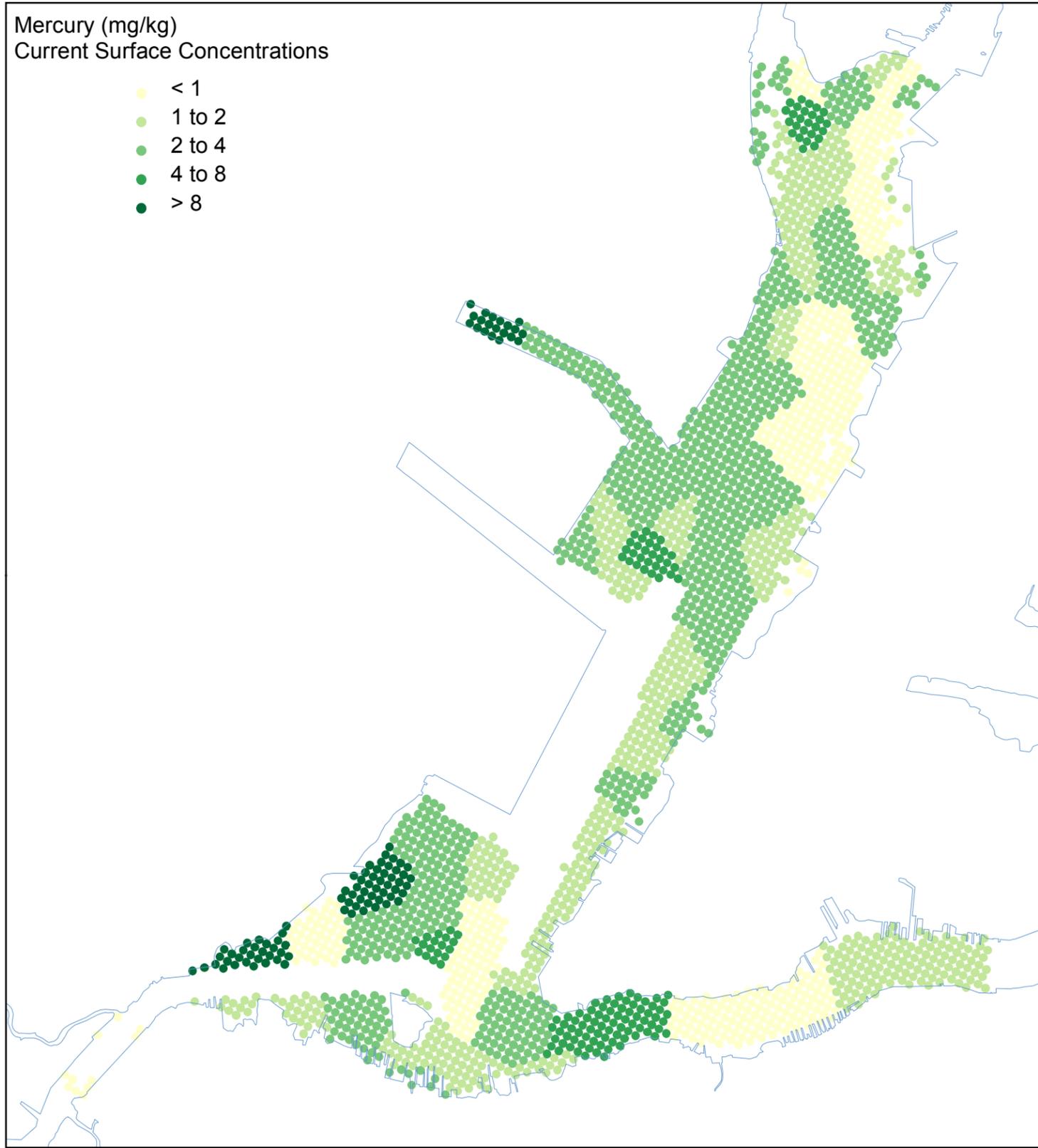


**Figure 22c. Benzo(a)pyrene : Predicted changes in surface sediment concentrations that are greater than the uncertainty threshold cumulative assessment**

*Predicted changes were greater than the uncertainty threshold in points colored pink. Dashed line represents the boundaries of the uncertainty threshold. See text for more details.*

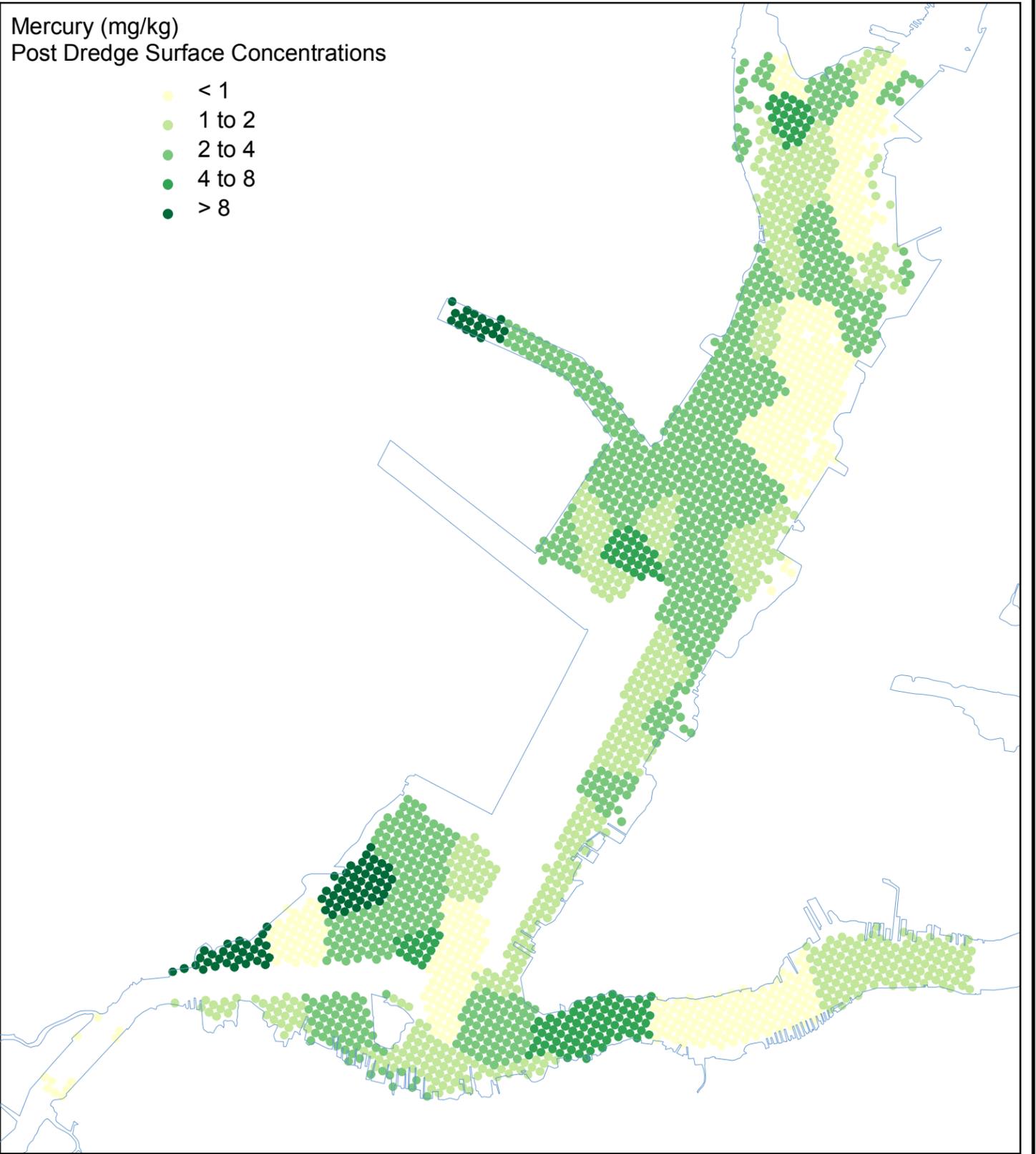
Mercury (mg/kg)  
Current Surface Concentrations

- < 1
- 1 to 2
- 2 to 4
- 4 to 8
- > 8



Mercury (mg/kg)  
Post Dredge Surface Concentrations

- < 1
- 1 to 2
- 2 to 4
- 4 to 8
- > 8



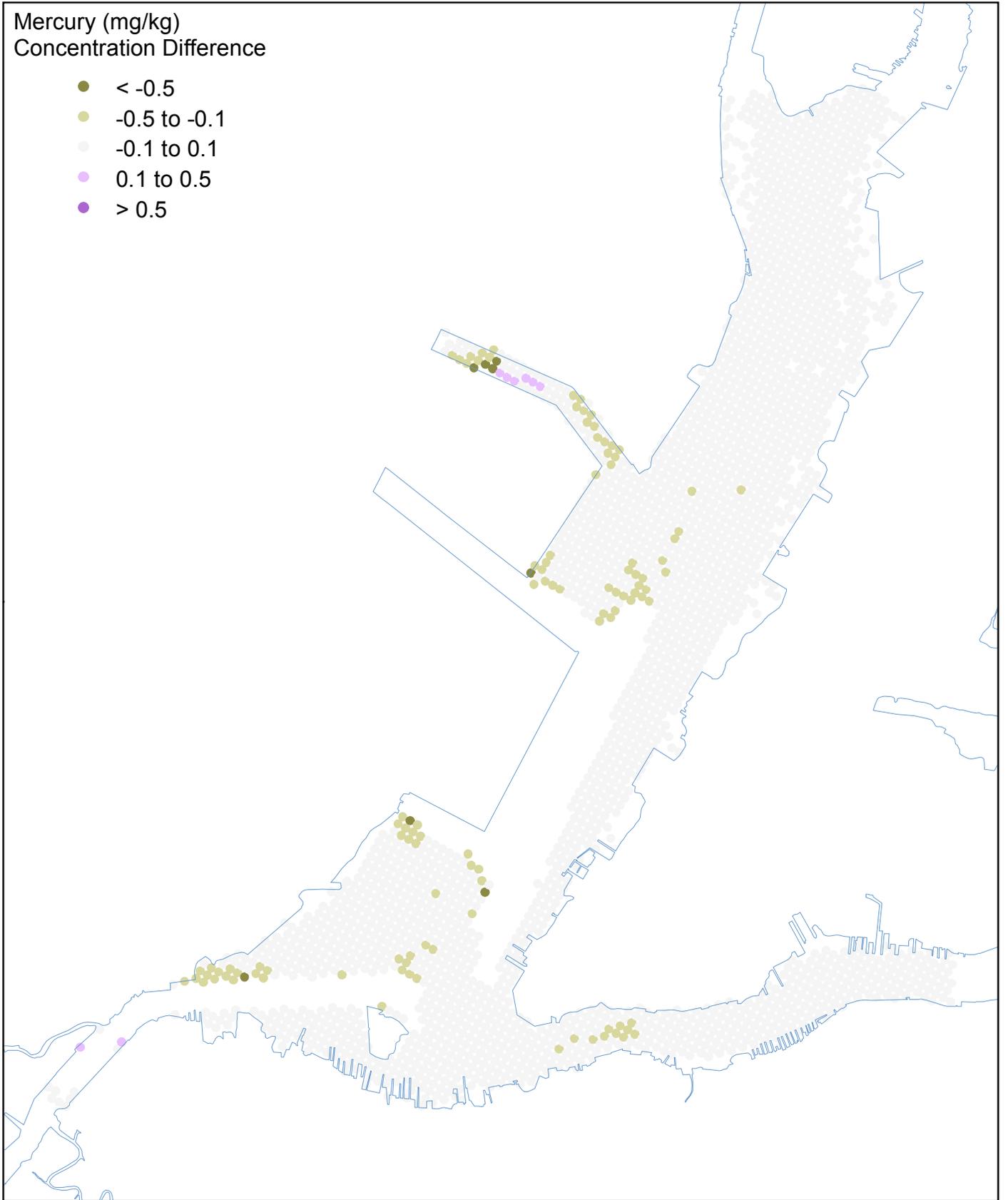
US Army Corps of Engineers  
New York District

Figure 23a

Mercury: comparison of existing surface sediment concentrations with  
post dredging concentrations predicted by the model, cumulative assessment

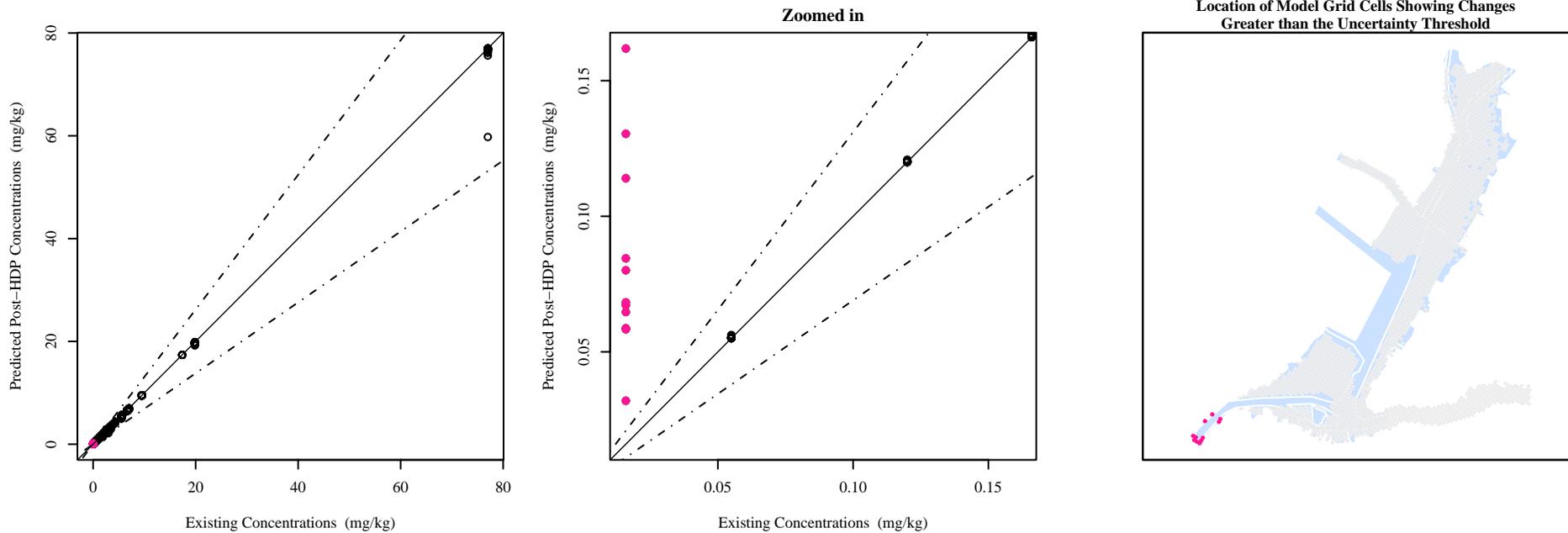
Mercury (mg/kg)  
Concentration Difference

- < -0.5
- -0.5 to -0.1
- -0.1 to 0.1
- 0.1 to 0.5
- > 0.5



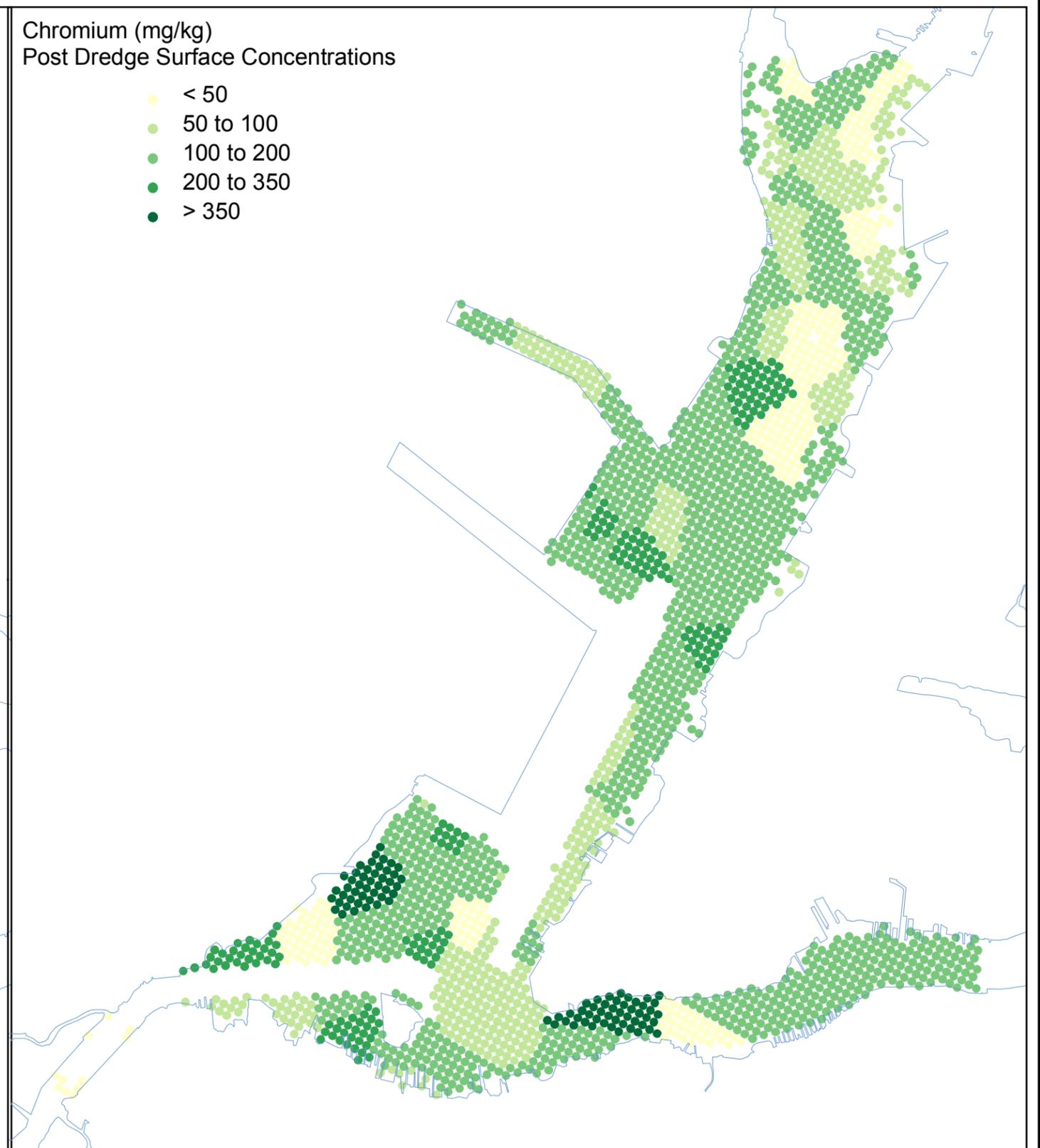
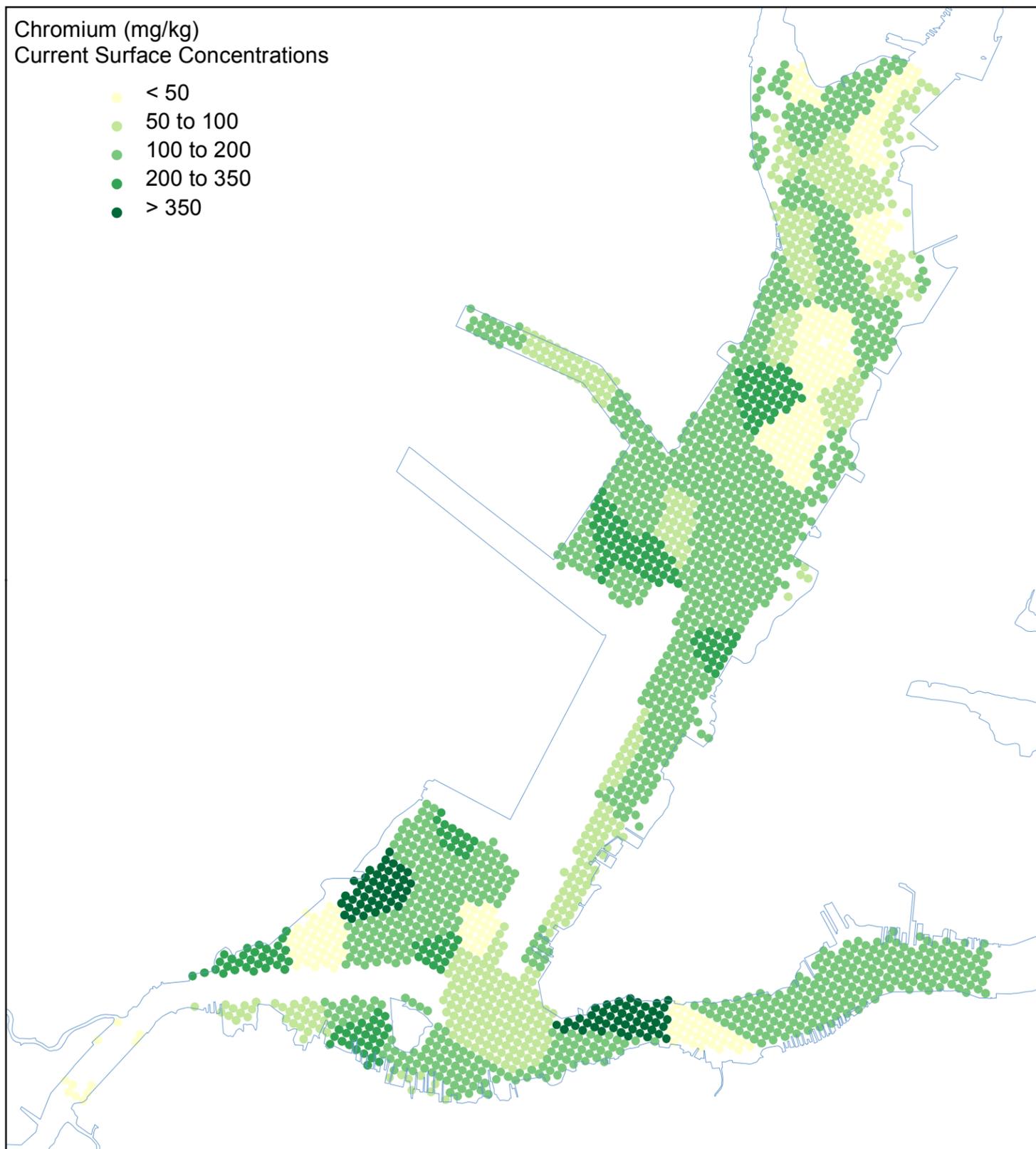
US Army Corps of Engineers  
New York District

**Figure 23b**  
**Mercury: change in surface sediment**  
**concentrations due to dredging as predicted**  
**by the model, cumulative assessment**



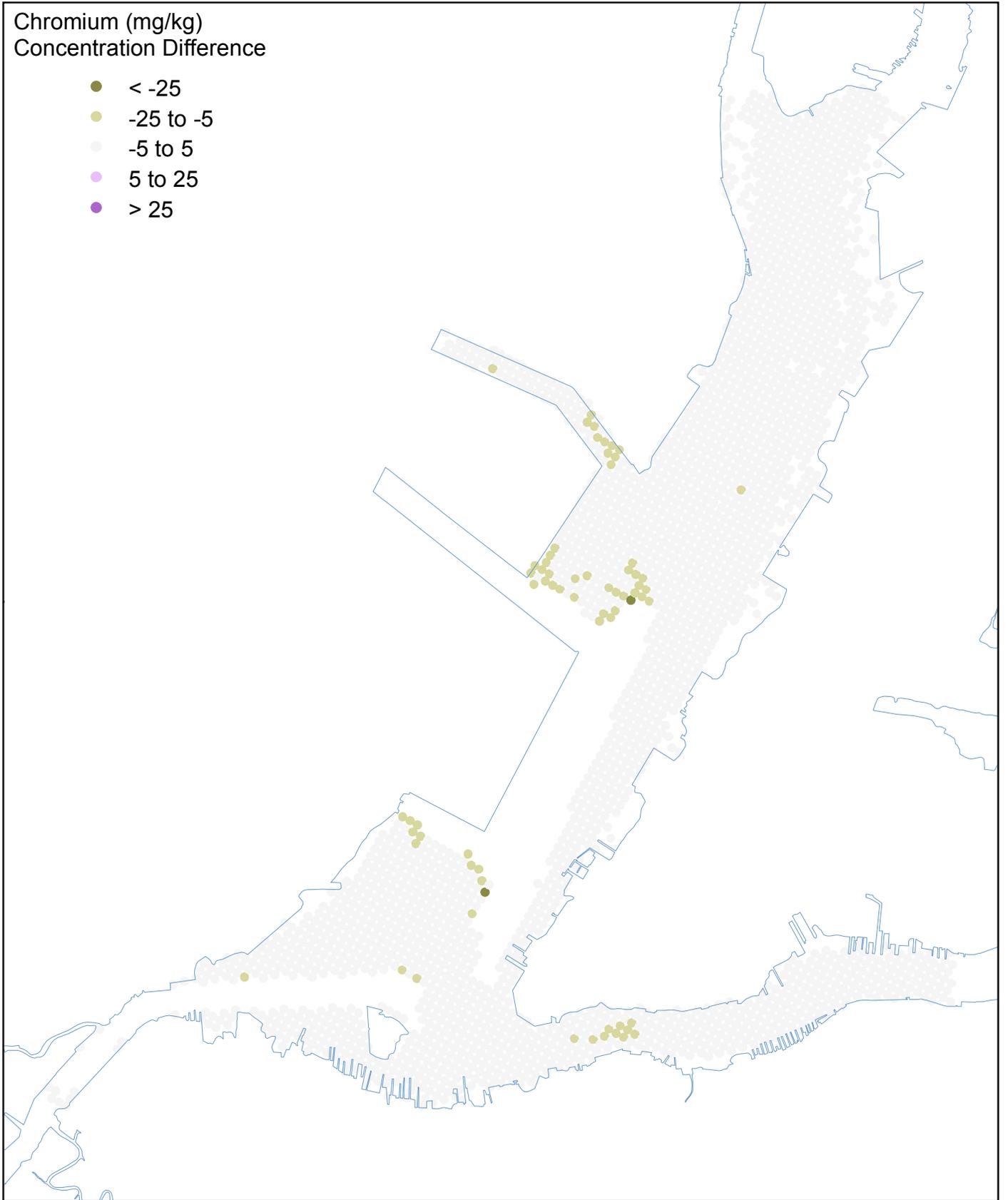
**Figure 23c. Mercury : Predicted changes in surface sediment concentrations that are greater than the uncertainty threshold cumulative assessment**

*Predicted changes were greater than the uncertainty threshold in points colored pink. Dashed line represents the boundaries of the uncertainty threshold. See text for more details.*



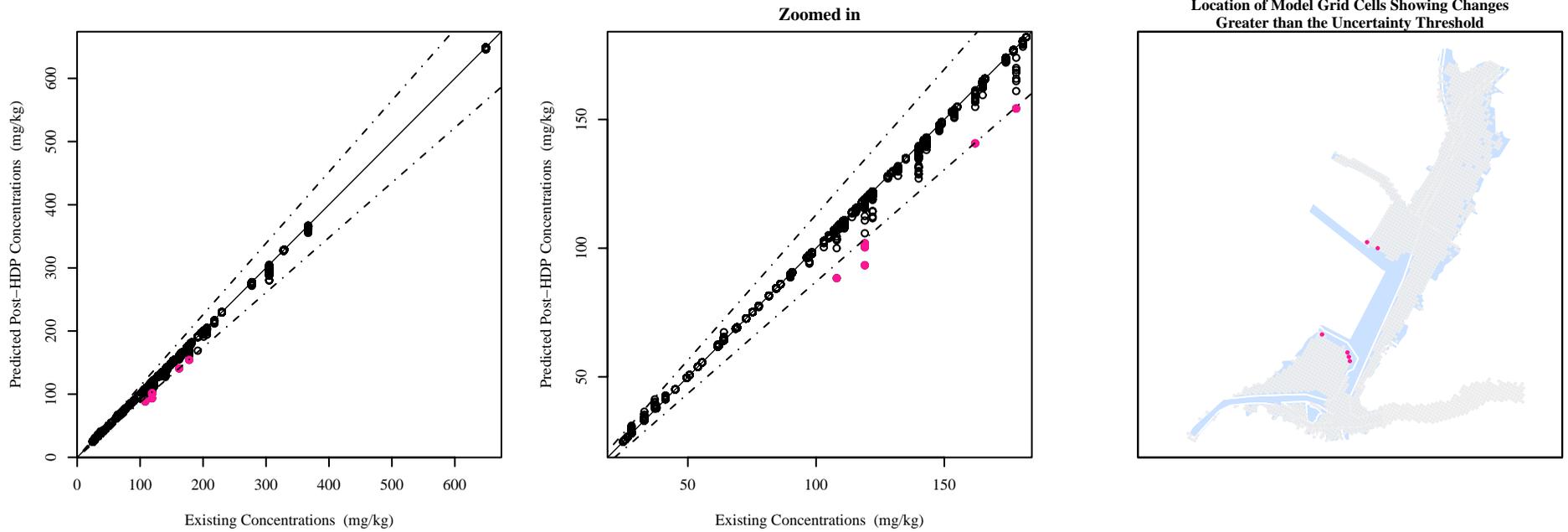
Chromium (mg/kg)  
Concentration Difference

- < -25
- -25 to -5
- -5 to 5
- 5 to 25
- > 25



US Army Corps of Engineers  
New York District

**Figure 24b**  
**Chromium: change in surface sediment**  
**concentrations due to dredging as predicted**  
**by the model, cumulative assessment**



**Figure 24c. Chromium : Predicted changes in surface sediment concentrations that are greater than the uncertainty threshold cumulative assessment**

*Predicted changes were greater than the uncertainty threshold in points colored pink. Dashed line represents the boundaries of the uncertainty threshold. See text for more details.*