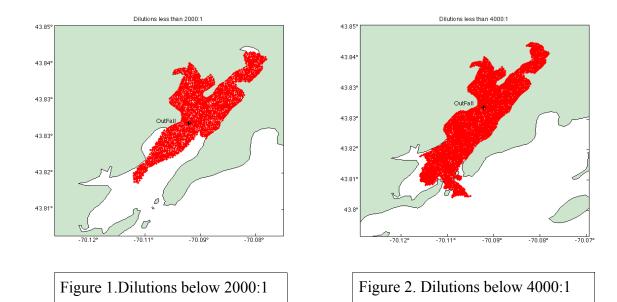
Model-Appendix

Tracking the discharge of a waste water treatment plant in Casco Bay, Maine with a numerical coastal model.

June 2013

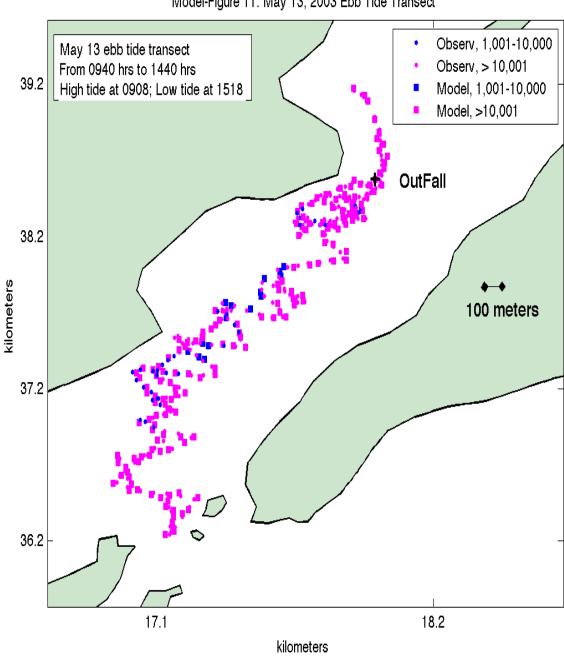
Ernest D. True, Mathematics Dept., Norwich University, Northfield, VT 05663 USA

This appendix includes graphs that are provided to supplement the work in the above article.



Figures 1 and 2 are described in the article in section B of the Results. The numerical model output was searched for locations where dilutions of dye concentrations are met at least once during the 48 hour dye injection. Figures 1 and 2 show all locations where dilutions were below 2000:1 and 4000:1 respectively.

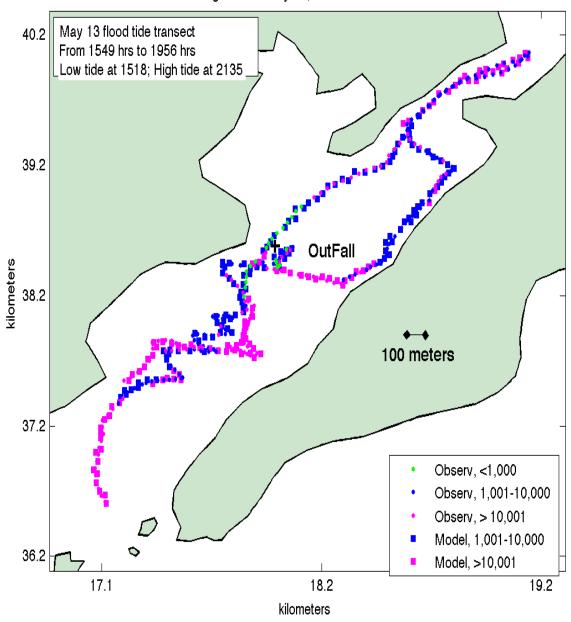
The next ten figures are labelled as Model-Figure 11, 13A, 13B, 14, 15, 16, 17, 18, 19, 20 to coincide with the figure numbers in the report by Livingston(2007). The dilution ranges from both the observations and the model are shown on the same graph for comparison. The observed data are shown with colored circles, and the model results are shown with colored squares.



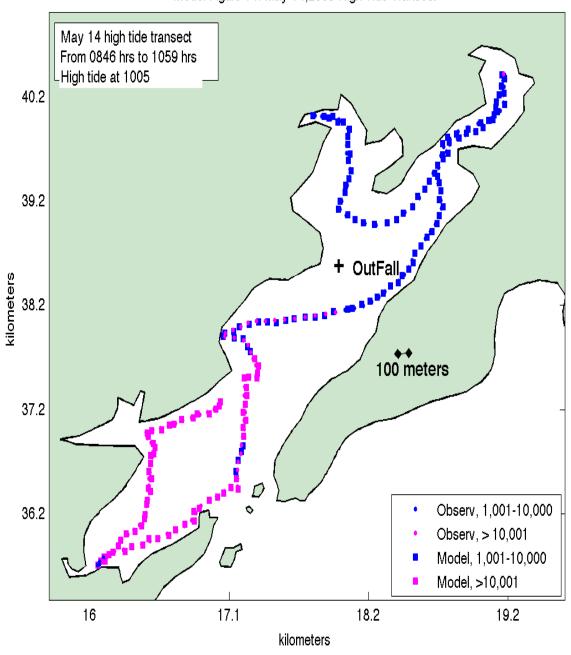
Model-Figure 11: May 13, 2003 Ebb Tide Transect

Model-Figure 13A: May 13,2003 Low Tide Transect May 13 low tide transect 39.2 From 1448 hrs to 1548 hrs Low tide at 1518 Observ, 1,001-10,000 Observ, > 10,001 Model, 1,001-10,000 OutFall Model, >10,001 38.2 kilometers 100 meters 37.2 36.2 18.2 17.1 kilometers

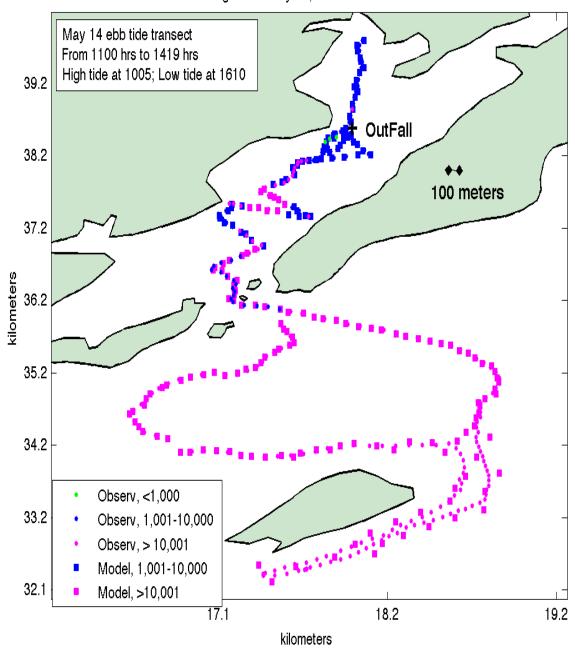
Model-Figure 13B: May 13,2003 Flood Tide Transect



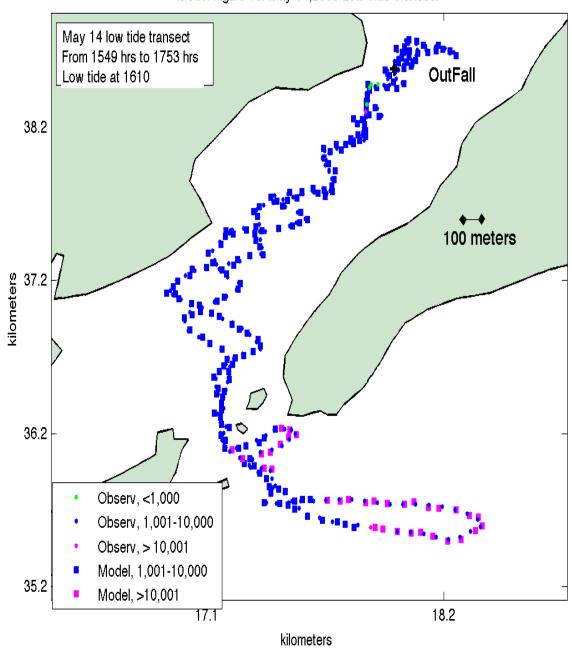
Model-Figure 14: May 14,2003 High Tide Transect



Model-Figure 15: May 14,2003 Ebb Tide Transect



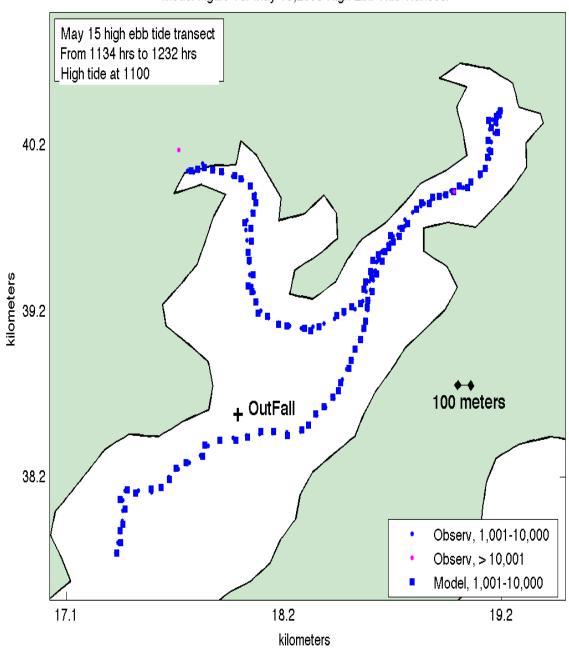
Model-Figure 16: May 14,2003 Low Tide Transect



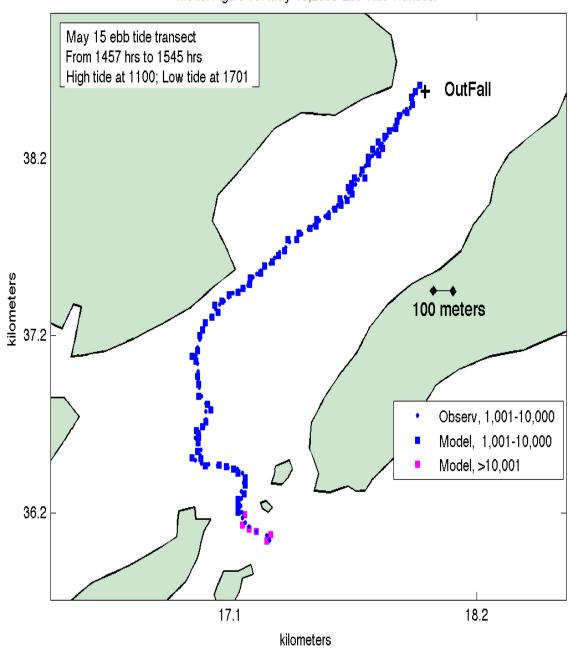
May 15 flood tide transect From 0830 hrs to 0951 hrs Low tide at 0447; High tide at 1100 39.2 38.2 kilometers ◆→ 100 meters 37.2 Observ, <1,000 Observ, 1,001-10,000 36.2 Observ, > 10,001 Model, 1,001-10,000 Model, >10,001 17.1 18.2 kilometers

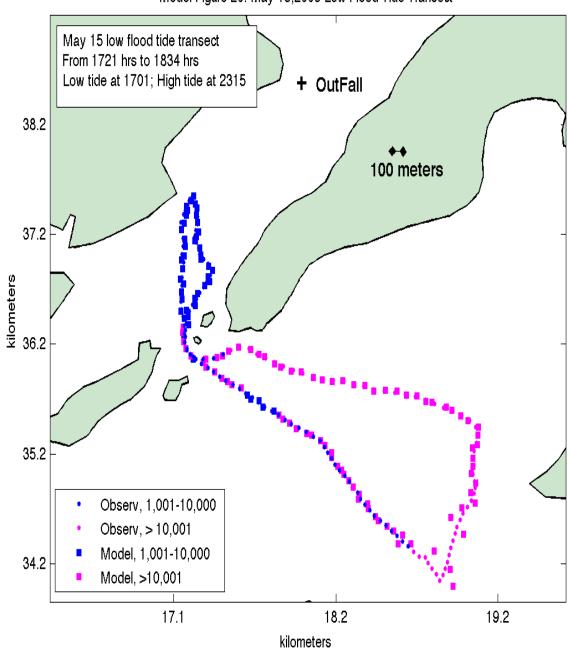
Model-Figure 17: May 15,2003 Flood Tide Transect

Model-Figure 18: May 15,2003 High Ebb Tide Transect



Model-Figure 19: May 15,2003 Ebb Tide Transect





Model-Figure 20: May 15,2003 Low Flood Tide Transect