

Appendix I Environmental Visualization Systems (EVS) Simulation Notes

1. Base map information and Newark Bay navigation channel is from National Oceanic and Atmospheric Administration charts 12311, 12333, and 12337, dated May 4, 1995. Passaic Navigation Channel provided by the U.S. Army Corps of Engineers (USACE).
2. The shoreline is digitized from an aerial photograph dated July 2002 (Intrasearch, Englewood, Co).
3. Bathymetry data shown in the EVS simulation were collected by Ocean Surveys, Inc. (OSI) in fall 2005. Depths are in feet and are referenced to North American Vertical Datum 1988 (NAVD 88) based on the Port Authority of New York and New Jersey's "Port Authority 50" benchmark, which has an elevation of 8.53' NAVD 88 (provided by the Port Authority). All depths were tide-corrected.
4. Bathymetric data were not collected by OSI in 2005 for the Hackensack River, Arthur Kill, or Kill Van Kull and therefore, are not shown in the EVS simulation. The sediment cores located in those three areas are shown in the EVS simulation without the overlaying bathymetry.
5. Vertical exaggeration for bathymetry is 25x.
6. Sediment accumulated thickness represents the estimated net sediment accumulation from 1934 to 2006 based on USACE's Geomorphological Report dated December 31, 2006. Sediment layer thickness data were extracted from Figure 2 of USACE (2006), as shown on Figures 4-1a and 4-1b.
7. Sediment core locations were collected during the 2005 Phase I and the 2007 Phase II Sediment Investigations for Newark Bay. The Phase I and Phase II sediment investigations included analysis of 461 individual chemicals or chemical groups, and concentrations were calculated for an additional 10 chemical groups. Of those chemicals, a subset of 18 chemicals and/or chemical groups was developed for conducting comprehensive statistical analyses; these are the 18 chemicals included in the EVS simulation.
8. The Phase I and Phase II sediment core coordinates and surface elevations that were used to develop the EVS are provided in Table I-1.