CHAPTER 4.0 FLOODPLAINS

4.1 Introduction

This chapter provides an overview of the County's Floodplain Rules and Regulations, as described in the Larimer County Floodplain Development Guide. The complete guidance document may be found on the County's website. For additional information, consult the Larimer County Land Use Code (LCLUC), Article 12: *Floodplain*.

4.2 Floodplain Regulations

In order to participate in the National Flood Insurance Program (NFIP), the County has adopted and enforces floodplain rules and regulations for development within regulatory floodplains in the County. The following floodplain regulations apply within the County:

- Article 12 of the Larimer County Land Use Code (www.larimer.org/engineering/floodplains),
- National Flood Insurance Act of 1968,
- 44 Code of Federal Regulations §65.3 (44 CFR §65.3),
- Section 2 Colorado Code of Regulations 408-1 (2 CCR 408-1), and
- Colorado Water Conservation Board (CWCB) Rules and Regulations for Regulatory Floodplains in Colorado.

4.3 Definitions

Common floodplain-related items and terms are defined below. Additional definitions may be found in the LCLUC.

100-Year Flood: A flood event having a 1-percent chance of being equaled or exceeded during any given year. The term does not imply that the flood will necessarily happen only once every 100 years.

500-Year Flood: A flood event having a 0.2-percent chance of being equaled or exceeded during any given year. The term does not imply that the flood will necessarily happen only once every 500 years.

Base Flood Elevation (BFE): The water surface elevation for the flood event associated with a 1% chance of being equaled or exceeded in any given year. Therefore, BFEs represent the 100-year flood water surface elevations.

Certification of No-Rise: Statement by the professional engineer certifying that the proposed development activities in the floodway will not cause an increase in BFE, floodway elevations, or impact the floodway widths.

Conditional Letter of Map Revision (CLOMR): Federal Emergency Management Agency's comment on a proposed project, which does not revise an effective floodplain map, that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodplain.

FEMA: Federal Emergency Management Agency, the agency responsible for administering the National Flood Insurance Program.

Flood Fringe: The portions of the Floodplain Overlay District (see Section 4.4) that are within flood zones associated with a 1% annual chance of occurrence but not located in a floodway zone.

Floodplain or Flood-Prone Areas: Any land area susceptible to being inundated as the result of a flood, including the area of land over which floodwater would flow from the spillway of a reservoir. This also includes the inundation pools for reservoirs.

Floodway: Those portions of the Floodplain Overlay District (see Section 4.4) that must be reserved from development or encroachment in order to discharge the 1% Annual Chance Flood Event without cumulatively increasing the water surface elevation more than 0.5 feet (or other height specified by the County or local community), including the channel of a river or other watercourse and any adjacent floodplain areas that must be kept free of development and other encroachments.

Letter of Map Revision (LOMR): An official amendment to the currently effective FEMA map, issued by FEMA, which changes flood zones, delineations, and elevations.

4.4 Floodplain Overlay District

For purposes of regulation, the County has established a zoning district which includes all its regulatory floodplains called the "Floodplain Overlay District," or FPO District.

The FPO District includes the FEMA Floodplain, Best Available Floodplain, Municipal Floodplain, Cache La Poudre Growth Management Area Floodplain, and Larimer County Flood-Prone Areas. Detailed descriptions of, and instructions for viewing, the FPO District boundaries can be found in the County's Floodplain Development Guide. Each floodplain contains several different flood zones, each with different regulations. Refer to the County's Floodplain Development Guide and LCLUC for detailed information regarding each zone.

The FPO District can be viewed using the online floodplain map at:

https://maps1.larimer.org/gvh/?Viewer=LIL&run=Theme&theme=Flood%20Information

If the above link does not work, search the County's floodplain website.

4.5 Floodplain Development Permits

All development within the FPO District is required to obtain a Floodplain Development Permit (FDP). Floodplain development is defined as any manmade change to improved and unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating or drilling operations.

4.5.1 Exclusions

Please refer to the County's Floodplain Development Guide or LCLUC for details regarding exclusions to the FDP requirement.

4.5.2 Standards

In addition to these Standards, all development within the FPO District must meet requirements as defined in the following documents:

- Larimer County Floodplain Development Guide,
- Larimer County Rural Area Road Standards,
- Larimer County Urban Area Street Standards,
- Larimer County Land Use Code (Article 12.0 *Floodplain*), and
- FEMA Technical Bulletins and Technical Documents (FEMA Guidance).

4.5.3 Permit Process

The process for obtaining an FDP begins with the submittal of an FDP Application and other submittal items needed to evaluate whether floodplain requirements are adequately met by the project. Floodplain development projects are categorized by structural or non-structural projects and may need to be evaluated by the County's Flood Review Board depending on the nature of the project. The process for obtaining an FDP is shown in Figure 4-1.

4.5.4 Submittals

The FDP Application may be accessed on the Larimer County Floodplains website: <u>https://www.larimer.org/engineering/floodplains</u>.

Submittal requirements for an FDP Application may include any/all of the following and may require certification by a licensed professional engineer:

- Construction Plans,
- Hydraulic Study,
- Certificates (No-Rise Certificate, No Adverse Impact Certificate, FEMA Elevation Certificate),
- Floodproofing Design Specifications,
- Repair of Substantial Damage or Substantial Improvement (SI/SD) Submittals,

- Ownership Documentation or Right-of-Access Agreements,
- Federal, State, and Local Permits, and
- Other Requirements.

Permit close-out submittal requirements for an FDP Application may include any/all of the following and may require certification by a licensed professional engineer:

- As-built plans
- Certificates (No-Rise Certificate, No Adverse Impact Certificate, FEMA Elevation Certificate)
- Letter of Compliance



Figure 4-1. Floodplain Development Permit Flowchart (From Larimer County Floodplain Development Guide)

4.5.5 Flood Review Board

Certain floodplain permit applications require review and recommendation by the Larimer County Flood Review Board (FRB). The FRB is appointed by the Board of County Commissioners and makes recommendations to the County Engineer regarding variance requests, interpretation of the LCLUC, map amendment proposals, Floodplain Project Reviews, and provides general guidance regarding floodplain development and other flood related topics. Projects requiring review by the FRB need to follow the processes outlined in the Floodplain Development Guide.

4.6 Additional Resources

Links to additional resources for understanding floodplains, flood risk, and development regulations may be found in the Larimer County Floodplains website and Floodplain Development Guide.