



**FIGURE 10.** A two-dimensional hydrodynamic and water quality model of the Lower Charles River in Boston, Massachusetts was developed to simulate fecal coliform and dissolved oxygen in the river during storm events with varying precipitation and rainfall intensity and to evaluate the benefits of combined sewer overflow reductions and stormwater best management practices. Water quality measurements collected by MWRA and other agencies were used for model initial conditions (a) and model calibrations (b).