



Figure 9. Surface temperature (color gradients) and current (arrows) in summer 1999 from Massachusetts Bay hydrodynamic model (a) and correspondence between model predictions and MWRA surface and bottom dissolved oxygen at a station near the new outfall in Massachusetts Bay (b).

MWRA water quality data is used to maintain, enhance and apply the existing Massachusetts Bay hydrodynamic model developed by USGS and water quality model developed by Hydroqual results. Since 2002, a long-term cooperative research project between MWRA and the UMass Boston is helping to understand the environmental issues with advanced models. Model results will be calibrated with observational data as was done with the existing model in 1999 (b) to assess the impacts of new outfall on the Mass. Bay water quality.