

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevation (BFEs)** and/or **flowways** have been determined, users are encouraged to consult the Flood Profiles and Flowway Data tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevation (CBFEs) shown on this map apply only landward of 0.2 North American Vertical Datum (NAVD83). Users of the FIRM should be aware that coastal flood elevations may also be provided in the Summary of Elevation Data table in the Flood Insurance Study report for this community. Elevation data shown in the Summary of Elevation Data table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the flowways were computed at cross sections and interpolated between cross sections. The flowways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Flowway widths and other pertinent flowway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) Zone 13. The **horizontal datum** is NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structures and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

National Network Branch, NCG13
National Geodetic Survey, NOAA
Silver Spring Metro Center 3
1315 East West Highway
Silver Spring, Maryland 20910
(301) 713-3191

To obtain current elevation, description, and/or location information for **benchmarks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit their website at www.ngs.noaa.gov.

Base map information shown on this FIRM was provided in digital format by U.S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1992 or later.

Please refer to the separately printed **Map Index** for an overview map showing the layout of map sheets for this jurisdiction.

An accompanying Flood Insurance Study report, Letters of Map Revision or Letters of Map Amendment (revising portions of this panel), and digital versions of this PANEL may be available. Contact the **FEMA Map Service Center** at the following phone numbers and Internet address for information on all related products available from FEMA:

Phone: 800-358-9516
FAX: 800-355-9520
www.fema.gov/mis

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA-MAP (1-877-336-2827) or visit the FEMA website at www.fema.gov.

This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The flowways and flowway data were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Flowway Data tables in the Flood Insurance Study report may reflect stream channel distances that differ from what is shown on this map.

LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD EVENT

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equalled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, X, and VE. The Base Flood Elevation (BFE) is the elevation of the 1% annual chance flood.

ZONE A No base flood elevations determined.

ZONE AE Base flood elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined. For areas of abutment for flooding, velocities also determined.

ZONE AR Areas of special flood hazard formerly protected from the 1% annual chance flood event by a flood control system that was subsequently dismantled. Zone AR indicates that the former flood control system is being retained to provide protection from the 1% annual chance or greater flood event.

ZONE ABB Areas to be protected from 1% annual chance flood event by a Federal floodway system under construction; no base flood elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no base flood elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

The flowway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood depths.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with average areas less than 1 square mile are not protected by areas from 1% annual chance flood.

OTHER AREAS

ZONE D Areas determined to be outside the 0.2% annual chance floodplain. Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally paired within or adjacent to Special Flood Hazard Areas.

Flowable Boundary

Zone D Boundary

Coastal Barrier Boundary

Boundary showing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or velocities

Base Flood Elevation line and value (elevation in feet)

Base Flood Elevation value where uniform within zone; elevation in feet

Reference to the North American Vertical Datum of 1988

Cross Section Line

Transect Line

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

100-meter Universal Transverse Mercator grid values, zone 13

5000-foot grid ticks

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)

Designations of structures referenced to the North American Datum of 1988 (NAD 83)