

10.2 Flood Hazard Management

10.2.1 Existing Waterways

The City of Newberg has four primary waterways and associated flood hazard areas – Hess Creek, Springbrook Creek, Chehalem Creek, and the Willamette River. Hess Creek originates in the southeastern part of the Chehalem Mountains approximately 2.5 miles north of the city center. It flows southerly, through the middle of the city draining approximately 4.4 square miles before joining Springbrook Creek south of the city. Springbrook Creek flows 1.4 miles until joining the Willamette River. Chehalem Creek flows generally southeasterly from its headwaters in hills approximately 9 miles northwest of Newberg. It flows along the southwestern corporate limits of the city to its confluence with the Willamette River. Elevations in the basin range from approximately 100 feet near Newberg to above 1,450 feet on the northeastern boundary in the Chehalem Mountains. The Willamette River flows just south of the Newberg corporate limits. Although it does not directly overflow into the city, it causes several smaller tributaries to back up within the city limits.

10.2.3 Floods, Floodplains, and Special Flood Hazard Area (SFHA)

Flooding is a natural occurrence. Periodically rivers, streams, and lakes will overflow their banks and inundate adjacent land areas. These areas, known as floodplains, temporarily store this excess water. Special Flood Hazard Areas are locations where flood studies have determined that there is a likelihood of a base flood occurring. The base flood, sometimes referred to as the 100-year flood, has a 1% or greater chance of occurring in any given year. Flooding in Newberg is rare, however flooding can occur. Most floods in Newberg are contained within the upper banks of the streams, and in areas adjacent to the Willamette River. Localized flooding can occur because of various factors, such as blocked stream channels or storm drains. In reviewing the latest flood hazards maps, the city has not identified any homes within the Newberg city limits that are located in a Special Flood Hazard area, though it is possible that some may exist.

10.2.2 The National Flood Insurance Program (NFIP)

The National Flood Insurance Program was primarily established by the U.S. Congress to relieve communities of the fiscal burden caused by potential flood relief. The NFIP is administered by the Federal Emergency Management Agency (FEMA), a component of the U.S. Department of Homeland Security (DHS). To participate in this program, local governments are required to adopt plan policies, development standards, and to adopt the most current FEMA flood insurance rate maps. Participating communities are provided with a Flood Insurance Rate Map (FIRM) and detailed engineering study, termed a Flood Insurance Study (FIS). Paper copies of the study and maps shall be made available for review at Newberg City Hall. A digital version of the flood insurance rate maps can be viewed on the internet at www.fema.gov. If Newberg does not participate in the program, under the NFIP, flood insurance is not available for property owners within Newberg. The City of Newberg recognizes the fiscal and public health benefits of participating in the NFIP, and shall take necessary steps to ensure continued participation in the program.

10.2.4 Flood Hazard Management Policies

The following policies shall guide the management of flood hazards in Newberg:

- (a) The City recognizes that development standards help to: minimize public and private financial losses, minimize expenditure of public money and costly flood control projects,

minimize damage to public facilities, and maintain a stable tax base by providing for the sound use and development of areas of special flood hazard. Development regulations do not prohibit construction in floodplain areas, but seek to lessen the economic loss and social disruption caused by flood events.

- (b) The City shall periodically review existing development standards to ensure consistency with best management practices and state and federal law.
- (c) The City shall participate in the National Flood Insurance Program. This requires that the City adopt plan policies, flood hazard development standards, and adopt the most current FEMA flood insurance study and flood insurance rate maps.