

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 Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the **Flood Profiles** and **Floodway Data** and/or **Summary of Stillwater Elevations** 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 values. 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 report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the **Summary of Stillwater Elevations** table in the **Flood Insurance Study** report for this jurisdiction. Elevations shown in the **Summary of Stillwater Elevations** 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 **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway 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 for this jurisdiction.

The projection used in the preparation of this map was Universal Transverse Mercator (UTM) zone 10. The horizontal datum was NAD83, GRS1900 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 this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations to determine the potential for flooding. For more information regarding conventions between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov/> or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, NNGS12
National Geodetic Survey
CG-003, #202
1315 East-West Highway
Silver Spring, MD 20910-3282

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

Bench mark information shown on this FIRM was derived from multiple sources. High resolution color orthophotos produced by Merrick & Co., Pixxures, Inc., and Clean Water Services covered portions of the county. USGS Digital Quadrangles at a scale of 1:12000 or less dated 6/20/94 covered the remainder of the county.

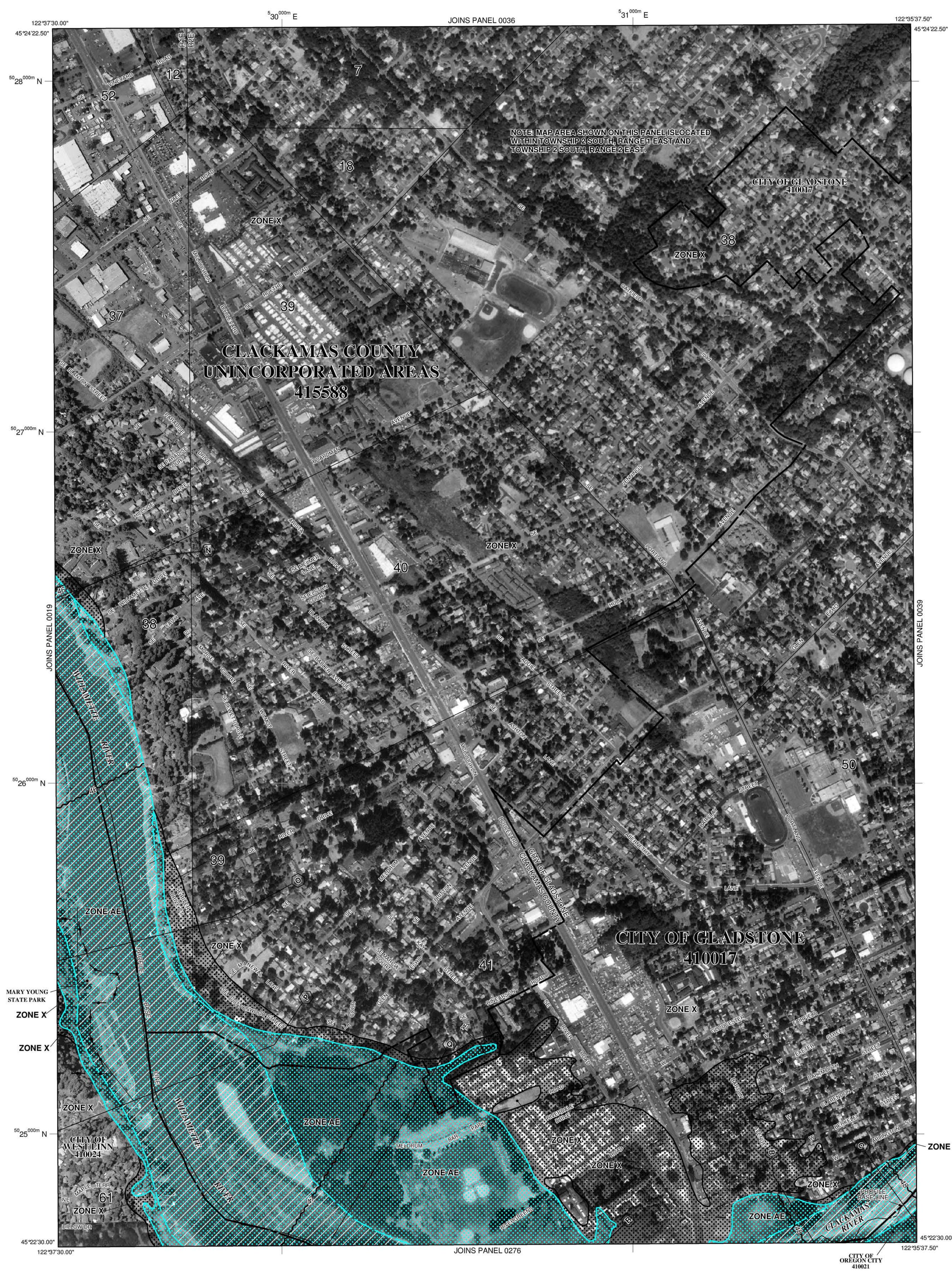
This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were determined from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the **Flood Profiles** and **Floodway Data** tables in the **Flood Insurance Study** report (which contains **authoritative hydraulic data**) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a **Listing of Communities** table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a **Flood Insurance Study** report, and/or digital versions of this map. The **FEMA Map Service Center** may also be reached by Fax at 1-800-358-9620 and its website at <http://www.msfc.fema.gov/>.

If you have **questions about this map** or **questions concerning the National Flood Insurance Program** in general, please call 1-877-FEMA MAP (1-877-336-2627) or visit the **FEMA** website at <http://www.fema.gov/>.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is an area subject to inundation by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AR** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE A99** Special Flood Hazard formerly protected from the 1% annual chance flood by a flood control system that was subsequently removed. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection 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 floodway is the channel of a 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 heights.

- 88888** 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 drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- OTHER AREAS**
- ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.
- ZONE D** Areas in which flood hazards are undetermined, but possible.
- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**
- OPAS** OTHERWISE PROTECTED AREAS (OPAS)

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

- 1% annual chance floodplain boundary**
- 0.2% annual chance floodplain boundary**
- Floodway boundary**
- Zone D boundary**
- CBRS and OPAs boundary**
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.**
- 513 ~~~ (E1.987)** Base Flood Elevation line and value; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

- (A) ----- (A)** Cross section line
- (23) ----- (23)** Transect line
- 97°37'30" 32°22'30"** Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 42°75'00"N 122°37'00"W** 1000-meter Universal Transverse Mercator grid ticks, zone 10
- 6000000 M** 5000-foot grid ticks: Oregon State Plane coordinate system, north zone (FIPSZONE 3601), Lambert Conformal Conic
- DX5510_X** Bench mark (see explanation to Users section of this FIRM panel)
- M1.5** River Mile

MAP REPOSITORIES

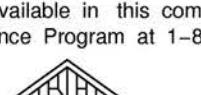
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
June 17, 2008

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the **Flood Insurance Study** report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.



MAP SCALE 1" = 500'
250 0 500 1000 FEET
150 0 150 300 METERS

NFIP

PANEL 0038D

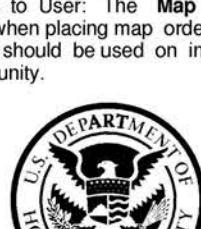
FIRM FLOOD INSURANCE RATE MAP CLACKAMAS COUNTY, OREGON AND INCORPORATED AREAS

PANEL 38 OF 1175

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:
COMMUNITY **NUMBER** **PANEL SUFFIX**
CLACKAMAS COUNTY 410016 0038 D
GLADSTONE, CITY OF 410017 0038 D
OREGON CITY, CITY OF 410021 0038 D
WEST LINN, CITY OF 410024 0038 D

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER

41005C0038D

EFFECTIVE DATE

JUNE 17, 2008

Federal Emergency Management Agency