

Issue 9: Feet versus Meters

Background

All Center for Geographic Information and Analysis (CGIA) Geographic Information System (GIS) data are stored in State Plane coordinate system and metric units. All Flood Insurance Rate Maps (FIRMs) (except those for Puerto Rico) show Base (1% annual chance) Flood Elevations (BFEs) in feet. Federal data should be converted to meters. One of Federal Emergency Management Agency's (FEMA's) Map Modernization goals is conversion of all digital FIRMs to metric units and the North American Vertical Datum of 1988. However, most users prefer English units.

Representation of BFEs on the map can be independent of the units used to store the GIS data. FEMA and the United States Geological Survey (USGS) currently store GIS data in metric units while representing contours and/or BFEs in English units.

Recommendations

BFE values should be shown on the digital FIRMs in feet to facilitate ease of use, although they can be stored in the digital FIRM database in meters.

Discussion Summary

Date Discussed: 10/6/2000
Discussion Attendees: Karen Siderelis, Zsolt Nagy, Ken Taylor, Ken Shaffer, David Giordano, Cheryl Pierce, Sue Hoegberg, Tom Tribble (by phone)

Summary of Discussion

The GIS data can be stored in either feet or meters. BFE values should be shown on the digital FIRMs in feet to facilitate ease of use by surveyors, floodplain managers, etc.

Final Guidelines

BFE values will be shown on the digital FIRMs in feet to facilitate ease of use. Although they can be stored in the digital FIRM database in meters, there is currently no plan to do so.