To: The Chehalis Basin Flood Authority

Re: Floodplain Management in Unincorporated Lewis County

Date: April 24, 2012

You have requested information concerning the regulations that govern “fill” within the Chehalis River floodplain in unincorporated Lewis County. Most cities and counties in the United States that are built in or near floodplains, including Lewis and Thurston counties, participate in a federal program administered by the Federal Emergency Management Agency (FEMA) known as the National Flood Insurance Program (NFIP). All local governments participating in NFIP are required to comply with strict federal regulatory standards in managing the floodplain. Participation in NFIP also creates conformity in local government rules regarding “filling” in floodplains so that Lewis County’s rules will be substantially similar or identical to those adopted by Thurston County.

Lewis County has participated in the NFIP program since 1981 and currently enjoys a Class 7 rating under the Community Rating System created by that program. This rating reflects the county’s extensive and continuing efforts to reduce flood damage in the county and results in lower flood insurance rates to its citizens. In order to maintain this rating, the County must comply with strict federal regulatory standards in managing the floodplain.

Like most of the counties and cities participating in the NFIP and CRS programs, the county has chosen to adopt FEMA’s model floodplain management ordinance. The model federal ordinance permits “fill” in the floodplain subject to conditions set forth in the ordinance. The relevant portions of the ordinance as adopted by the County are excerpted below. I have highlighted the provisions directly applicable to your inquiry.
Section .040 of the county ordinance, the definitions section, defines the operative terms of the ordinance. Section .030 authorizes the county to regulate fill among other practices. Section .140 states the generally applicable standard of permitting fill only if it is for a “beneficial purpose” or “beneficial use” that is “consistent with protection of human health and public safety.” Section .190 states the specific standard that governs fill in the 100-year or one-percent floodplain including, inter alia, that “any fill or encroachments shall minimize the net increase in flood levels to less than or equal to the federal standard of one-foot increase in flood levels from the cumulative effect of the proposed development when combined with all other existing and anticipated development during the occurrence of the base flood discharge.” This is the federal standard and applies in most jurisdictions in the United States that participate in the federal program.

LEWIS COUNTY FLOODPLAIN MANAGEMENT ORDINANCE

15.35.040 Definitions.
Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application.

(3) “Area of special flood hazard” means the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letter A or V….

(5) “Beneficial purpose” shall mean a ‘beneficial use’ of fill or materials deposition, involving purposeful development which includes, but is not limited to commercial and residential buildings, and road and utilities construction, in a manner consistent with protection of human health and public safety.

(9) “Development” means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations located within the area of special flood hazard. Practices that are normal or necessary for farming, ranching, and/or irrigation are not considered to be “development.”

(14) “Floodway” means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

(22) “Special flood hazard area” means an area subject to a base or 100-year flood; areas of special flood hazard are shown on a flood hazard boundary map or flood insurance rate map as zone A, AO, Al-30, AE, A99, AH, VO, V1-30, VE, or V.

15.35.030 Methods of reducing flood losses.
In order to accomplish its purposes, this chapter includes methods and provisions for:

(1) Restricting or prohibiting uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;

(2) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
(3) Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters;

(4) **Controlling filling, grading, dredging, and other development which may increase flood damage**; and

(5) Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas. [Ord. 1157, 1998; Ord. 1145 § 3, 1995]

**15.35.140 Development permits.**
A development permit entitled flood hazard zone permit shall be obtained before construction or development begins within any area of special flood hazard established in LCC 15.35.060. The permit shall be for all structures including manufactured homes, as set forth in LCC 15.35.040 and for all other development including fill and other activities, also as set forth in LCC 15.35.040. Application for a development permit shall be made on forms furnished by the building official and shall include (but not be limited to) site plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the location of the foregoing. Specifically the following information is required:

(5) “Beneficial purpose” shall mean a ‘beneficial use’ of fill or materials deposition, involving purposeful development which includes, but is not limited to commercial and residential buildings, and road and utilities construction, in a manner consistent with protection of human health and public safety.

**15.35.190 Flood hazard reduction – General standards.**
In all areas of special flood hazards the standards of LCC 15.35.200 through 15.35.240 are required. In addition, in all areas of special flood hazards:

(1) Any fill or materials to be deposited within special flood hazard areas must have a beneficial purpose and the amount thereof not greater than is necessary to achieve that purpose, as demonstrated by a plan submitted by the legal owner(s) showing the uses to which the filled land will be put and the final dimensions of the proposed fill or other materials. **Any fill or encroachments shall minimize the net increase in flood levels to less than or equal to the federal standard of one-foot increase in flood levels from the cumulative effect of the proposed development when combined with all other existing and anticipated development during the occurrence of the base flood discharge.** The county may adopt a program to limit the cumulative impacts of fill to meet the FEMA standard of an overall increase not to exceed one foot in any watershed or sub basin or an applicant may provide a study that demonstrates compliance with the one-foot cumulative rise standard; provided, that up to 500 cubic yards of fill may be placed outside of the mapped floodway on an existing parcel under contiguous ownership without complying with the above standard. However, the requirement of LCC 15.35.310 shall continue to apply for any encroachment into a FEMA identified floodway. All or substantial alteration of existing facilities, including roadways, except approved flood control
structures, shall incorporate provisions to allow the free movement of floodwaters and may require retrofitting to remove barriers to flood movement.

I completed a records search dating back to January of 2000 to date. Lewis County issued 59 flood Plain development permits (FDP) for the placement of fill within the 100 year flood plain. Total fill volume 72,135 cubic yards of fill placed in the 100 flood plain. Public agencies such as Lewis County Public Works, City of Centralia, Washington State Department of Transportation, Tacoma City Light, placed 34,054 cubic yards of that volume for infrastructure such as roads, bridges and waste water treatment plants. One startling fact was that 10 flood plain development permits were issued for removal of fill during that time and are included in the 59 FDP and total volume to be removed from flood plain is 5,031,598 total cubic yards. These numbers are not exact to the cubic yard but they are very close to actual amounts, I rounded off the numbers when I could and actual fill placed could vary depending on honesty of the applicant. Lewis County has no way to determine the exact amount of fill the application amount is what we go by. I want to close this response with this final comment. This document only addresses the permits issued by Lewis County and only for the unincorporated areas of Lewis County.

If I can be of any additional assistance please feel free to contact me at (360)-740-1132 or you may e-mail me at fred.chapman@lewiscountywa.gov.

Sincerely,

Fred S. Chapman Jr.
Lewis County Building Official/Fire Marshal/Flood Plain Manager