



**Figure 5.4.** Data comparison of summer near-surface (2-m depth) effluent concentrations calculated from observed  $\text{NH}_4$  concentrations at the harbor sewage outfalls and of summer mid-depth (16-m depth) concentrations at the MB outfall. As in the simulations, at the MB outfall location, effluent is trapped at mid-depth during the summer beneath the warm surface layer. The areal extent of high effluent concentration at the new outfall is smaller, as in winter (Fig. 5.3), than at the harbor outfalls. The very low values observed in the surface water are most likely due to biogeochemical processes, in addition to physical dilution. The elevated values in Cape Cod Bay at 16 m were also observed with the harbor outfall (not shown) and thus are not due to outfall relocation. Compare to Fig. 5.2.