



**Figure 2.2a.** Map of topography of Massachusetts Bay in shaded relief view, colored by water depth, based on multibeam surveys and the National Oceanic and Atmospheric Administration Coastal Relief Model (Butman and others, 2004b). The onshore topography is from the U.S. Geological Survey Digital Elevation Model. The image was created by vertically exaggerating the topography four times and then artificially illuminating the relief by a light source positioned 45 degrees above the horizon from an azimuth of 350 degrees. In the resulting image, topographic features are enhanced by strong illumination on the northward-facing slopes and by shadows cast on southern slopes. The image also accentuates small features that could not be effectively shown by contours alone at this scale. The major features, such as banks and basins, are unchanged from previous maps; however the 5-10 m spatial resolution provides a new more detailed view of the surface topography.