



KITTITAS COUNTY COMMUNITY DEVELOPMENT SERVICES

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P-002
BULLETIN

NO-NET-LOSS OF FLOODPLAIN STORAGE

FOR MORE INFORMATION VISIT THE CDS WEBSITE AT: WWW.CO.KITTITAS.WA.US/CDS

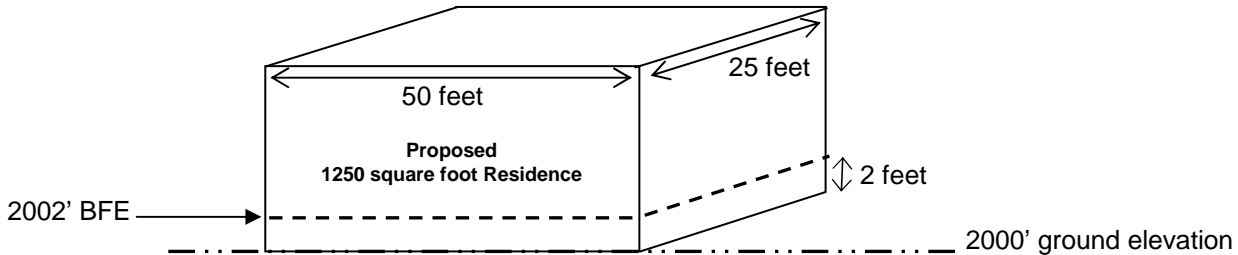
Pursuant to Kittitas County Code 17A.05.020, loss of floodplain storage associated from residential structures and accessory buildings within the 100-year floodplain of all shorelines of the state listed under WAC 173-18-230 is limited to ten (10) cubic yards. **Certification/documentation demonstrating that the subject structure(s) will not exceed 10 cubic yards of floodwater displacement, including any necessary mitigation as proposed by the applicant, must be completed prior to issuance of any building permits.** You can use the attached sheet to complete your calculations or submit a separate sheet to complete this requirement. All documents need to be submitted to your planner.

The following Example identifies how the amount of floodplain storage lost from a development may be calculated. Please contact your planner if you have any questions.

Example

You are proposing to construct a 1250 square foot residence in the 100 year floodplain of a studied A zone. It has been established that the ground elevation of your building site is **2000 feet** Above Sea Level (ASL). Your planner has determined that the **Base Flood Elevation (BFE) at your site is 2002 feet** ASL. Based on this information, the floodwaters will be **2 feet deep** at your site during a 100 year flood event.

With this information you can calculate the volume of floodwater that will be displaced by your 1250 square foot residence that is 25 feet wide by 50 feet long. (1250 square feet total)



Volume of residence: 25'X50'X2'= **2500 cubic feet**

Conversion from cubic feet to cubic yards: 2500/27= **92.59 cubic yards** of displaced water

From the calculations above it can be determined that the residence will displace **92.59 cubic yards of water.**

Helpful conversion guides:
3 linear feet= 1 linear yard
9 square feet= 1 square yard
27 cubic feet= 1 cubic yard

Kittitas County Code limits displacement to **10 cubic yards.** The proposed 1250 square foot residence is displacing 92.59 cubic yards; therefore **82.59 cubic yards** will need to be mitigated for.

For this example the following two mitigations can occur:

1. Remove 82.59 cubic yards of dirt/other regolith material from the site and placed outside of the flood hazard area, or in this case the 100 year floodplain; OR
2. The residence will need to be constructed on pilings with the lowest floor framing (including utilities) 2 feet above ground elevation.

Note: The top of the lowest floor of all new or substantially improved structures must be elevated at least 1 foot above the Based Flood Elevation.

NO-NET-LOSS OF FLOOD PLAIN STORAGE CALCULATIONS AND PROPOSED MITIGATIONS

Form to be completed by applicant and submitted to CDS per requirements of KCC 17A.06.020

Applicant Name: _____

Daytime Phone Number: ____ - ____ - ____

Email: _____

Flood Permit #: KF - ____ - ____

Map Parcel #: ____ - ____ - ____ - ____

Building Permit #: _____

Calculations to be completed by applicant

Ground Elevation _____ feet ASL | Base Flood Elevation _____ feet ASL | Square footage of structure: _____

Amount displaced: _____ Cubic Yards that need to be mitigated for no-net loss

Proposed Mitigations (attach additional sheets if necessary): _____

Applicant Signature: _____ Date: _____

I certify that I am familiar with the information contained in this form, and that to the best of my knowledge and belief such information is true, complete, and accurate, and further agree to conduct the mitigations necessary to meet the no-net-loss requirements per Kittitas County Code. I certify that I possess the authority to submit this information. I hereby grant to the agencies to which this application is made, the right to enter the above-described location to conduct review if so required.

FOR CDS STAFF REVIEW _____ Approved Reviewed by: _____ Date: _____

Notes: _____