

APPENDIX A

100-YEAR FLOODPLAIN ILLUSTRATION

THE FLOODWAY

The floodway is the channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment in order that the 100-year flood be carried without substantial increases in flood height.

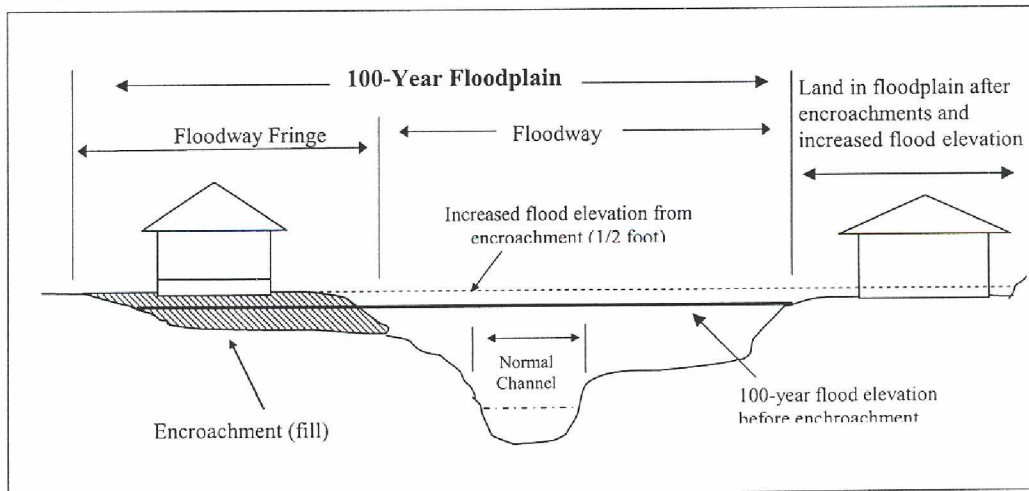
THE PURPOSE OF THE FLOODWAY

The National Flood Insurance Program (NFIP) requires that new structures be protected from flooding to the 100-year flood elevation, or Base Flood Elevation (BFE). If the BFE is increased, these structures are no longer protected from the 100-year flood.

Base flood elevations can be increased by obstructions in the floodplain. To avoid the possibility of significantly increasing the BFE, the NFIP calls for a community to reserve a part of the floodplain. This reserved area is called the floodway. The State of Montana has determined that the BFE must not be increased more than one-half foot.

Thus, the 100-year floodplain is divided into two parts; the floodway and floodway fringe. The floodway fringe is all parts of the 100-year floodplain that are outside the floodway. In theory, if all of this floodway fringe were filled, the BFE would raise by one-half foot.

Encroachments can cause flood heights to rise above the elevation of land that was previously not in the 100-year floodplain.



HOW THE FLOODWAY IS DETERMINED

A floodway study is usually done with a computer. The floodway boundary is determined by "squeezing in" the floodplain boundary on the computer until the base flood is raised one-half foot. This simulates the effect of building a "wall" from both sides of the floodplain toward the center.