National Channel Framework (NCF)

Until fairly recently, the U.S. Army Corps of Engineers (USACE) and the National Oceanic and Atmospheric Administration (NOAA) fulfilled their responsibility to provide navigation information to the maritime community through the use of CAD to build and maintain framework data for all congressionally authorized navigation channels. This is being replaced by the National Channel Framework (NCF), an enterprise GIS geodatabase that includes information on all 61 high-tonnage channels maintained by USACE. Simply speaking, it is a 3D waterway roadmap.

The NCF database includes the outside channel limits, TOELINES, construction centerlines, top of slope lines, TOSLINES, channel reach positions, and inside channel quarters for all USACE-maintained navigation channels. It serves to provide the required data to update NOAA electronic and paper navigation charts (ENC); it provides foundational data for eHydro, the Dredging Quality Management (DQM) Program, and other applications; and it connects to the USACE Corps Project Notebook (CPN), providing a consistent inventory of projects and subprojects across the USACE Navigation Business Line.